THE EFFECT OF ENTREPRENEURIAL MARKETING ON FIRM PERFORMANCE

by

NASSER A. ALQAHTANI

A dissertation submitted to the

Graduate School-Newark

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Graduate Program in Management

written under the direction of

Can Uslay

and approved by

_____

Can Uslay

_____

Sengun Yeniyurt

_____

Kihyun (Hannah) Kim

_____

Goksel Yalcinkaya

Newark, New Jersey.

January, 2020

Copyright page:

ABSTRACT OF THE DISSERTATION

The Effect of Entrepreneurial Marketing on Firm Performance

By NASSER ALQAHTANI

Dissertation Director:
Can Uslay

Increasing market uncertainty renders traditional marketing efforts less efficient and effective in enhancing firm performance. In today's ever-changing, chaotic, and unsettled environments, with continuously increasing competition and increasingly diminishing returns to current market offerings, businesses are constantly on the lookout for new market opportunities. Overall, firms are under an increasing burden to be more vigilant, innovative, proactive, risk-tolerant, and agile than ever as they develop and carry out marketing strategies.

This dissertation introduces a robust scale for measuring entrepreneurial marketing (EM) as a distinct construct and demonstrates its discriminant validity from the overlapping notions of market orientation (MO) and entrepreneurial orientation (EO). Empirical findings also demonstrate that the positive and significant impact of EM on firm performance becomes even more pronounced under highly uncertain environmental conditions. Additionally, this research finds EM to partially mediate the well-established positive relationships between MO, EO, and firm performance. It reviews the evolution of the domain and conceptualization of EM and synthesizes the literature that is emerging from the marketing-entrepreneurship interface on this fertile research stream. The

interrelationships between EM, MO, EO, firm performance, and the moderating effect 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 examined through several hypotheses.

To test the hypotheses articulated by this research, I employed structural equation modeling (SEM) to analyze survey results from 450 U.S. based firms representing a broad spectrum of industries and firm sizes, using a stratified sampling technique. Overall, the analyses provide compelling evidence that EM is a distinct construct that has a positive influence on firm performance, and that it partially mediates the positive effects of MO and EO on firm performance. This dissertation also demonstrates that while the EM-performance relationship is positively moderated by market turbulence, competitive intensity, and supplier power, it is negatively moderated by market growth and network strength. It also finds an inverted U-shaped relationship between the performance efficacy of EM and firm size. Managerial implications, limitations, and future research are also discussed.

Keywords: Entrepreneurial marketing; market orientation; entrepreneurial orientation; organizational performance; network structure; effectuation; service-dominant logic; contingency theory; firm size

This dissertation is dedicated to the soul of my mother, Samerah Alqahtani, who has always been beside me during the hard times and the good times. She has filled me with love, compassion, and confidence. Rest in peace, Mom.

Acknowledgement

I am tremendously grateful to the many people who have helped me to navigate my way through my doctoral journey. First and foremost, I would like to convey my deepest gratitude to Dr. Can Uslay, my advisor and the chair of my dissertation committee, for his continuous support and limitless encouragement. I would like to thank him for his inspiring attitude, enthusiastic mentorship, and endless assistance while I was working on this dissertation, and all throughout my journey as a doctoral student. Since my first day at Rutgers University, he has been very generous in giving his time, very thorough in sharing his feedback, and very insightful in providing his inputs. He was the one who taught me how to find an interesting research question, search for the best approach to tackle that question, study and analyze it thoroughly and scientifically, and then publish my findings accordingly. He was a monumental influence on my progress as a young marketing scholar.

I would like to also express my deepest gratitude and appreciation to Dr. Sengun Yeniyurt, Dr. Kihyun (Hannah) Kim, and Dr. Goksel Yalcinkaya for serving on my dissertation committee. Their invaluable contributions, insightful inputs, and constructive comments were instrumental in shaping and writing my dissertation. I would like to give a special thank-you note to Dr. Sengun Yeniyurt, for his help and support in providing the resources that made this research possible, as well as for his guidance and advice through the data analysis stage of my dissertation. It's also a great opportunity to say thank you to all of my colleagues in the marketing department, for being so supportive and cooperative during my time at Rutgers Business School. Special thanks go to Dr. Kyungwon Lee, Dr. Serdar Yayla, Dr. Mesut Çiçek, Dr. Sevinc Ulu, Dr. Omer Kutlubay, and Dr. Emine Erdogan, for providing their thoughtful feedback on my research instrument, and for

reviewing and validating my questionnaire items. Moreover, I would thank Goncalo Filipe for his help and support through my tenure as a doctoral student. I would like to also express my deepest appreciation for the industrial collaborators who provided me with their insightful feedback on my survey, and for sharing their inputs on my research design. Furthermore, thanks to all the marketing leaders who participated in my survey, for giving me their time and attention. I would also like to thank my sponsor, King Fahd University for Petroleum and Minerals.

My warmest gratitude goes to my wife, Azizah Alqahtani, for her never-ending patience and support throughout this journey. She was of great help, and she was always a great source of inspiration and motivation. I would like to thank my father, Ali Alqahtani, for his encouraging words and wistful advices. God bless him. I would also like to say thank you to all of my family members, friends, colleagues, and whoever has stood by me. And I must also say that this work would not have been completed without the help of Allah, almighty, who gave me the power and grit to accomplish this milestone in my academic career. Thanks to God!

Table of Contents

Lists of Tables

List of Illustrations

CHAPTER 1

1. Introduction

"There is only one valid definition of business purpose: to create a customer… Because it is its purpose to create a customer, any business enterprise has two — and only these two — basic functions: marketing and innovation. They are the entrepreneurial functions." (Drucker 1954, p. 37)

New products and solutions are increasingly available to consumers at growing rates, which further raise market uncertainty. As a consequence, traditional marketing efforts are now becoming less effective and efficient in improving organizational performance. In such paradoxically disoriented, complex, disordered and fast-changing environments characterized by a steady decrease of business and product lifecycles, the anticipated profits expected from extant processes are becoming highly uncertain, to such an extent that firms must relentlessly look for new opportunities (Hitt and Reed 2000; Rauch et al. 2009; Sadiku-Dushi, Dana, and Ramadani 2019; Whalen et al. 2016). Firms are beginning to see themselves forced to operate in progressively risky environments, compounded with weaker barriers to market entry, new structures which allow and enhance change, changing managerial objectives, and diminished forecasting capabilities (Morris, Schindehutte, and LaForge 2002; Yang and Gabrielsson 2017). In summary, firms see themselves compelled to be more agile, proactive, and innovative when developing and carrying out marketing strategies (Matsuno and Kohlbacher 2019).

In the present dissertation, I submit that entrepreneurial marketing (EM) is vital if firms want to remain healthy, competitive, and relevant under prominently uncertain market conditions. As a discipline, marketing is based on context (Sheth and Sisodia 1999). Throughout its progress, numerous tactics, such as viral marketing, disruptive marketing, guerrilla marketing, and radical marketing have been introduced. EM resulted from this

progress, as well as from practitioners' need to deal with limited resources and increasing uncertainty. As an emerging marketing subfield that will potentially develop further and become a distinctive marketing school of thought, EM could facilitate marketing theory by offering a consistent theoretical base for organizations with high growth objectives (Hills and Hultman 2006; Whalen et al. 2016). Special issues published in prominent academic journals such as the *Journal of Strategic Marketing* and the *Journal of Business Research*, as well as conferences and symposia, have already acknowledged the potential of EM (e.g., Hills, Hultman, and Miles 2008; Miles et al. 2016; O'Cass and Morrish 2016). Moreover, courses on EM are offered by leading business schools, such as Stanford, Wharton, and Harvard (Morris, Schindehutte, and LaForge 2002), while journals (e.g., *Journal of Research in Marketing and Entrepreneurship*) dedicate their efforts toward disseminating research on the entrepreneurship/marketing interface (MEI).

In his book *"The Innovator's Dilemma"*, Christensen (1997) suggests that being excessively customer-focused may hinder a firm's capacity to innovate and survive in today's ever-changing marketplace. In contrast, other researchers argue that customers are a primary source of information for introducing successful and innovative market offerings (Ulwick 2002). While many studies have demonstrated strong connections between entrepreneurial orientation (EO), market orientation (MO), and firm performance (Kirca, Jayachandran, and Bearden 2005; Rauch et al. 2009), there is still ambiguity in their interrelationships. For instance, in an award-winning paper, Matsuno and colleagues (2002) found that, when MO and EO are not modeled simultaneously, EO's direct impact on performance becomes negative or non-significant. Moreover, in their meta-analysis of EO-performance relationships, Rauch et al. (2009) found that the discrepancies in past

studies' findings about EO and firm relationships are not explained by sampling errors. Furthermore, Brockman and Becherer (2012) suggest that the relationship between customer orientation, a primary constituent of MO, and firm performance is positively moderated by the following dimensions of EO: innovativeness, risk-taking, and opportunity focus, such that the customer orientation-performance relationship diminishes with low levels of EO. Therefore, it is possible that a mediating variable between EO, MO, and firm performance has been overlooked, and that further investigation of the simultaneous effects of EO and MO on organizational performance is warranted. This research argues that EM, while positively correlated with both orientations, is a strong candidate to partially mediate the relationships between EO, MO, and firm performance, with an even stronger influence on firm performance under certain conditions. Over the past three decades, EM research has progressed considerably. However, no comprehensive investigation of the relationship between performance and EM has been undertaken (e.g., Sadiku-Dushi, Dana, and Ramadani 2019; Whalen et al. 2016). Consequently, scholars have required more research on the impact and adoption of EM, and the circumstances under which EM becomes a more feasible alternative for organizations (e.g., Ahmadi and O'Cass 2016; Hills, Hultman, and Miles 2008).

Therefore, the purpose of the current research is fourfold: First, I develop a contemporary conceptualization of EM and introduce a scale to measure its underpinning dimensions. Second, I empirically investigate the effect of EM on firm performance and study the generalizability of that effect to various types of firms operating under different sets of settings. Third, I examine the interrelationships between EM, MO, EO, and firm performance, and establish EM as a distinct construct (by demonstrating its discriminant

validity), to roll out any possible confounding effects. Doing so helped me to answer a long-standing question for researchers in the field: whether EM is merely a summation of MO and EO (e.g., Morrish et al. 2010). Fourth, I introduce an inclusive model of EM, and explore under what environmental and institutional conditions it becomes most viable for firms to improve their performance. In essence, I investigate the moderation effect of environmental variables (market turbulence, technological turbulence, competitive intensity, supplier power, and market growth), network structure (i.e., network strength, size, and diversity), and firm size (small, medium, and large) to the relationship between EM and firm performance.

In summary, this research introduces a comprehensive model of EM, and intends to contribute to the marketing literature as follows: First, this work provides a better understanding of EM, its antecedents (MO and EO), and their interrelationships with firm performance. This dissertation introduces a robust scale for measuring entrepreneurial marketing (EM) as a distinct construct and demonstrates its discriminant validity from the overlapping notions of MO and EO. To the best of my knowledge, this is the first study that conceptually and empirically examines EM as a mediator between MO, EO and performance. By introducing a comprehensive model incorporating MO, EO, EM, and firm performance interrelationships, and conducting an empirical investigation on the proposed interrelationships, this research makes a significant contribution to the research on the marketing/entrepreneurship interface (Hills and Hultman 2013). Second, I investigate the importance of networks in the EM context by studying the components of network structure as moderators to the EM-performance relationship answering recent calls in research priorities for the marketing-entrepreneurship interface (Hills and Hultman 2013; Uslay and

Teach 2009). I contribute to EM literature by incorporating the centrality of networks to the success of EM activities. Following an investigation into how these structural components can moderate EM-performance relationship, I introduce a model that also provides guidance for optimal network structure (i.e., network strength, size, and diversity) for EM effectiveness, and contend that EM surpasses conventional marketing in leveraging networks. Third, as research on the impact of the environment on EM is scant (Peterson 2018), some influential moderation effects of environmental factors on the EM-performance relationship are explored by using a contingency perspective, in order to enhance our understanding of the circumstances under which EM yields maximum value. Fourth, I examine the non-linear moderating effect of firm size on the EM-performance relationship. Fifth, this research will stimulate other studies on the marketing/entrepreneurship interface (MEI) by introducing an appropriate and rigorous scale for EM, a feature that is lacking at present (e.g., Whalen et al. 2016). Sixth, the current research is a response to recent calls for additional research on the distinctiveness of EM (Hills and Hultman 2013) and uses several axioms to emphasize the features that make EM a distinct construct (See Table 2). Seventh, the current research also presents a comprehensive review of EM literature, analyzes its intersection with the effectuation theory and the service-dominant (S-D) logic, and discusses various conceptualizations, developments, and perspectives that have been instrumental for the development of a theory of EM. Eighth and lastly, in view of this comprehensive investigation, the present research defines EM, and establishes the dimensions that compose a new conceptualization of EM advocated by this study.

The remainder of this dissertation is organized as follows: a theoretical background and a thorough review of EM literature are presented, along with a proposed definition for EM and synthesis that demonstrates how it has progressed into a distinct construct. Then, a relevant discussion about the proposed conceptualization is introduced. The proposed conceptual model incorporating EM, its antecedents, moderation variables, and its effect on firm performance is discussed through several hypotheses. Next, I describe the EM scale development process, and discuss research methodology and design. Research results are presented, and findings are discussed in dedicated sections. Finally, I conclude this dissertation with managerial implications, conclusion, limitations, and future research.

CHAPTER 2

2. Literature Review and Theoretical Background

The basic objective of this paper is to explore organizational performance with respect to EM under different environmental and organizational conditions, in order to create a better basis for EM conceptualization, and improve our understanding of it. The theoretical foundation of the present dissertation is based on the effectuation, S-D logic, and contingency theories, as understanding the influence of marketing and entrepreneurship practices in firms and their contextual fit is critical for improving firm performance (Lawrence and Lorsch 1967; Sarasvathy 2001; Vargo and Lusch 2004). This research takes the fact that firm optimal performance is contingent on several internal and external factors as the foundation of its theoretical development (e.g., Hofer 1975; Lawrence and Lorsch 1967). For instance, the characteristics of the firm's environment (e.g., intense competition) will shape its behavior, and different environmental situations will require different responses from the firm. Moreover, being a small firm requires different approaches in tackling marketing activities than being a large firm would, due to differences in resources, capabilities, and competition. Therefore, there is no "one size fits all" solution to optimizing organizational performance, or as Hofer (1975) puts it in the text below:

> "Unless one is willing to admit the possibility that there exists some strategy or set of strategies which are optimal for all businesses (corporations) no matter what their resources and no matter what environmental circumstances they face - an assumption that is inconsistent with all research studies on business (corporate) strategy conducted to date - any theory of business (corporate) strategy must be a contingency theory… If contingency theories of business and corporate strategy can be successfully developed, their implications are both obvious and important. At a minimum, they should help improve the productivity of corporations, large and small, by improving the strategy choices made by such organizations. This, of course, would lead directly to improvements in the overall productivity of society as a whole". (Hofer 1975, p.785-807)

2.1. Entrepreneurial marketing

Market uncertainty, resulting from dramatic changes in technology and consumer tastes, renders traditional marketing strategies less effective (Reibstein, Day, and Wind 2009; Sheth and Sisodia 2006). Thus, there is a critical need for marketing scholars to incorporate concepts such as innovation, risk management and proactiveness into developing marketing theory. In this burgeoning sub-field, EM, entrepreneurship and marketing are all tied together by the common thread of value creation (Schindehutte, Morris, and Kocak 2008).

2.1.1. The definition of EM

Incipiently, EM was related to the marketing efforts performed by SMEs with limited resources, and was commonly associated with creative and spontaneous marketing activities (Hills et al. 2010; Morris, Schindehutte, and LaForge 2002). Nonetheless, this narrow definition of EM has since evolved into a more inclusive and broader conceptualization. Based on a thorough review and analysis of the evolving EM conceptualizations and definitions, I synthesize prior attempts and bring forth a definition of EM (*See* Table 1).

Inspired by various seminal works, my definition of EM captures the latest conceptual developments in the EM field. Historically, incremental developments have contributed to the refinement of EM's scope, and the crystallization of its underlying dimensions. While Morris, Schindehutte, and LaForge (2002) discuss EM as a unique construct with seven dimensions, my investigation extends these to eight dimensions, as shown in Figure 1, that are different from Morris and colleagues' conceptualization in several ways. For instance, while customer intensity has been commonly introduced as a

dimension of EM (e.g., Hills et al. 2010; Morris, Schindehutte, and LaForge 2002), it was replaced with the notion of inclusive attention in my definition, where EM promotes more impartial attention to all stakeholders (e.g., Morrish, Miles, and Deacon 2010). Whilst previous EM research (e.g., Morris, Schindehutte, and LaForge 2002) speculates that value creation and opportunity focus are performed solely by the principle firm, I integrate more recent EM thinking (e.g., Lee, Olson, and Trimi 2012; Vasilchenko and Morrish 2011; Whalen and Akaka 2016), in which opportunities and values are co-created with other stakeholders and consumers. Additionally, the proposed conceptualization adapts the network perspective (Hills et al. 2010; Whalen et al. 2016) and argues that networks are instrumental in the successful adoption of EM. Moreover, the new conceptualization differs from the traditional risk-taking perspective (e.g., Morris, Schindehutte, and LaForge 2002) by claiming that entrepreneurial marketers are prone to take acceptable risks, whilst not risking more resources than they can afford (Sarasvathy 2001). I also postulate that EM can be defined as a way of thinking, an agile mindset that, when adopted by top management teams, may develop into an organizational culture which outlines the foundation for competitive advantages that are difficult to imitate (Whalen et al. 2016). However, a further revision for the introduced definition and underlying dimensions of EM is warranted, after the empirical examination that this study is set to undertake.

Figure 1 The Proposed Conceptualization of Entrepreneurial Marketing (EM)

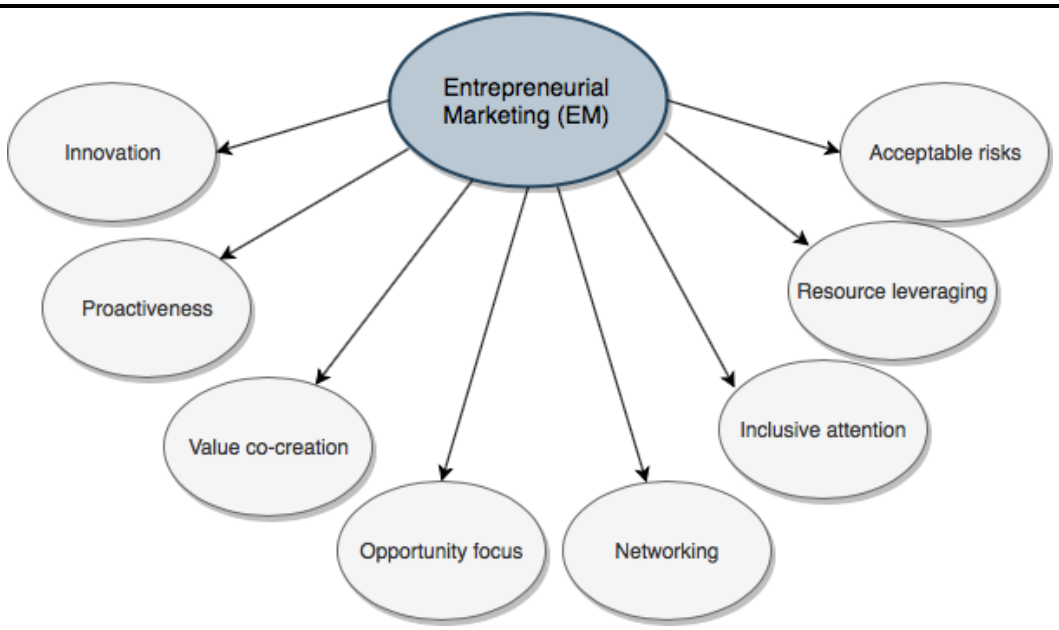


Table 1 Evolving Definitions of Entrepreneurial Marketing (EM)

Source	EM Definition	Underlying Dimensions
(Gardner 1994, p.37)	"The interface of entrepreneurial behavior and marketing is that where innovation is brought to market"	Marketable innovation
(Duus 1997, p.297)	"The distinguishing feature of this new interpretation, which is essentially a market-oriented inside-out perspective, could be the development of the specific competencies of the firm by entrepreneurial action with a view to serving future customers' latent demand for products that do not yet exist"	Proactiveness Customer intensity
(Stokes 2000, p.2,13)	"marketing carried out by entrepreneurs or owner-managers of entrepreneurial ventures … The entrepreneurial marketing concept is focused on innovations and the development of ideas in line with an intuitive understanding of market needs"	Innovation Customer intensity
(Collinson and Shaw 2001, p.8)	"Entrepreneurial marketing is characterized by a responsiveness to the marketplace and a seemingly intuitive ability to anticipate changes in customer demands"	Proactiveness Customer intensity Responsiveness
(Morris, Schindehutte, and LaForge 2002, p.5)	"the proactive identification and exploitation of opportunities for acquiring and retaining profitable customers through innovative approaches to risk management, resource leveraging and value creation"	Innovation Proactiveness Customer intensity Risk-taking Value-creation Opportunity Resource leveraging
(Kraus, Harms, and Fink 2010, p.9)	"Entrepreneurial marketing is an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders,	Innovation Proactiveness Customer intensity

	and that is characterized by innovativeness, risk-taking, proactiveness, and may be performed without resources currently controlled"	Risk-taking Value-creation
(Hills et al. 2010, p.6)	"EM is a spirit, an orientation as well as a process of pursuing opportunities and launching and growing ventures that create perceived customer value through relationships, especially by employing innovativeness, creativity, selling, market immersion, networking or flexibility"	Innovation Customer intensity Value-creation Opportunity Creativity Selling Market immersion Networking Flexibility
(Whalen et al. 2016, p.3)	"EM is a combination of innovative, proactive, and risk-taking activities that create, communicate, and deliver value to and by customers, entrepreneurs, marketers, their partners, and society at large"	Innovation Proactiveness Customer intensity Risk-taking Value-creation/co-creation Opportunity Networking
(Pane-Haden et al. 2016, p.122)	"the process of opportunity discovery, opportunity exploitation and value creation that is carried out by an individual who often exhibits a proactive orientation, innovation focus and customer intensity and is able to leverage relationships and resources and manage risk"	Innovation Proactiveness Customer intensity Risk-taking Value-creation Opportunity discovery Opportunity exploitation

		Resource leveraging
Current study	EM is 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.	Innovative marketing Proactive marketing Value co-creation Opportunity focus Resource leveraging Networking Acceptable risks Inclusive attention

2.1.2. EM development, perspectives, and conceptualization

Early EM literature focused primarily on marketing managed by entrepreneurs in SMEs and analyzed how these entrepreneurs could cope with the challenges generated by uncertainty using EM (Miles et al. 2015; 2016; Tyebjee, Bruno, and McIntyre 1983; Whalen et al. 2016). Given the development of EM into a marketing research stream, its domain has substantially expanded from SMEs to corporations (Hills and Hultman 2013; Lam and Harker 2015; Miles et al. 2015), also incorporating community and societal domains (Morrish and Jones 2019; O'Cass and Morrish 2016; Uslay and Erdogan 2014). Currently, a substantial amount of EM literature focuses on EM for large firms (e.g, Lam and Harker 2015). For instance, Kraus and colleagues (2010) claimed that EM is a marketing version that functions in any size of organization. According to Miles and Darroch (2006), an entrepreneurial marketing process is instrumental for opportunity creation, exploitation, and evaluation inside large organizations. Moreover, EM is not limited to a specific stage of the product lifecycle. It is relevant to all stages, and may expedite speed to market (Mort, Weerawardena, and Liesch 2012; Whalen et al. 2016). As EM is not restricted to B2C organizations, it also works for B2B firms that need EM to create value through innovation and networks (Whalen et al. 2016; Yang and Gabrielsson 2017).

Previous attempts to classify EM research have given rise to insightful perspectives. For instance, Hills and Hultman (2006) classified marketing/entrepreneurship interface (MEI) research into SME marketing, MEI theory, MEI and planning, and growth-oriented EM. In their Charleston summit statement, Hansen and Eggers (2010) acknowledged four main MEI research perspectives: marketing and entrepreneurship, marketing in

entrepreneurship, entrepreneurship in marketing, and unique concepts in the MEI domain. Lastly, Miles and colleagues (2015) categorized EM schools of thought as follows: networks, marketing in entrepreneurship, entrepreneurship in marketing, and SME marketing.

Over time, EM thinking has enabled scholars to further develop its conceptualization. Kotler (2003) claimed that EM is generally a stage of marketing development in an organization's dissolution or initiation. Using the example of a Russian doll, and based on Kotler's conceptualization, Morrish and colleagues (2010) argued that EM is an efficient approach in marketing management throughout all lifecycle stages. Their work brought about a remarkable contribution, by proposing that consumers and entrepreneurs are equally important in the firm and that, consequently, they should simultaneously influence the firm's decisions in shaping tactics, doctrine, and strategies of marketing. Furthermore, some scholars recognize EM as an organizational capability alongside strategic orientations such as customer orientation, EO, and MO (e.g., Kocak and Abimbola 2009; Thoumrungroje and Racela 2013). Using enactment and effectuation theories, Lam and Harker (2015) suggested an EM model in which entrepreneurship is neither ends – nor means – driven. Instead, it is perceived as an interaction between various actors within a social context. Lastly, Miles and colleagues (2015) categorized EM within organizations as follows: "temporal" – as a stage of evolution, "horizontal" – for the marketing function, and "vertical" – for top management team (TMT).

Adopting a holistic perspective, the current research claims that EM is a way of thinking which functions for varying sizes of organizations, in both business and non-

business domains (Hills and Hultman 2013; Lam and Harke 2015; Miles et al. 2015; Whalen et al. 2016; O'Cass and Morrish 2016; Uslay and Erdogan 2014).

2.1.3. EM as a distinctive subfield

Though widely recognized as dissimilar to conventional marketing (Hills, Hultman, and Miles 2008), EM needs to be further distinguished from other overlapping domains, such as EO and MO. Whereas EO can be defined through proactiveness, innovation, and risk-taking (Miller 1983), MO can be delineated through the embracing of the marketing concept in organizations through promoting inter-functional coordination, customer orientation, and competitor orientation (Narver and Slater 1990). Overlaps among the conceptualizations of EM, MO, and EO clearly exist (e.g., value creation and innovation). Although I deem it important to identify the boundaries of each construct, I claim that EM goes beyond the simultaneous adoption of EO and MO akin to perspective 4, illustrated by Hansen and Eggers (2010).

According to Hills and Hultman (2013), there is a pressing need for scholars to shape a distinctive EM domain and define its main characteristics. For their part, Sethna and colleagues (2013) claim that EM goes beyond applying entrepreneurship and marketing in organizations, and rather informs these disciplines. Likewise, Morrish and colleagues (2010) claim that EM is not merely a summation of MO and EO dimensions, but a synergetic process as well, that needs acumen to reach competitive advantages. In their view, unlike traditional firms, those that embrace EM tend to have a flatter hierarchy and use more flexible structures. Moreover, Hills and colleagues (2008) indicate that firms that embrace EM differ in their control of resources, management structure, strategic

orientations, and opportunity recognition mechanisms. They claim that EM is superior to conventional marketing in those situations characterized by high uncertainty, limited resources, lack of an economy of scale, or constrained image and loyalty. In their attempt to isolate MO from EM, Jones and Rowley (2011) suggested further development of the EM concept toward the entrepreneurial marketing orientation (EMO) concept, by claiming that customer orientation associates more with EM than with MO. Recently, Whalen and Akaka (2016) included opportunity co-creation as a new dimension which contributes toward creating and clarifying the EM construct. Whalen and colleagues (2016) claim that, by incorporating effectuation theories and S-D logic, EM replaces "value-in-exchange" with "value-in-use". Table 2 emphasizes the identified unique characteristics of EM and introduces the EM axioms.

Table 2 Axioms of EM

Source	Key Premises
(Sarasvathy 2001)	• EM encourages taking risks while being cognizant of affordable loss.
(Hills, Hultman, and Miles 2008)	• EM excels in utilizing experience, market immersion, resources, and networks to achieve marketing efficiency.
(Read et al. 2009)	• EM employs heuristics in decision-making and engages in high-speed experimental marketing enabling more flexibility, iterations, and pivots.
(Morrish, Miles, and Deacon 2010)	• EM tends to use more flexible structures and promotes a flatter hierarchy. • EM gives the same weight to consumers and entrepreneurs in decision making to balance market needs with entrepreneurs' progressive vision.
(Jones and Rowley 2011)	• Customer orientation (CO) is more into EM than MO.
(Vasilchenko and Morrish 2011) (Lee, Olson, and Trimi 2012)	• EM adopts creative co-creation approaches such as crowdsourcing, crowd creation, and open innovation.

(Coviello and Joseph 2012) (Whalen and Akaka 2016)	• Opportunity co-creation is a unique dimension of EM.
(Lusch and Vargo 2014)	• EM considers all stakeholders as resources integrators, and, therefore, gives balanced attention to different parties in the value creation chain.
(Whalen et al. 2016)	• The intersection of S-D logic and effectuation represents a great foundation for EM to confront uncertainty. • EM replaces "value-in-exchange" with "value-in-use" and heavily benefits from operant resources.
Current study	• EM excels by leveraging networks to co-create value and opportunities throughout the customer journey including co-ideation, co-innovation co-promotion, co-distribution, co-pricing, co-maintenance and co-disposal. • EM promotes a holistic thinking to improve performance. • While S-D logic identifies the underlying principles of EM, effectuation explains how these principles are executed.

2.1.4. EM, S-D logic, and effectuation theory

Considering that S-D logic and the effectuation theory have emerged from the increasing dynamism and uncertainty in the marketplace to provide alternatives to marketing and entrepreneurship philosophies respectively, and since EM was born to address similar challenges, these theories could substantially inform our comprehension of EM (e.g., Renton and Richard 2019). Effectuation implies that, under uncertain conditions, entrepreneurs tend to make decisions based on a pre-established set of means (i.e., who they know, who they are, and their knowledge and expertise) in order to achieve results (Sarasvathy 2001). With an affordable loss mindset, they consider the impact that they can

make by utilizing their available set of means (Coviello and Joseph 2012; Read et al. 2009; Sarasvathy 2001).

They also make the best use of surprises and contingencies with their available means, by employing the sense-making that emerges from market immersion (Sarasvathy 2001). Effectuation is the use of sense-making and non-predictive logic, in which the rationale is that, if a business wants to predict the future, it better tries to control it (Read et al. 2009; Sarasvathy 2001). This rationale has been proposed because entrepreneurs usually operate under uncertainty, and from a position wherein it is extremely difficult to predict the future. Such uncertainty is a common theme in today's ever-dynamic businesses, where technological and scientific advancements are constantly altering market practices. Read and colleagues (2009) used an effectual lens to analyze the differences in embracing marketing between marketing managers and entrepreneurs, and discovered that people with a higher entrepreneurial experience are prone to apply heuristics in decision-making, distrust predictive techniques, employ prior experience, doubt market research data, utilize affordable loss in calculating risk, consider market and product alternatives, take into consideration the big picture for the entire business, develop partnership-based channels, and use skim pricing.

Moreover, some scholars argue that effectuation theory is very helpful in explaining entrepreneurial actions (e.g., Fisher 2012). Others document its positive effect on performance indicators, such as new product development success (e.g., Coviello and Joseph 2012). For instance, in their meta-analysis of effectuation and venture performance, Read and colleagues (2009) find all dimensions of effectuation, except for design and affordable loss, to be positively related to venture performance. Furthermore, effectuation

in the EM domain is helpful in understanding many related marketing issues, including market creation and new product development (Read, Song, & Smit 2009). Hills and Hultman (2011) argue that effectuation differentiates EM from traditional marketing, making it distinctive from its mainstream counterpart. Additionally, EM uses effectuation logic to overcome predictive logic's negative impact on innovation and value creation (Miles et al. 2015). In their study of born global (BG) firms' performance, Sullivan and colleagues (2012) also advance EM research by using effectuation theory to demonstrate EM-BG firms' positive performance relationship. In line with effectuation theory, EM firms tend to use intuition and market immersion more than traditional market research (Maritz, Frederick, and Valos 2010).

Initially suggested by Vargo and Lusch (2004), a new prevailing logic for marketing detected that marketing is drifting from a goods-dominant logic dominated by tangible resources and exchanges toward a service-dominant logic (S-D logic). Service is defined as "the application of specialized competencies (knowledge and skills) through deeds, processes, and performances for the benefit of another entity or the entity itself" (Vargo and Lusch 2004, p. 2). This new logic focuses on utilizing operant[1] resources to develop better value propositions than competitors are able to (Constantin and Lusch 1994; Vargo and Lusch 2004). The process of this new logic relies on identifying competitive operant resources, such as knowledge and skills, identifying main prospective actors in an ecosystem, encouraging relationships with customers to improve value propositions, and

[1] While operand resources (e.g., buildings, equipment, and raw materials) are tangible resources that action is applied upon, operant resources (e.g., skills, systems, information, and technology) are chiefly intangible resources that act upon operand resources to cause an effect (Vargo and Lusch 2004; Whalen et al. 2016).

measuring performance to enhance learning (Vargo and Lusch 2004). The theoretical basis of the S-D logic has gradually evolved (Vargo and Lusch 2004; 2008; 2011). Recently, four inclusive and broad axioms have been introduced: value is exclusively determined by the beneficiary; customers are co-creators of value; service is the dominant basis of exchange; all other actors are resource integrators (Lusch and Vargo 2014).

This new logic was developed in line with prominent management theories such as resource advantage theory and competency theory (e.g., Conner and Prahalad 1996; Day 1994; Hunt and Lambe 2000; Srivastava et al. 2001). It is focused on value co-creation with customers as a main operant resource to enhance value propositions (Lusch and Vargo 2014; Vargo and Lusch 2004; 2008). Customers have evolved over time from being a target, an operand resource, into a co-producer, an operant resource, as they have gained more involvement in the value creation process (Prahalad and Ramaswamy 2000; Vargo and Lusch 2004). Thus, service-dominant logic has substantially influenced several marketing research streams, including sales and retail, global marketing, B2B marketing, supply-chain management branding, and pricing (e.g., Akaka, Vargo, and Lusch 2013; Lusch 2011; Lusch, Vargo, and O'Brien 2007; Merz, He, and Vargo 2009).

Recently, a compelling amount of work on EM has developed in line with both S-D logic (e.g., Hills and Hultman 2011; 2013; Miles et al. 2015; Morrish 2011; Mort, Weerawardena, and Liesch 2012; Whalen et al. 2016) and effectuation (e.g., Kasouf et al. 2009; Miles et al. 2015; Morrish et al. 2010; Whalen and Akaka 2016), reflecting how these progressive theories can enhance our understanding of the different characteristics of EM. Entrepreneurial marketers outstandingly leverage their resources by means of creative approaches, such as open innovation, crowdsourcing, and crowd creation (e.g., Cooper

2002; Vasilchenko and Morrish 2011). Essentially, they co-innovate with their partners and customers by engaging them in the innovation process to acquire valuable information and ideas (e.g., Lee, Olson, and Trimi 2012; Yeniyurt, Henke and Yalcinkaya 2014). They also engage in value and opportunity co-creation with network partners throughout the entire customer journey. Therefore, as illustrated in Table 2, the intersection of S-D logic and effectuation can help in further differentiating EM. Both theories convey the importance of leveraging partnerships and networks, intangible resources, and value co-creation to thrive in marketplaces that are characterized by high uncertainty. While S-D logic shows various key principles of EM, effectuation explains how these principles are carried out.

2.2. EM antecedents

2.2.1. Market orientation (MO)

Kohli and Jaworski (1990) developed MO theory, which signifies the marketing concept in organizations. They define MO as the generation of market intelligence with regard to the needs of present and future customers, the distribution of such intelligence throughout an organization, and the response of the organization to this information. In their behavioral perspective, the main focus is not on the customer, but on marketing intelligence. By contrast, Narver and Slater (1990) delineate MO from a cultural perspective that incorporates competitor orientation, customer orientation, and inter-functional coordination as its three main facets. Although both definitions of MO have been measured and tested, past research did not reach a consensus that one is more accurate than the other (Pitt Caruana, and Berthon 1996; Tajeddini, Trueman, and Larsen 2006).

Yet another MO scale was developed by Deshpande et al. (1998) with a primary focus on customer orientation. However, regarding MO-EM relationship, Jones and Rowley (2011) suggest that, even if all of these scales are good enough to be used to measure MO, Narver and Slater's (1990) scale is still more useful for EM scholars. In addition to this, in their meta-analysis on MO-performance relationship, Kirca and colleagues (2005) found strong evidence that MO is positively correlated with firm performance, demonstrating that MO has the following correlations with performance: 0.32 with overall performance, 0.27 with profits, and 0.26 with revenue.

2.2.2. Entrepreneurial orientation (EO)

Entrepreneurship scholars have struggled to find a common ground in defining entrepreneurship as an emerging area of study (Davidsson 2005). One broad definition describes entrepreneurship as a process of putting together multiple resources in order to take advantage of an opportunity and create value (Stevenson and Jarillo 2007). However, research on EO has made great progress in more recent years (Rauch et al. 2009). As the author of one of the earliest works on EO, Miller (1983) argued that EO is comprised of three primary facets: risk-taking, innovation, and proactivity. This cultural perspective on EO gained prominent support from other entrepreneurship scholars (e.g., Miller and Friesen 1978; Covin and Slevin 1991; Venkatraman 1989). As a primary constituent of EO, innovation is described as a business's desire to be involved in the development of creativity, idea generation, originality, trialing, and novel processes that might result in producing new goods and services (Lumpkin and Dess 1996). Furthermore, risk-taking can be defined as the tendency for managers to sacrifice large amounts of resources for risky projects that may potentially fail (Miller and Friesen 1978). In addition, proactivity can be

defined as leading the competition through a continuous commitment to looking for new opportunities to anticipate demand and develop products (Lumpkin and Dess 2001).

Adding to Miller's (1983) primary outline of EO, Lumpkin and Dess (1996) introduced autonomy and competitive aggressiveness as new dimensions. While autonomy is defined as the ability for entrepreneurs to act independently when pursuing a new endeavor, competitive aggressiveness refers to a company's intention and ability to beat competitors. However, the dimensionality of EO has also been questioned by the past literature (Rauch et al. 2009), with some scholars suggesting that EO is a unidimensional construct (e.g., Covin and Slevin 1989), while others argue that it is multidimensional (e.g., George 2006). It has also been argued that, while EO provides an edge to those who embrace its essence, it becomes even more vital when businesses are faced with challenges, such as a lack of opportunities, technological disruption, volatile customers, great changes in society at large, a lack of environmental control, increased specialization, or the fast obsolescence of resources (Stevenson and Gumpert 1985).

2.2.3. EO and MO interrelationships

Past research shows that both EO and MO have a strong positive influence on firm performance (e.g., Kirca, Jayachandran, and Bearden 2005; Lisboa, Skarmeas, and Saridakis 2016; Rauch et al. 2009; Shan, Song, and Ju 2016; Slater and Narver 2000). For instance, while Rauch et al. (2009) found the average correlations between EO and performance to be 0.242, the average correlation between MO and performance is proposed to be 0.32 (Kirca et al. 2005). However, exploring what their synergetic interrelationships are, and how they relate to each other, is crucial in developing a conceptual understanding

of EM. Extant research suggests that adopting multiple orientations can contribute more to firms' competitive advantage than adopting a single orientation (e.g., Hakala 2011; Hult, Hurley, and Knight 2004). In the context of this paper, the implication is that adopting either MO or EO independently may not be optimal. Several scholars have criticized MO for creating excessively customer-centric firms to the extent that it undermines proactiveness and innovativeness (e.g., Berthon, Hulbert, and Pitt 1999; Christensen 1997). On the other hand, under uncertainty, being entrepreneurial alone may not be enough to attain a healthy financial performance (Matsuno, Mentzer, and Ozsomer 2002). Therefore, adopting EO and MO simultaneously should have a greater influence on firm performance (e.g., Eggers, Hansen, and Davis 2012; Matsuno, Mentzer, and Ozsomer 2002; O'Cass and Ngo 2011; Slater and Narver 1995; Solé 2013). By complementing MO with EO, firms can supplement their market-driven behavior with a market-driving culture (Jaworski, Kohli, and Sahay 2000; Schindehutte, Morris, and Kocak 2008).

Some scholars consider MO and EO, along with other orientations, as organizational capabilities that enhance firms' performance (e.g., Bhuian, Menguc, and Bell 2005). MO and EO interrelationships, and their simultaneous impact, have been studied productively by early research. Although they overlap and correlate significantly (e.g., Becherer and Maurer 1997; Hult and Ketchen 2001; Miles and Arnold 1991; Slater and Narver 2000), they still have their distinctive domains (e.g. Atuahene-Gima and Ko 2001; Atuahene-Gima et al. 2005; Baker and Sinkula 2009). Yet, they both complement each other in improving performance and attaining competitive advantage (e.g., Atuahene-Gima and Ko 2001; Baker and Sinkula 2009; Bhuian, Menguc, and Bell 2005; Frishammar and Hörte 2007; Hult and Ketchen 2001; Li et al. 2008; O'Cass and Ngo 2011; Slater and

Narver 1995; Tzokas et al. 2001). For instance, Li and colleagues (2008) investigate EO as a moderator for the relationship between MO and performance for Chinese small and medium enterprises (SMEs), and find that the MO-performance relationship is moderated by EO's dimensions of proactiveness and innovation. In addition, Frishammar and Hörte (2007) suggest that MO, when aligned with a firm's innovativeness, improves the performance of new product development. Finally, Bhuian and colleagues (2005) suggest a different moderation effect of EO on the MO-performance relationship, proposing an inverted-U moderation model. In this curvilinear relationship, an optimal MO-performance relationship is attained when a firm has a moderate level of EO.

Although MO and EO have their own deficiencies when modeled separately, these deficiencies have been marginally addressed by extant research. For example, Narver and colleagues (2004) added proactiveness as the fourth dimension to MO in order to improve its underlying construct. They incorporated proactiveness, because marketing must be more proactive in order to be able to explore and exploit opportunities efficiently. Similarly, Hamel and Prahalad (1994) introduced a more entrepreneurial perspective on marketing. Whereas some scholars consider EO as proactive MO (e.g., Webster 1981; Zeithaml and Zeithaml 1984), others suggest that EO alone is not enough to enhance firm performance (e.g., Matsuno, Mentzer, and Ozsomer 2002). All of these approaches suggest that there might be a missing link – EM – which could serve as an alternative approach to enable firms to amplify the valuable elements of MO and EO simultaneously and, further, to complement them with the distinctive dimensions introduced by EM, in order to obtain optimal impact on performance. Baker and Sinkula (2009) also suggest that the

simultaneous adoption of MO and EO leads to innovation success, which, as a concept, overlaps significantly with EM.

2.3. EM and networks

The social network theory serves as the basis for the assumption that actors cooperate within a social context, forming networks (Latour 2005). As applied to entrepreneurship, the networks research stream was brought forth thirty years ago, with its roots arising from sociology and further related fields, based on the premise that entrepreneurs are held together by social relationships (Hoang and Antoncic 2003; Chen and Tan 2009; Vasilchenko and Morrish 2011). In this entrepreneurial framework, research on networks focuses on either the impact of networks on the entrepreneurial process or on how the latter affects networks' development (Borgatti and Foster 2003; Hoang and Antoncic 2003; Slotte-Kock and Coviello 2010). Furthermore, networks provide actors with relevant operant and operand resources, thus enhancing organizations' capabilities and creating value for all participants (Guercini and Ranfagni 2016; Jiang, Tao, and Santoro 2010; Lin and Lin 2016; Vargo and Lusch 2004; Vasilchenko and Morrish 2011). Consequently, firms' networks, including their customers, partners, distributors, and suppliers could represent unique resources that trigger their superiority in the marketplace (Aarikka-Stenroos and Sandberg 2012; Stuart, Hoang, and Hybels 1999). The relevance of networks relies upon location, context, culture, and industry (Hitt et al. 2001), and is associated with the marketplace's competitiveness, dynamism, and uncertainty (Gulati, Nohria, and Zaheer 2000).

Networks' influence on organizational performance has been investigated by early research. It was suggested that leveraging the firms' networks leads to substantial improvement in their performance (e.g. Brouthers et al. 2015). As such, some scholars propose that well-developed networks lead to better growth in the marketplace (Stearns 1996; Zhao and Aram 1995). Baum and colleagues (2000) also argue that startups with effective networks tend to have better survival rates. Other studies suggest that having a mix of weak and strong ties leads to better performance (Bruderl and Preisendorfer 1998; Uzzi 1996). Additionally, firms with diverse networks, and thus more weak ties, were found to identify a larger number of opportunities (Singh et al. 1999). Some research finds that having ties with different actors, including customers, competitors and suppliers, enables entrepreneurs to attain competitive advantage by providing the following: precious information and tacit knowledge, tangible and intangible resources, valuable capabilities, investment capital, market access, and technology (Brouthers et al. 2015; Brown and Butler 1995; Davidson and Honig 2003; Gulati, Nohria, and Zaheer 2000; Hanna and Walsh 2008; Hoang and Antoncic 2003; Johannisson et al. 1994; Larson and Starr 1993; Light and Gold 2000). Furthermore, it has been found that entrepreneurial marketers use their networks in multiple ways. For example, Stokes (2000) argued that entrepreneurs utilize interactive marketing strategies in developing marketing mix, and use their networks to obtain information. Such strategies endow entrepreneurs with legitimacy, a factor that is highly regarded in uncertain conditions (Hoang and Antoncic 2003). Therefore, interactive marketing strategies help actors to leverage resources more effectively, find and create opportunities, and be more proactive, innovative, risk-tolerant, and customer-oriented in

ways that create value for all actors in the environment. All of this suggests how relevant and crucial the study of networks is, in EM theory construction.

In recognition of the importance of networks, researchers propose different constructs that highlight its influence on firms' and entrepreneurs' performance, including network capability and networking orientation. Network capability is defined as entrepreneurs' and organizations' capacity to make, preserve, and exploit relationships to attain different resources from actors in their environment (McGrath and O'Toole 2013; Mitrega et al. 2012). In their university spin-off performance research, Walter and colleagues (2006) suggested that network capability is positively associated with firm performance. Some scholars further suggest a positive relationship between innovation and network capability (e.g. Parida and Örtqvist 2015). Other research introduced networking orientation as a strategic orientation concerned with the efficiency and effectiveness in managing and leveraging networks and their exchanged resources (Mu and Benedetto 2011).

2.3.1. Network structure

In the entrepreneurship framework, research on networks concentrates on three main areas: governance, structure, and network content (Hoang and Antoncic 2003). Network content describes inter-organizational and inter-personal relationships between actors in a network, and the exchanged resources between these actors. Network governance examines coordination features that influence networks, such as trust, and how actors exchange resources. Lastly, network structure analyzes different networks characteristics and patterns. However, diversity, strength, and size are some of the most

significant characteristics examined in the network structure context (Capaldo 2007; Hoang and Antoncic 2003).

Although networks' value to firms and entrepreneurs has received wide acceptance among business scholars, there is still some lack of clarity about how the characteristics of networks may contribute to performance (Johannisson 2000; Hite and Hesterly 2001; Rowley, Behrens, and Krackhardt 2000). The three most prominent, and relevant to EM, network structure attributes are: size, strength, and diversity. Size is measured by the number of interpersonal or inter-organizational ties that the focal actor has (Hoang and Antoncic 2003). In some ways, the entrepreneur's centrality within a network is positively related to the size of his network, with some attention to controlling advantage between direct and indirect links in that network. In essence, the more central he is in the network, the more network ties, direct and indirect, he will have. As such: the more ties an entrepreneur or organization has, the more resources he will be able to access (Baum, Calabrese, and Silverman 2000; Hansen 1995). Therefore, a more developed network is more valuable to entrepreneurs in pursuing their goals (Larson and Star 1993). Furthermore, strength is actually concerned with whether an entrepreneur's ties within a network are strong or weak. Strong ties, such as family, close friends, and other strongly-committed actors within their network, usually indicate more commitment to entrepreneur success. Weak ties include acquaintances, friends, and all other actors in their network. Lastly, diversity is concerned with how diverse the entrepreneur's network ties are; the more diverse his ties are, the more likely he will have access to an assorted set of resources. In addition to broadening entrepreneurs' resources, having a diverse network provides them with better learning opportunities (Jiang, Tao, and Santoro 2010). Diverse networks

also tend to contain high proportions of bridges (Capaldo 2007). Similar concepts have been discussed by network researchers, such as network density and heterogeneity (e.g. Silverman and Baum 2002). As ties become denser, they may fall into a resource reciprocity behavior, where ties and resources are exchanged. Some researchers argue that having weaker ties will provide entrepreneurs with more diverse resources (Capaldo 2007).

CHAPTER 3

3. Research Hypotheses and Conceptual Model

Due to increased uncertainty in the marketplace, traditional marketing efforts become inefficient in improving organizations' performance. Conversely, the current research claims that EM can effectively enhance organizational performance under uncertainty. Numerous scholars have either implicitly claimed, or explicitly argued, that EM improves performances, either directly or indirectly (e.g., Eggers, Hansen, and Davis 2012; Hakala 2011; Morrish and Jones 2019; Morrish, Miles, and Deacon 2010; Sadiku-Dushi, Dana, and Ramadani 2019). In their meta-analysis comprising 114 studies, Kirca and colleagues (2005) find that financial performance and firm MO are positively correlated. Since both MO and EO have commonalities with EM (e.g., value creation and risk-taking), a positive relationship between firm performance and EM should be anticipated. For example, the marketing capabilities and innovativeness dimensions of EM are somehow driven from MO and EO, respectively, and positively relate to organizational performance (e.g., Baker and Sinkula 2009; O'Cass and Ngo 2011; Uslay and Sheth 2008).

Several studies (e.g., Eggers et al. 2018; Sadiku-Dushi, Dana, and Ramadani 2019; Whalen et al. 2016) overtly theorize a positive relationship between organizational performance and EM. According to Bjerke and Hultman (2002), it is advisable for growth-seeking firms to use EM to build long-term relationships with customers, thus achieving growth under high uncertainty. Latterly, Morrish and colleagues (2010) argued that EM can generate a productive culture that triggers competitive advantage attainment and opportunity creation. Furthermore, EM allows firms to obtain competitive advantages over

their competitors by becoming more affordable and distinctive (Morrish 2011). The use of the effectuation approach allowed Mort and colleagues (2012) to empirically determine that EM promotes an enhanced performance for born-global organizations. Analogously, the comparative study carried out by Jones and colleagues (2013) establishes that an EM orientation triggers long-term growth for SMEs. Moreover, according to Whalen and colleagues (2016), the use of EM allows organizations to attain a temporary competitive advantage. In accordance with Thoumrungroje and Racela's (2013) point of view regarding EO and customer orientation as organizational capabilities (and as per the resource-based theory), I acknowledge EM capabilities as a distinguishing resource that firms can use to obtain competitive advantages (Barney 1991). The firms that employ networks, pay inclusive attention, foster innovation, leverage resources, take acceptable risks, embrace proactiveness, and focus on opportunities to add value to their ecosystem are liable to achieve a better overall performance. Hence, I expect EM to positively influence firm performance, and, in line with earlier research, positive effects of MO and EO on organization performance are also anticipated. Therefore,

Hypothesis 1a: EM positively affects firm performance.

Hypothesis 1b: MO positively affects firm performance.

Hypothesis 1c: EO positively affects firm performance.

Marketing and entrepreneurship are crucial parts of business which contribute to firm success in the marketplace (Miles and Arnold 1991; Whalen et al. 2016). Entrepreneurship views marketing as a primary organizational function that will introduce and enhance innovation (Collinson and Shaw 2001). In an EM context, the influence of

entrepreneurship on marketing is even more substantial. It is helpful to recall that Morris and colleagues (2002) argue that four out of their seven dimensions of EM are derived from EO conceptualization (i.e., proactiveness, risk-taking, innovation, and opportunity). Moreover, there is empirical evidence that the correlation between EO and MO is robust (e.g., Hult and Ketchen 2001). This relationship should carry over to EM, as MO is inherently about embracing the marketing concept in organizations. In fact, we expect it to be more pronounced between EO and EM, due to relative similarity in their underlying conceptualizations. Therefore, the more a company is entrepreneurially-oriented, the more entrepreneurial its marketing will be.

On the other hand, early research suggests a moderate overlap between the conceptualizations of MO and EM (e.g., O'Cass and Ngo 2011). For instance, Morris and colleagues (2002) suggest that two of the EM dimensions are basically drawn from MO theory. In particular, customer intensity and value-creation are related to a firm's MO (Jaworski and Kohli 1993; Narver and Slater 1990). In these studies, it is implied that EM is more relevant for the market-oriented firm. As MO is inherently about promoting the marketing concept inside organizations, there is a higher propensity of embracing EM in companies with higher MO. Therefore,

Hypothesis 2: Firms' EO positively affects their EM.

Hypothesis 3: Firms' MO positively affects their EM.

While MO has been criticized for being excessively customer-centric to the degree that it demoralizes innovativeness and proactiveness (e.g., Christensen 1997), adopting EO by itself might not be enough to enhance performance (e.g., Li et al. 2008; Matsuno,

Mentzer, and Ozsomer 2002). As aforementioned, MO and EO both have their own deficiencies when modeled individually, yet these have only been marginally addressed by extant research. For instance, Narver and colleagues (2004) added proactiveness as the fourth dimension to MO, in order to improve the effectiveness of its underlying construct. Similarly, Hamel and Prahalad (1994) introduced a more entrepreneurial perspective for marketing. Meanwhile, there is ambiguity in the EO-MO relationship; when EO and MO are not modeled simultaneously, the direct relationship between EO and firm performance may diminish (Matsuno, Mentzer, and Ozsomer 2002).

These issues with the existing models of MO and EO suggest that there might be an overlooked link – EM – as an alternative approach for firms to effectively utilize valuable competencies of MO and EO simultaneously, and supplement these with constructive dimensions, introduced by EM, and generate higher impact on firm performance. That is to say, EM might be a mediator to MO, EO and performance relationships, with a stronger influence on firm endeavors under uncertainty. For instance, Thoumrungroje and Racela's (2013) path analysis shows that customer orientation, EO, and performance relationships are mediated by product innovation a focal concept to EM. Furthermore, Baker and Sinkula (2009) suggest that MO and EO, when adopted simultaneously, will lead to innovation success, a concept which overlaps with EM. Therefore,

Hypothesis 4a,b: EM positively and partially mediates the relationship between a) MO and firm performance, and b) EO and firm performance.

According to previous research, environmental factors moderate the relationship between firms' performances and varying orientations (e.g., Kirca, Jayachandran, and

Bearden 2005; Rauch et al. 2009). Under this context, the goal of the present study is to investigate the following factors: technological turbulence, market turbulence, supplier power, market growth, and competitive intensity.

In high turbulence markets, firms see themselves being increasingly obliged to withstand the changing needs of their customers. Such markets are reinforcing higher levels of customer service and customization, thus becoming more heterogeneous (Han, Kim, and Srivastava 1998). Whilst the positive effect of MO on firm performance is noticeable to a higher extent in markets with higher turbulence (Kirca, Jayachandran, and Bearden 2005; Kumar, Subramanian, and Yauger 1998), low turbulence markets that deal with stable customer preferences require less effort from firms to develop market intelligence allowing them to cope with competition. An equivalent relationship can be anticipated for EM. Specifically, EM is less advisable for those firms which operate in markets defined by stable demand (e.g., Whalen et al. 2016; Yang and Gabrielsson 2017). Nonetheless, in my conceptualization, EM in turbulent markets allows firms to become more innovative, proactive, and prone to take acceptable risks, thus improving their ability to endure, create value for their stakeholders, and take advantage of opportunities.

Furthermore, markets are expected to possess higher technological turbulence as they become more heterogeneous (e.g., Han, Kim, and Srivastava 1998). This gives rise to the necessity for firms to employ proactive and innovative marketing in order to survive and prosper in a marketplace characterized by increased technological turbulence (e.g., Ahmadi and O'Cass 2016). According to Whalen and colleagues (2016), the more technological turbulence a firm has to face, the higher is its tendency to engage in EM.

Competition obliges firms to become more flexible, an attribute warranted by EM, in order to succeed (Morrish, Miles, and Deacon 2010). Nonetheless, some markets are notably more competitive, thus requiring higher levels of EM. Due to the growing competitive intensity, firms have to be aggressive in identifying and meeting customer needs (Kohli and Jaworski 1990). Similarly, increased competition causes firms to become more predisposed to engage in EM (Whalen et al. 2016). Furthermore, it has been found that the MO-performance relationship, and venture performance, marketing capabilities, and EO interrelationships rely upon the competitive hostility level (e.g., Harris 2001; Martin and Javalgi 2016). Therefore, the moderating influence of competitive intensity applies to the EM-performance relationship, as well. In my conceptualization, the use of EM in such competitive environments allows firms to provide evened attention to competitors, customers, and other stakeholders, permitting them to exploit opportunities innovatively and proactively, and to generate value in their ecosystem.

Supplier power causes buyers to incur higher costs, negatively affecting their margins. Under such challenging scenarios, in which suppliers overpower the firm, the power gap can be narrowed by the efficacy of EM (e.g., Morris, Schindehutte, and LaForge 2002). In order to survive under such difficult circumstances, organizations tend to resort to unconventional approaches (i.e., EM). Organizations that embrace EM tend to employ their networks more efficiently, thus gaining access to more resources and reducing their vulnerability to suppliers' uncertainties. Moreover, such organizations are expectedly superior in leveraging the resources they dispose, thus consuming less by enhancing the productivity of their resources. By offering higher perceived value, EM organizations can also bypass the challenges of supplier power and protect their margins more efficiently.

The difficulty of achieving firm growth in low growth and mature markets stimulates the need to concentrate on providing more value to consumers and performing better than competitors (Slater and Narver 1994). Creating differentiation in stagnant markets by embracing EM (i.e. finding innovative approaches and taking more acceptable risks) and creating added value for all stakeholders has become a necessity (e.g., Whalen et al. 2016). In such markets, firms are under increasing pressure to deviate from the status quo, and to try and create new markets. Consequently,

Hypothesis 5a,b,c,d,e: The relationship between EM and firm performance is moderated by environmental factors, such that a) market turbulence, b) technological turbulence, c) competitive intensity, and d) supplier power positively moderate the EM-firm performance relationship, while e) market growth negatively moderates the relationship.

Whether, and how, the effectiveness of EM is dependent upon firm size is a controversial topic (Kilenthong, Hultman, and Hills 2016). Given the differences in their resources and capabilities, differently-sized firms behave in different ways, in the marketplace. Contemporary research has marginally studied and reported mixed findings on how organization size influences the relationship between organization performance and strategic orientations (e.g., MO, and EO) (e.g., Núñez-Pomar et al. 2016; Rauch et al. 2009). Initially, EM solely focused on small businesses, due to their idiosyncratic approach to markets and customers, as well as their enduring flexibility (Morris, Schindehutte, and LaForge 2002). Small firms adopt EM because of their limited resources, and out of the need to survive under uncertain market conditions and hostile environments (Whalen et al. 2016). Nonetheless, as uncertainty and hostility have become exponentially more common in most markets, EM no longer applies solely to small businesses. For instance, Miles and

Darroch (2006) acknowledge that, in order to gain competitive advantages, large corporations engage in EM as well. Nevertheless, as medium-sized firms do not enjoy the adaptability, focus, and flexibility of smaller firms, as well as the scale, scope, and resource leveraging opportunities of larger firms, engaging in EM does not benefit them to the same extent as their smaller and larger peers (Uslay, Altintig, and Winsor 2010; Whalen et al. 2016). Consequently,

Hypothesis 6: Firm size moderates the relationship between EM and firm performance in a U-shaped manner, such that both large and small-sized firms benefit more from EM than mid-sized ones do.

While the networks value is not questioned, some lack of clarity persists about how their structure and characteristics assist performance (Johannsson 2000; Hite and Hesterly 2001; Rowley, Behrens, and Krackhardt 2000). Strength, size, and diversity are the most important network structure attributes that are relevant to EM. Size is acknowledged as the number of inter-organizational or interpersonal ties of the focal actor. Typically, the centrality of a firm within a network is related to its network's size. Essentially, the more central firms are in networks, the more network ties, both direct and indirect, that they will have. Additionally, strength centers upon determining whether the ties of a firm within a network are weak or strong (e.g., family and close friends). Finally, diversity centers upon the variety of the firm's ties. The more diverse these ties are, the more possibilities that they will access a diversified set of resources.

Altogether, the more ties an organization has, the more resources it can access (Baum, Calabrese, and Silverman 2000). The expansion of a firm's network potentially grants access to more information and knowledge inflows (Xie, Fang, and Zeng 2016). In

accordance with the effectuation theory, Hills and colleagues (1997) claim that the vast majority of entrepreneurs use their networks to find ideas for new businesses. The larger the size of a firm's network, the more likelihood that the firm will have to discover structural holes in its environment. Linking these structural holes generates a unique source of profits and value (Burt 2000; Sheth and Uslay 2007). Furthermore, by associating themselves with renowned entrepreneurs and firms, and by having a well-developed network, firms can also share risk (Grandori 1997) and achieve legitimacy in the marketplace (Cooper 2002).

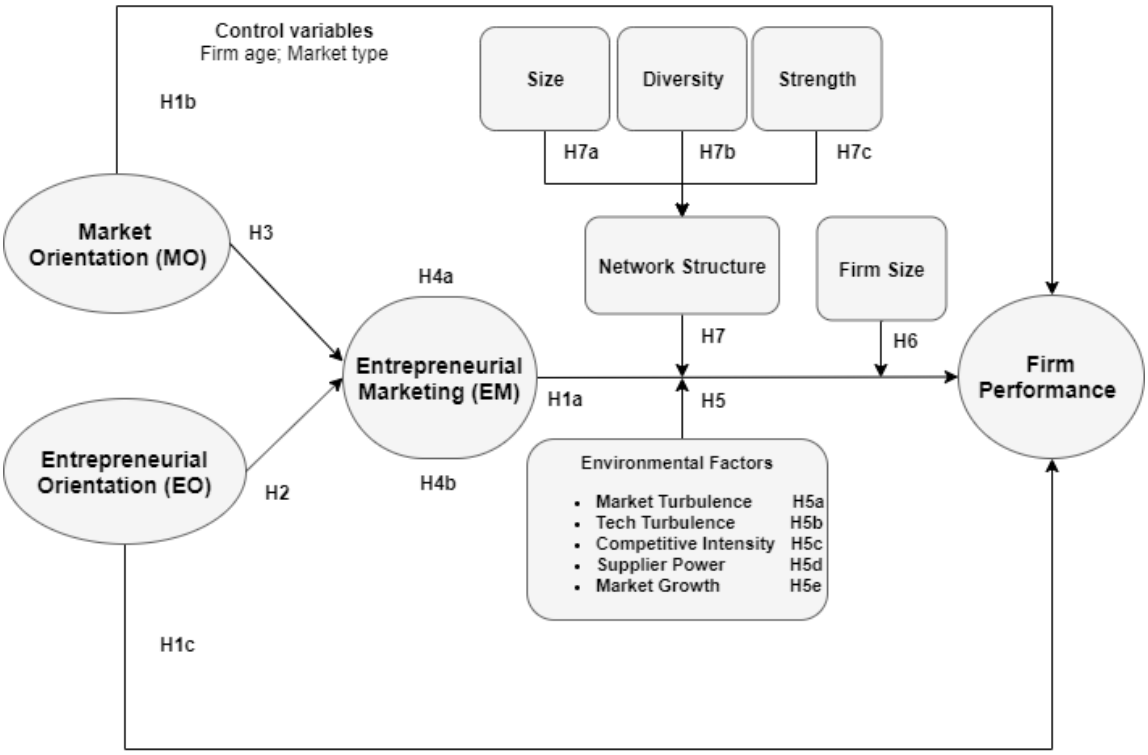
Diverse networks provide entrepreneurs with a different set of resources and knowledge (Elfring and Hulsink 2003; Jiang, Tao, and Santoro 2010; Rauch et al. 2016; Xie, Fang, and Zeng 2016), reinforcing learning and enhancing value creation and proactive behavior (Jiang, Tao, and Santoro 2010). A diverse network increases the possibility of having additional resources within the network, thus enhancing collaboration with a varied set of actors for mutual value creation and outsourcing (Amit and Zott 2001). Firms with more diverse networks gain access to varied types of people and firms, thus further reinforcing their legitimacy in the marketplace. Furthermore, an increasing network diversity will expand the types of opportunities that firms are exposed to, and their ability to identify more structural holes. Due to this, diverse networks have been acknowledged as fertile and rich areas for innovation (Capaldo 2007). To provide an example, past research shows how a diversified portfolio of alliance partners reinforces the innovation capability of a firm (Baum, Calabrese, and Silverman 2000). Therefore, EM stimulates firms to pay inclusive attention to varied stakeholders in their environment, consequently empowering them to preserve higher network diversity.

Even though having strong ties guarantees firms easier access to crucial information and resources, increased legitimacy in the marketplace, and more support from partners (Hoang and Antoncic 2003), having a superfluous number of strong ties might turn out to be disadvantageous (Gargiulo and Benassi 1999). Entrepreneurs and firms may fall into the trap of over-embeddedness in their networks (Uzzi 1996). By becoming over-dependent on practices and information within their networks, they might find themselves isolated from the external environment. Consequently, their access to external opportunities, intelligence, and evolving market conditions might see itself negatively affected (Johannisson 2000). By falling into the trap of over-embeddedness and failing to build sufficient weak ties, organizations will see their innovativeness endangered due to deficient access to knowledge and new ideas (Mu, Peng, and Love 2008; Uzzi 1997). Additionally, weak ties are a rich source of knowledge, information, and ideas. It was found that firms with more weak ties are able to identify more opportunities (Singh et al. 1999). Nonetheless, in the EM context, over-relying on strong ties is acknowledged as disadvantageous, thus I anticipate a negative relationship between EM effectiveness and network strength. Consequently,

Hypothesis 7a,b,c: Network structure (strength, size, and diversity) moderates the relationship between EM and firm performance, such that a) network size (number of ties), and b) diversity (variety of ties) positively moderate EM-firm performance relationship, while c) strength of the network (ratio of strong ties) has a negative moderation influence on that relationship.

The research hypotheses are captured in my model of EM and organizational performance in Figure 2.

Figure 2 The Proposed Contingency Model of EM



CHAPTER 4

4. Method

4.1. Sampling frame and data collection

To test the hypotheses articulated in this research, a nationwide survey of business units (BUs) from a broad spectrum of industries was conducted. 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 multiple billions of dollars. Based on these interviews, appropriate participants for the survey were determined to be marketing executives (director or above) with primary responsibilities for the marketing strategy and day-to-day activities in their organizations. Thus, data was drawn from senior marketing executives at different-sized organizations from different industries within the US. A commercial data collection source, Centiment[1], was hired to reach the target audience of this survey. Using a representative pool of marketing decision-makers, the sampling frame of this study incorporates small, medium, and large-sized organizations from a diverse set of industries, including retail, food services, information and technology, financial services, manufacturing, and healthcare. Some industries that might have idiosyncratic characteristics, such as the utility industry, were excluded.

[1] Centiment provides access to thousands of decision-makers from different industries and has established a good reputation in providing both B2B and B2C research services to a wide range of clients, including prominent research institutions such as Harvard, Yale, Stanford, and Georgetown, and large corporations including Amazon, Sofi, and Capital One.

As the present study is set to undertake a thorough examination of EM with respect to firm size, a stratified sampling method was used to collect data. The sample was divided into three main stratums, with each stratum representing at least 30% of the total sample. The European Union's definition of firm size (Hansen and Eggers 2010; Rauch et al. 2009) was followed in reaching out to respondents. It categorizes firm sizes based on the number of the employees as follows: small (1 to 49 employees), medium (50 to 499 employees), and large (more than 500 employees) (Whalen et al. 2016). Next, a letter was sent to the sampled audience of this investigation, explaining the purpose and the details of this study, assuring the anonymity of data collection, including a request for participation, and providing a link to the web-survey. Then, two weeks later, a follow-up email was sent, to remind the targeted individuals to fill out the survey. Consequently, this study's questionnaire was made available to 2,034 marketing decision-makers from different-sized organizations that operate in a wide array of industries. After the data collection process was complete, 420 verified and complete responses were received. Therefore, the effective response rate for the current study is approximately 20.6 %. However, it is worth mentioning that 49 responses were collected earlier, before full-scale data collection described above, to conduct a pilot study as will be discussed in more details later in this text.

As this study is employing key informants as the primary source of information, I needed to assure the presence of a rigorous criterion for the informants' selection process. Hence, I have conducted four preliminary interviews with three marketing executives and an entrepreneur. These interviews have helped to achieve three main objectives: 1) identifying the right key informants who will be able to answer my survey, 2) assuring the

understandability of the items I intend to use in measuring EM, and 3) ensuring EM scale face validity. Consequently, the appropriate respondents for this survey were identified to be marketing decision-makers, who are at the level of director or above. This decision enabled me to establish reasonable confidence that my respondents are well-informed about the marketing behavior of their organizations, and therefore capable of making generalizations about the constructs under question in this survey (Seidler 1974). Furthermore, to make sure that informants possess the needed knowledge and expertise to respond to the survey, I asked the informants to self-assess their expertise on the topic of this survey on a 7-point scale, in which "7 = most qualified" (Kumar et al. 1993). Consequently, any respondents who rated themselves with less than "4" on the qualification scale were removed from my data set. Accordingly, 14 respondents were disqualified from being incorporated into my analysis, and the mean response was 6.17, indicating adequate qualification to participate in the study.[2] Furthermore, as proposed duration for the participation in this study was 15 minutes, any respondents who spent a significantly longer time (i.e., more than two hours) in answering the survey questions were also identified and removed from the analysis. As a result, five responses were found to meet this criterion and, consequently, were removed from the data set. This makes my final

[2] As a robustness check, and to validate my decision in eliminating responses from informants with "3" or "less" in the qualification confidence scale, I ran all possible cuts (i.e., 1, 2, 3, and 4) and checked for the differences in the results and the model fit. Through all cuts, all of my key variables maintained positive and significant relationships (as hypothesized). However, after eliminating responses with "4" on the confidence scale, my model fit began to deteriorate. Therefore, I decided to keep the most confident respondents, while maintaining the best fit for my model, making the elimination of responses with "3" or "less" in the confidence scale out to be my best option.

data set to encompass 401 complete and clean responses, which were used throughout the empirical investigation that this study was set out for.

The final sample incorporates a diverse set of industries and firm sizes. Industry-wide distribution is as follows: health and social care (15.7%), retail (12.2%), arts, entertainment, and recreation (11%), information and technology (10.7%), finance and insurance (10%), wholesale (7.2%), manufacturing (6.5%), and other industries (6.7%). Furthermore, professional services, real estate, education, consumer packaged goods, construction and transportation, hospitality, non-profit, agriculture and mining, and law industries are all fairly represented in my sample, with representation ranging between .5% and 4.5%. However, firm size representation is as follows: small firms (28.4%), medium firms (36.4%), and large firms (35.2%). However, firms' annual revenues vary among the studied firms, ranging from less than a million dollars to one billion dollars or more. For instance, while 20% of the sampled firms have less than one million dollars of revenue annually, about 20.2% of the sample generates more than one billion dollars in annual revenue. Moreover, while 55.4% of the sampled firms operate primarily in consumer markets (B2C), 44.6% of the sample have other businesses as their primary customers (B2B). However, participating organizations range in their market share in their served markets, and only 13.2% of the sample own less than 10% of the markets. Moreover, while 14.2% of the sample has been in business for less than 5 years, 18% of the sampled firms have been conducting business for more than 30 years. Nonetheless, respondents-wise distribution is as follows: 41.1% are C-level executives (e.g., CEO, CFO, CMO, or president), 10% are vice presidents (VPs), and 48.9% are directors (e.g., marketing

director, group director, or senior director) positions in their firms. A full description and discussion of the sample descriptive statistics is provided in Appendix D.

After organizing my data set and preparing the data for analysis, a non-response bias test was conducted, to make sure that no significant differences exist between those who participated and those who did not. In an analogy to (Wu et al. 2006), I compared the early respondents (i.e., the first 75%) to the late respondents (i.e., the last 25%) to check for the "non-response bias" (Armstrong and Overton 1977). A t-test was conducted using Levene's homogeneity of variance test to investigate if there were any significant variances between the early and later respondents, in regard to the key constructs under investigation. This test revealed that non-response bias does not represent a concern for the current study. Furthermore, as I am using a self-administered instrument, there is a potential for a common method bias to take place. Therefore, multiple key steps were undertaken to examine whether the common method represents a threat to the validity and reliability of the present study. First, as mentioned earlier, I only included qualified senior marketing decision-makers (i.e., directors or above) in my sample, of which any respondents who rated themselves with less than "4" on the confidence of qualification question were removed from the analysis. Therefore, the possibility of the presence of common method bias is reduced by only including those who are qualified and confident about their qualification in my analysis (Rindfleisch et al. 2008). Second, I employed the Harman one-factor test, to check for the common method bias by conducting principal component analysis. No single factor accounted for most of the variance in my model, and therefore, I can proclaim that common method bias is not a problem for the present study (Podsakoff and Organ 1986). Third, I run a CFA model for all of the study variables under one factor,

and the results indicate bad model fit (e.g., CFI=.728, NFI=.661, NNFI=.716, GFI=.596, and AGFI=.566). Furthermore, as the survey includes closely related constructs and many moderation variables, the respondents' ability to guess is reduced significantly. All of these measures indicate that common method bias is not a threat to the present study.

4.2. Measurement and instrument development

I specified the domain of each construct and item under question, researched the literature to locate any relevant scales that can be employed, adapted existing scales when possible, and created new ones when necessary (Churchill 1979). Consequently, with the exception of the EM scale created by this dissertation, all of the primary measures employed by the present research were drawn from past research. As demonstrated by earlier research, these measures have well-established validity and reliability. Because an appropriate scale to measure EM is lacking (e.g., Whalen et al. 2016), I have developed a scale to measure EM (scale development details are discussed in the text below). A structured survey instrument which incorporates all of the employed constructs by this study was developed. The survey was prefaced with a letter to respondents describing the purpose and the details of this study, providing a glossary for some terminologies used in the survey, assuring the anonymity of data collection, and asking respondents to answer all survey questions, with respect to their primary business unit (BU) as the basic unit of analysis for the present study. Furthermore, a pilot study on a subset of the sample (N = 49) was performed before the full-scale data collection. The study instrument was refined based on the results of the pilot study, as will be discussed later in this text**.** All of the measures employed by the current study are discussed below and are shown in Table 4, and all survey questions are listed in Appendix A.

4.2.1. Study variables

MO was measured using MKTOR scale, which was first developed by Narver and Slater (1990), and incorporates three primary dimensions: customer orientation, competitor orientation, and inter-functional coordination. This construct proposes a 15-item scale to capture the three dimensions of MO. Each item was measured by a seven-point Likert scale, with 1 = "strongly disagree" and 7 = "strongly agree". Furthermore, to measure **EO,** a 9-item scale developed by Covin and Slevin (1989) was adapted. This scale reflects Miller's (1983) conceptualization of EO, and incorporates three main dimensions: proactiveness, risk-taking, and innovativeness. All dimensions for EO were measured using paired statements (1-7).

In an analogy to earlier research (Kohli and Jaworski 1993), **firm performance** was measured using a self-assessment scale (i.e., perceived firm performance). I employed three different sets of questions that pertain to overall performance, market effectiveness, and profitability to measure firm performance as the main dependent variable for this research. While overall performance was captured using a two-item scale adapted from Kohli and Jaworski (1993), market effectiveness and profitability were measured using two-item scales that were drawn from past literature (Morgan, Vorhies, and Mason 2009). While the overall performance items were measured by a seven-point Likert scale, with 1 = "poor" and 7 = "excellent", market effectiveness and profitability performance dimensions were measured by a seven-point Likert scale anchored by "much worse than competitors/much better than competitors". However, to retain more parsimony to my model, firm performance was treated as a unidimensional construct during the data analysis stage.

As this research proposes that the constituents of **network structure (i.e., strength, size, and diversity)** are moderators to the relationship between EM and firm performance, measures for these constituents are warranted to examine the proposed effects. In an analogy to Ma, Huang, and Shenkar (2011), this research employs single-item scales to measure the underlining concept for each component of network structure. All network structure items were measured by a seven-point Likert scale, with 1 = "strongly disagree" and 7 = "strongly agree".

All but one of the **environmental factors** (i.e., market turbulence, technological turbulence, supplier power, and market growth) that are proposed as moderators to EM-performance relationship were adapted from the past literature and measured using single-item scales drawn from early research (Baker and Sinkula 1999; Narver and Slater 1990). Competitive intensity is the only multi-item environmental variable employed by this research, and was also adapted from previous literature (Homburg, Artz, and Wieseke 2012; Kohli and Jaworski 1993). However, all environmental factors' measures, except for competitive intensity, were measured by a seven-point Likert scale, with 1 = "low" and 7 = "high". Competitive intensity items were measured by a seven-point Likert scale, with 1 = "strongly disagree," and 7 = "strongly agree". Moreover, as a proposed moderator to EM-firm performance relationship, **firm size** was measured using a single question about the number of employees inside the organization. This research adopts the European Union's definition of firm size (Hansen and Eggers 2010; Whalen et al. 2016), which categorizes firms into: small (1 to 49 employees), medium (50 to 499 employees), and large (more than 500 employees). To check for the robustness of this size measure, the annual revenue and the market share of firms were captured, and additional analysis was

conducted to verify my conclusions. The findings for the robustness analysis are presented in the results section.

4.2.2. Control variables

A number of variables that might have some influence on this research's conclusions were incorporated in my analysis. **Firm age,** the number of years since a firm started its operations, was measured using a single-item question, and was controlled for, as older firms may have less tendency to change their existing practices to remain relevant to the ever-evolving marketplace. For instance, Rauch et al. (2009) suggest that the older the firm, the less it engages in EO. Moreover, **market type**, whether the firm operates in a business to business (B2B) market or a business to consumer (B2C) market, may introduce different configurations for company operations, and therefore, was controlled for in this study.

4.2.3. EM scale development

Despite the fact that there have been earlier attempts to introduce a scale for EM (Becherer, Helms, and McDonald 2012; Eggers, Kraus, Niemand, and Breier 2018; Fiore, Niehm, Hurst, Son, and Sadachar 2013), scholars' efforts continue to be focused on developing a robust scale with applicability to all types and sizes of organizations (e.g., Whalen et al. 2016). However, while some of the previously-introduced scales suffer from serious validity and reliability issues, others adopted a limiting definition of EM that constrained their generalizability (e.g., being primarily focused on SMEs). Therefore, following Churchill (1979), I have developed a scale to measure EM that is applicable to all types of organizations of various sizes. Churchill's model suggested the following

stages for developing more adequate measures for marketing conceptualizations: specifying the construct domain, generating the sample of items, initial data collection, measures purification, data collection, purifying measures further, assessment of reliability and validity, and, finally, developing norms. To specify EM construct domain, I have tracked the development of EM theory and conceptualization, and introduced a more holistic, but concise, definition of EM. This definition suggests that EM has the following dimensions: innovative marketing, proactive marketing, acceptable risks, opportunity, value co-creation, inclusive attention, networking, and resource leveraging. Then, based on my proposed definition, and with guidance from an experienced scholar in the field of EM, I have developed an initial pool of items (i.e., 99 items) for measuring EM.

Subsequently, seven researchers with established experience in the interface of marketing and entrepreneurship and research methodology also reviewed these items in order to verify the content and face validity of the proposed EM measure. Accordingly, based on their feedback, 29 items were deleted and 23 items were adjusted. Two additional senior researchers provided help in revising the coherence and feasibility of the measurement instruments employed by this study. Moreover, I have interviewed four marketing decision-makers (e.g., managers, directors, and entrepreneurs) to check on the understandability and meaningfulness of the employed survey items, and to assure the face validity of my EM measure. These decision-makers represented private and public companies from fashion, biotechnology and pharmaceutical, advertising, and the consumer-packaged goods industries, and with annual revenue ranging from a few hundred thousand dollars to dozens of billions of dollars. Based on the solicited feedback from these executives, some items were revised, and some were dropped. After this rigorous review

process, an initial scale of EM which incorporates eight dimensions and has 61 items was introduced. Although I was confident that the proposed measure has a reasonable face and content validity, further data-driven purification is still warranted.

After data collection approval was received from the institutional review board (IRB), a pilot study on a subset of the sample (N= 49) was conducted, using the same data collection source. The pilot study consists of an examination for the full survey incorporating all the constructs and measures of this research, including EM scale**.** After obtaining the preliminary data, I run multiple exploratory factor analysis (EFA) and reliability analysis tests, to further purify the EM scale proposed by the current research. I made the items to load into pairs of factors and, then, only retained the items loaded to the major factor that explains the most variation of each dimension (Thompson 2004). Next, multiple reliability analysis tests were conducted on the dimensional level, and the items that did not contribute significantly to the scale reliability were removed. Accordingly, a 28-item EM scale which incorporates EM dimensions was identified to be in a ready format to be used in the full-scale data collection. Furthermore, following Churchill (1979), another round of scale purification was conducted after the full-scale data collection (N= 401) was complete, using confirmatory factor analysis (CFA) modification indices. An EM scale that has 20 items and incorporates six dimensions provided the best model fit for my study. While 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), networking and inclusive attention were better-represented by a single factor (i.e., network attention). That is, the final EM scale introduced by the present study pertains to six dimensions (innovative marketing, proactive marketing, acceptable risks, opportunity, network

attention, and resource leveraging) that are represented by 20 items, as shown in Table 3. The more details on how EM scale was captured are provided in Appendix A. A thorough assessment of EM scale's reliability, and discriminant and convergent validity, will be discussed in the following section; norms and future research recommendations were also developed.

Table 3 EM Scale

Dimension	Item
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.

Table 4 Study Measures, Scales, and Data Sources

Label	Variable	Measure[3]	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 Kohli and Jaworski (1993)
	Firm Performance (i.e., **Market effectiveness)**	2-items	(1=much worse than competitors 7=much better than competitors)	Adapted from Morgan, Vorhies, and Mason (2009)
	Firm Performance (i.e., **Profitability)**	2-items		
Moderators and Environmental Variables	Network Structure (i.e., **Size)**	Single-item	7-point Likert	In an analogy to Ma, Huang, and Shenkar (2011)
	Network Structure (i.e., **Strength)**	Single-item		

[3] Appendix A shows a complete list of all items employed questionnaire items by the current research.

	Network Structure (i.e., **Diversity)**	Single-item		
	Competitive intensity	4-items	7-point Likert	Adapted from Homburg, Artz, and Wieseke (2012); Kohli and Jaworski (1993)
	Market turbulence	Single-item	(1 = low 7 = high)	Adapted from Baker and Sinkula (1999); Narver and Slater (1990)
	Market growth	Single-item		
	Technological turbulence	Single-item		
	Supplier power	Single-item		
	Firm size (Primary)	Single-item	Number of employees	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

4.3. Validity and reliability

To examine the discriminant and convergent validity of the constructs employed by the present study, a second-order confirmatory factor analysis (CFA) was conducted (Bentler 1989). I employed structural equation modeling (SEM) and used the Maximum Likelihood Method to fit my model, using AMOS 25.0 software. There were no special problems in running the model. The full model specification is shown in Figure 3, and the results of the CFA are presented in Table 7. As shown in the Table 7, given the complexity of the second-order CFA, the analysis's fit metrics indicate that I have an excellent model fit. The score of the chi-square is not significant at the first degree of freedom, and Comparative Fit Index (CFI) is at an acceptable level (i.e., CFI= .903). Furthermore, while the Root Mean Square Error of Approximation (RMSEA) of my model is .049, the Standardized Root Mean Square Residual (SRMR) of the model is .048. The P of Close Fit (PCLOSE) of the introduced model is .692, which represents another piece of evidence that I have an excellent model fit. Moreover, Bentler-Bonett fit indices are at adequate levels (e.g., NNFI= 0.897). Furthermore, it is worth mentioning that building this second-order CFA model is the first part of a two-stage data analysis method adopted by the current research. As recommended by early research (e.g., Anderson and Gerbing 1988), I analyzed my data in two main stages. First, the measurement model (See Figure 4) was created to evaluate the validity and reliability of my latent constructs, as demonstrated earlier in this section. Second, a measurement model was created to test my research hypotheses, as will be discussed later in this text.

Moreover, after checking that all factors are significant, and that they have loaded into their respective constructs, I extracted the composite reliability. Except for the sub-

dimensions of EO, the composite reliabilities of all constructs are higher than (.7), as shown in Table 7, indicating adequate reliability (Nunnally 1978). Moreover, the loadings of all first-order factors of EO, MO, and EM are positive and statistically significant, and the composite reliabilities of EM, MO, and EO as second-order factors were above the threshold of (.7), indicating that all second-order factors of the present study pertain adequate reliability. However, 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, I believe that reliability does not represent a problem for my EO construct, knowing that it was adopted from previous literature, and that its reliability and validity have been well-established by early research (Nunnally & Bernstein 1994).

Table 7[4] also shows that all items[5] employed by the current research loaded perfectly to their respective latent constructs. As these factor loadings are positive, high in magnitude, and statistically significant, I can conclude that the constructs employed by the current model have strong convergent validity (Anderson 1987). Similarly, all first-order dimensions of EO, MO, and EM were positive, large in size, and statistically significant, indicating convergent validity on second-order level. Moreover, following Bagozzi, Yi, and Phillips (1991), discriminant validity was investigated though a series of CFA test procedures using AMOS 25.0 software. I ran all possible pairs of the main variables employed by the current research (i.e., firm performance; second-order factors of EO, MO,

[4] The standardized coefficients of the structural paths and the squared multiple correlations (R-squares) for all first and second-order factors in the current study are presented in Appendix B and Appendix C.

[5] Except for one item from EO, which should not be of concern, as highlighted earlier.

and EM) twice: once with the construct correlations constrained to unity, and second with the correlations unconstrained. Then, a series of chi-square difference tests were performed on the nested models, to assess the discriminant validity of the study variables. As shown in Table 6, the chi-squares of the unconstrained models were significantly lower than the chi-squares of the constrained ones for all possible pairs. In all cases, the difference between each pair of models was significant, at least at the five percent level ($\Delta\ \chi 2\ (1)>3.84$). Therefore, I can conclude that the constructs employed by the present research have successfully demonstrated discriminant validity.

4.3.1. Robustness check

To check the robustness of my conclusions about the convergent and discriminant validity of my main variables (i.e., EM, EO, MO, and firm performance), an additional assessment method was undertaken. The average variance extracted (AVE) for EM, MO, EO, and firm performance were .83, .87, .82, and .66, respectively. As all of these scores exceed the suggested threshold of .5, convergent validity is demonstrated for all the study variables. However, the discriminant validity is examined by comparing the amount of variance extracted for each construct to the squared of its correlations with each of the other constructs (Fornell and Larcker 1981). Therefore, by comparing the values of my latent constructs' AVE's (listed above) to the squared values of its correlations with each of other latent constructs (see Table 9; correlation matrix and descriptive statistics), I found the average variance extracted for each latent construct to exceed each of its squared correlations with other latent constructs. Furthermore, the "average variance extracted" exceeded the maximum shared variance with other constructs in all cases. Therefore, the latent constructs employed by current research exhibit discriminant validity.

Furthermore, as EO, MO, and EM constructs are presumed to be second-order constructs (EO and MO with three dimensions each, and EM with six dimensions), I tested the validity of this assumption by generating alternative nested models using CFA. I made each construct to load to one factor, instead of its proposed number of sub-dimensions, and compared the fit of the single-factor model to the multidimensional one. All second-order models of EO, MO, and EM demonstrated better fits, as per the chi-squares and fit indices of the alternative models as shown in Table 5. Therefore, I can conclude that my assumption is valid, and that EO, MO, and EM should be considered as multidimensional constructs (Hull, Tedlie, and Lehn 1991; Wu et al. 2006).

Table 5 Multidimensional vs. Unidimensional Models of EM, MO, and EO

Fit statistic measure	*EM*		*MO*		*EO*	
	Multidimensional Model	Unidimensional Model	Multidimensional Model	Unidimensional Model	Multidimensional Model	Unidimensional Model
$\chi 2$	380.958	652.218	295.526	432.01	100.273	132.203
DF	164	170	87	90	24	27
$\chi 2$/DF	2.323	3.837	3.397	4.8	4.178	4.896
CFI	.956	.902	.939	.9	.916	.885
SRMR	.039	.049	.046	.055	.057	.064
RMSEA	.058	.084	.077	.097	.089	.099

Table 6 Chi-square ($\chi 2$) Difference Tests of the Nested Models (Discriminant Validity)

Model Pair	Measure	Constrained Model	Unconstrained Model	Results
EM and EO	$\chi 2$	760.162	742.849	17.313
	DF	368	367	1
	p-value	-	-	< .001
EM and MO	$\chi 2$	1264.266	1259.311	4.955
	DF	551	550	1
	p-value	-	-	<.05
MO and EO	$\chi 2$	589.587	566.782	22.805
	DF	246	245	1
	p-value	-	-	<.001
EM and Performance	$\chi 2$	631.421	619.076	12.345
	DF	293	292	1
	p-value	-	-	< .001
EO and Performance	$\chi 2$	248.673	237.514	11.159
	DF	87	86	1
	p-value	-	-	<.001
MO and Performance	$\chi 2$	542.514	524.617	17.897
	DF	186	185	1
	p-value	-	-	<.001

Table 7 Results of the Second-Order CFA

Indicator	Factor	Item	Std. Loading	*t* value	Composite reliability
Performance	**Firm Performance**				.92
PERF1		Market share growth.[6]	.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.[7]	.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	

[6] 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.

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

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)[8]**			
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	
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	

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

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	-	
	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 ($\chi 2$) statistic of the model	2453.821
Degrees of freedom (df)	(1249)
$\chi 2$/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”.

Figure 3 The Full Model Specification of the Present Study

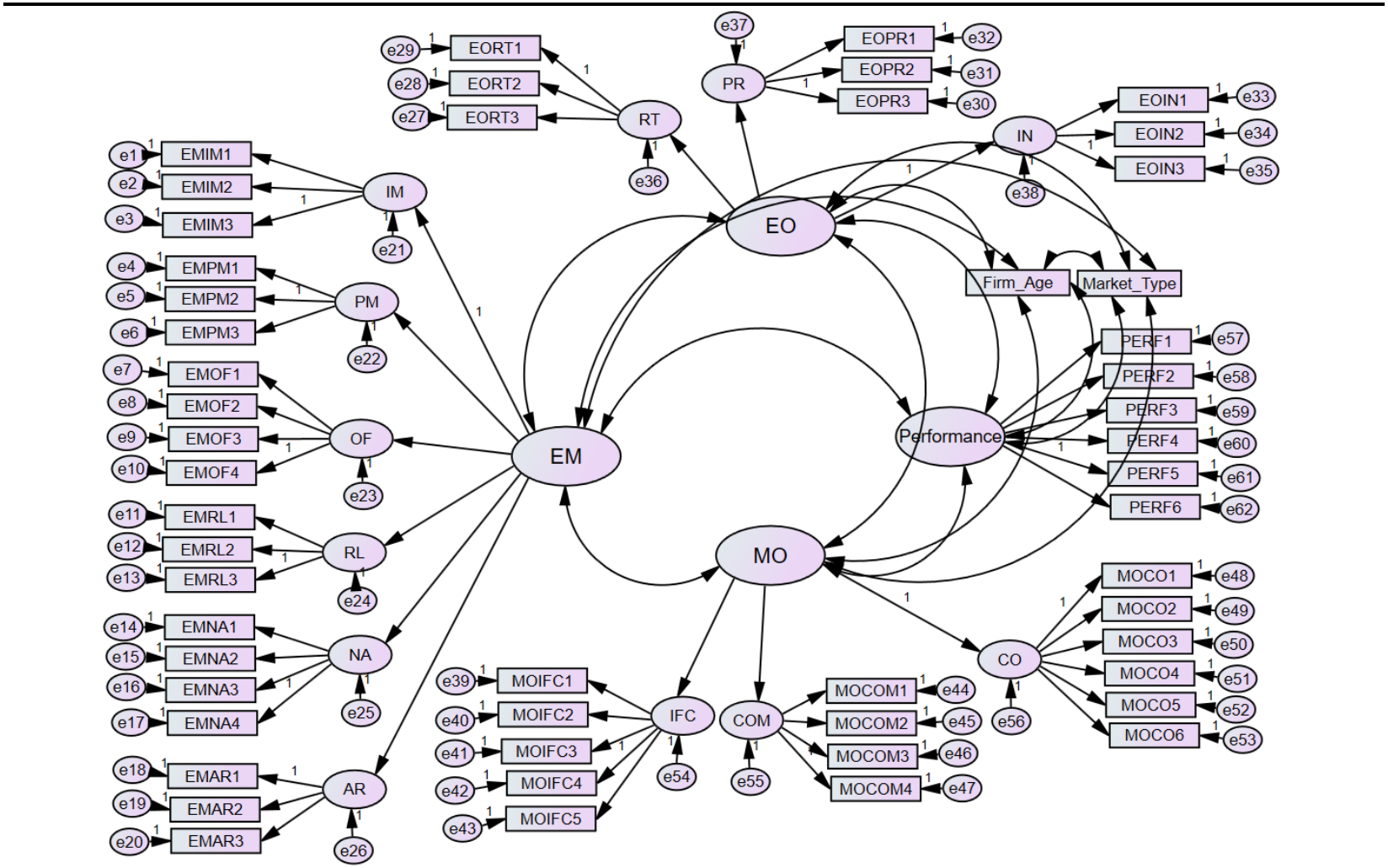
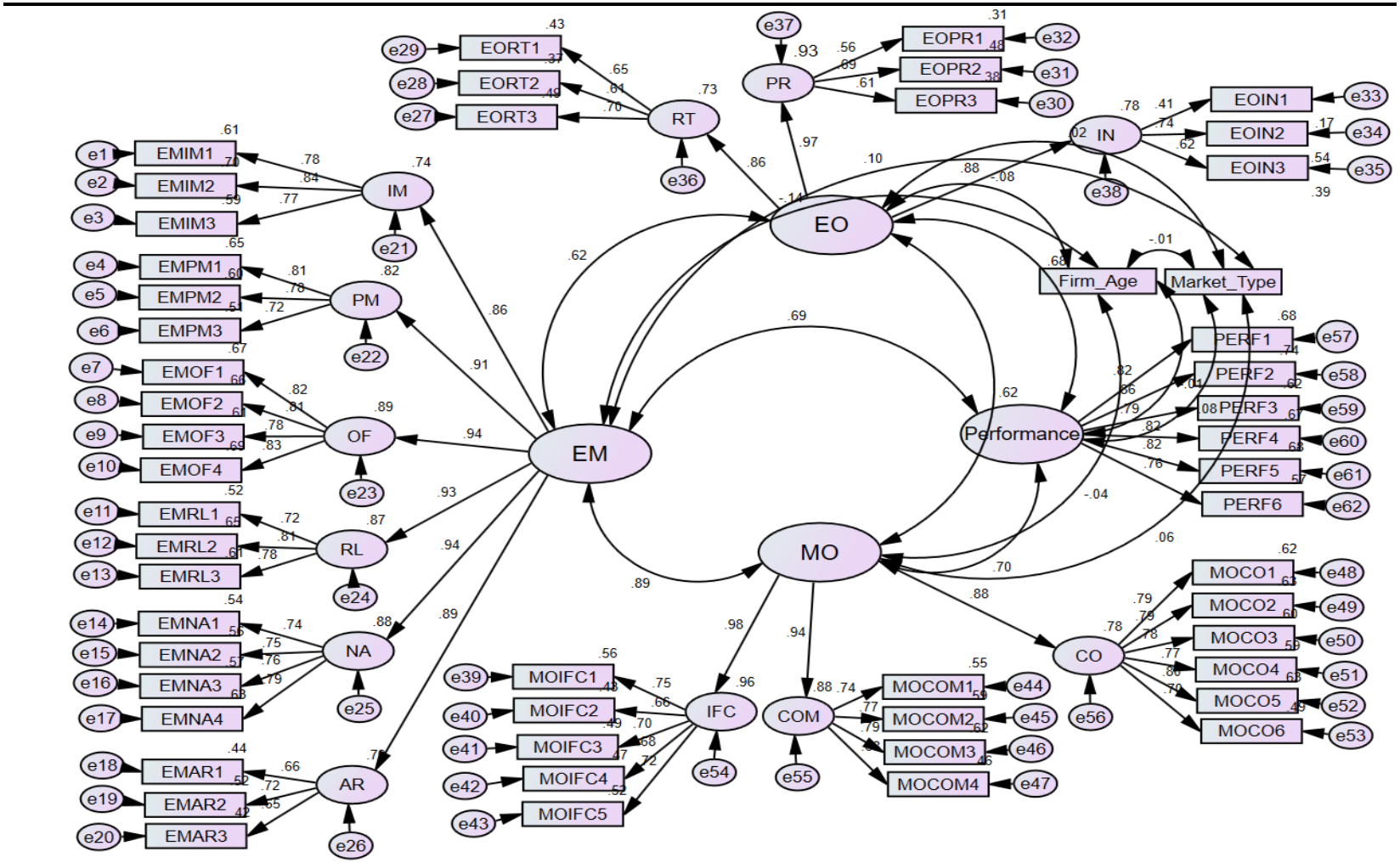


Figure 4 The Measurement Model of the Present Study



Model fit statistics: $\chi 2 = 2453.821$; df = 1249; $\chi 2/DF = 1.965$; CFI = .903; RMSEA = .049; SRMR = .048; PCLOSE = .692; NNFI = .897

CHAPTER 5

5. Results

5.1. Main effects

As previously-mentioned, I followed a two-stage data analysis method recommended by early research (Anderson and Gerbing 1988; Hunter and Gerbing 1982) to assess the validity and reliability of my latent constructs and examine my research hypotheses. First, I developed a measurement model using a second-order CFA to examine the convergent and discriminant validity of my latent constructs. As the validity and reliability of my latent constructs have been established, as demonstrated earlier, I moved to the second stage of data analysis. In this stage, a structural model was developed using the variance-covariance matrix, and a path model which incorporates the regression weights of the second-order factors was built to proceed and test my hypotheses, as shown in Figure 5. This approach (separating the measurement model from the structural model) has many merits (e.g., identifying model misspecification), as demonstrated by previous research (e.g., Anderson and Gerbing 1988), and is common among marketing scholars (e.g., Zou and Cavusgil 2002). Furthermore, the correlations between the main variables of this study are extracted from the second-order CFA output, and are presented along with their means and standard deviations in Table 9. Moreover, the standardized coefficients of the structural paths and the squared multiple correlations (R-squares) for all first and second-order factors in the current study are presented in Appendix B and Appendix C. The model fit indices for both models show appropriate fit for both models (measurement and path models), as shown in Table 8. Therefore, I can trust the findings of the final path

model to examine the hypothesized relationships. Figure 5 shows the fit statistics of my path model, along with the standardized coefficients of the proposed relationships. Additionally, while Table 11 provides a summary for the results of my hypothesis testing, Figure 12 shows a revised model of EM and firm performance, incorporating the results of the present study.

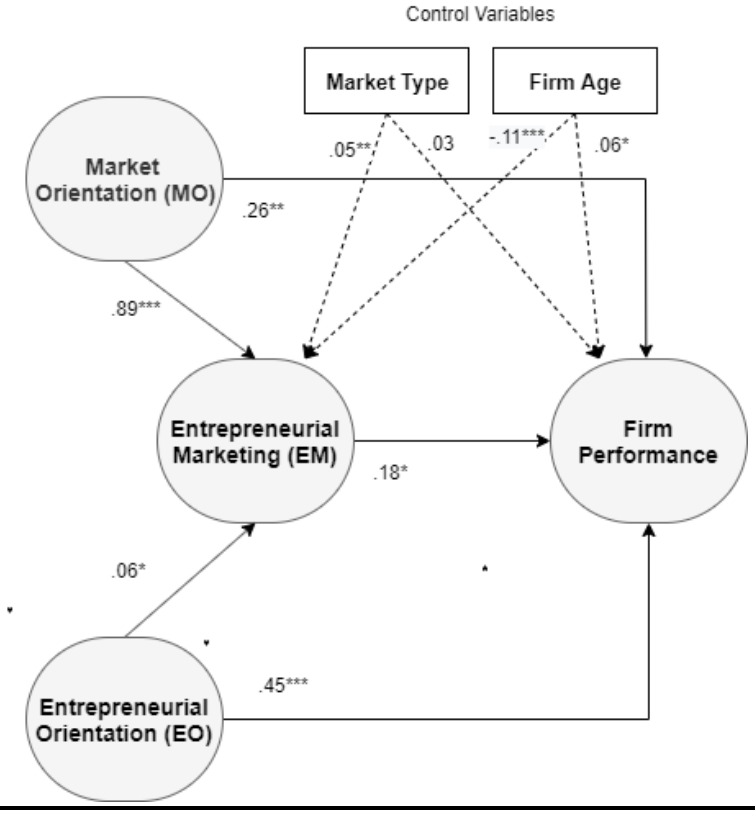
Table 8 Fit Statistics for Measurement and Path Models

Model fit statistics	Measurement Model	Path Model
Chi-square (χ2) statistic of the model	2453.821	4.943
Degrees of freedom (df)	-1249	4
χ2/DF	1.965	1.236
Comparative fit index (CFI)	.903	.999
Standardized root mean square residual (SRMR)	.048	.038
Root mean square error of approximation (RMSEA)	.049	.024
P of Close Fit (PCLOSE)	.692	.696
Bentler–Bonett non-normed fit index (NNFI)	.897	.998

In essence, I believe that I can draw sound conclusions about the proposed relationships by the current research, as my path model indicates an excellent model fit (χ2= 4.94, (df= 4, p=.293), CFI= .999, NNFI= .998, SRMR .038, RMSEA = .024, and PCLOSE=.696). The path coefficients were used (See Figure 5) to draw my conclusions about the main effects proposed by this study (H1-H4). Consequently, EM was found to have a positive and significant influence on organizational performance (t =2.06, p <.05). Therefore, H1a is supported. However, the direct effects of MO on performance (t =2.93, p <.01) and EO on performance (t =11.20, p <.001) were found to be positive and significant, supporting H1b and H1c, respectively. Furthermore, my results show that EO has a positive and significant effect on EM (t =2.51, p <.05). Hence, H2 is supported. Moreover, MO appears

to have a positive and significant influence on EM (t =38.81, p <.001). Thus, results support H3.

Figure 5 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

Furthermore, to test if EM mediates the relationships between MO, EO, and firm performance (H4a,b), two alternative models have been generated (Venkatraman 1989). The total effect analysis shows that the total effects of MO on organizational performance (t =10.35, p <.001) and EO on organizational performance (t =11.49, p <.001) are both positive and significant. In the first model, EM was removed, and the direct effects of EO and MO on organizational performance have been investigated. Both EO and MO were

[1] Based on the path model standardized estimates (Standardized parameters).

found to have positive and significant effects on organizational performance at the <.001 level. However, the second model incorporates the indirect relationships between EO, MO, EM, and firm performance (where EM mediates EO, MO, and firm performance relationships), along with the original direct relationships between EO, MO, and firm performance. The results of the second model indicate that the direct effects of MO ($t = 2.93$, $p < .01$) and EO ($t = 11.20$, $p < .001$) on organizational performance are positive and significant. Given that the direct effects of MO and EO on EM, and the direct effect of EM on organizational performance, were also still positive and significant, I can conclude that EO, MO, and firm performance relationships are partially mediated by EM (Venkatraman 1989). Thus, H4a and H4b are supported.

The analysis of the control variables market type and firm age indicates the presence of some effects. While the effect of market type on firm performance was not significant, the firm age seems to have a positive and significant impact on firm performance ($t = 2.04$, $p < .05$). That is, older firms in my sample tend to have better performance. However, as shown in Figure 5, the magnitude of this effect appears to be very small. Furthermore, while firm age has a negative and significant effect on EM ($t = -6.55$, $p < .001$), the effect of market type on EM is significant ($t = 3.20$, $p < .001$). In other words, younger firms are likely to have higher tendency to embrace EM. However, as compared to firms operating in business to customers (B2C), those who operate in business to business (B2B) markets appear to be more inclined to adopt EM strategies.

Table 9 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.

5.2. Moderation effects

To test the moderation effects proposed by the current study, multigroup path analyses (i.e., a series of multiple group path analysis tests) were performed in order to test the moderating role of the environmental factors, network structure, and firm size on the relationship between EM and firm performance (H5-H7). In each case, the full path model was tested on two groups, and then conclusions were drawn accordingly. These conclusions are based on a series of tests for the invariance of the specific paths under investigation. Each hypothesized moderation effect was examined through a multigroup path analysis test. Each test starts by examining the global chi-square difference between a fully constrained model and the unconstrained model was tested. In all cases but technological turblance, the chi-squares' differences were significant, indicating the existence of some moderation effect within the two models. However, to test the moderation effect on the paths of interest, a nested model was generated, in which the path of interest was constrained to equality. Then, in an analogy with previous research (e.g., Jöreskog and Sörbom 1989), moderation was examined through investigating the difference between the chi-square of the nested model as compared to a baseline model,

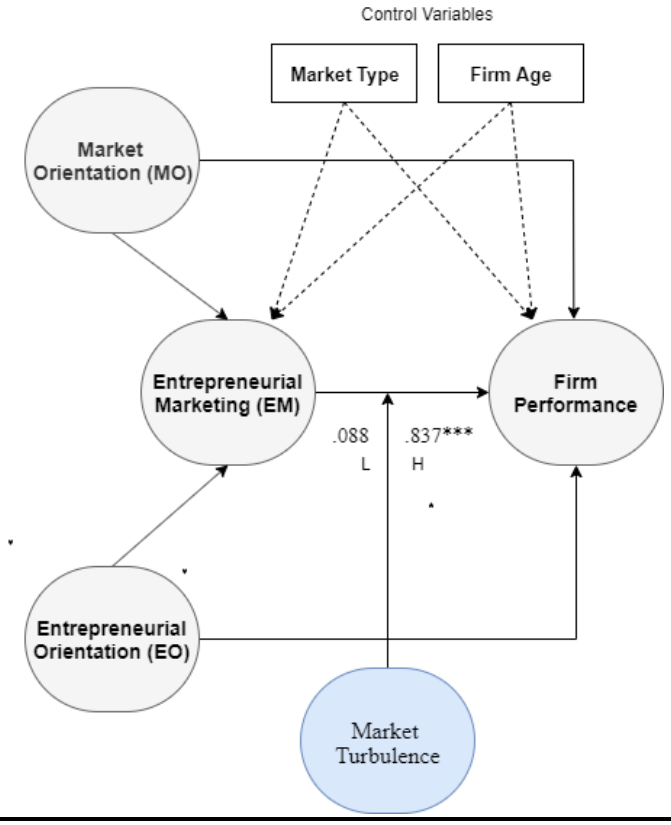
where all paths were freely estimated (Yoo 2002). Table 10 shows the results of the chi-squares differences tests that were conducted to investigate the moderation effects proposed by current research.

The environmental factors under investigation in this study are market turbulence, market growth, technological turbulence, supplier power, and competitive intensity. On the other hand, while network structure variables include size, strength, and diversity, firm size incorporates small, medium, and large firms. Both environmental factors and network structure variables were investigated using median split samples for each of the proposed moderating variables, and in each case, the sample median was identified, and the observations associated with the median were removed. Then, the sample was divided into two groups, where observations above the median were classified as "high", and those lower than the median were classified as "low". However, firm size was identified using a predetermined definition which uses the number of employees as a proxy for firm size. Thus, the size was classified as: small (1 to 49 employees), medium (50 to 499 employees), and large (more than 500 employees).

H5a proposes that the EM-performance relationship is positively moderated by market turbulence. To test this hypothesis, the median market turbulence was identified, and observations with the median scores were removed (Mdn. = 6; 103 obs.). Then, observations higher than the median were labeled as high market turbulence (171 obs.), whereas those lower than the median were labeled as low market turbulence (127 obs.). The difference in chi-square between the model with EM -> performance path constrained and the unconstrained model is significant ($\Delta \chi 2 = 12.65$; $p < .001$), as shown in Table 10. The results also indicate that EM provides better assistance for firms that operate in highly

turbulent markets (β= .837; p< .001) than for those in markets with low turbulence (β= -.088; p> .05), supporting H5(a). Figure 6 demonstrates the moderating effect of market turbulence on the EM-performance relationship in standardized estimates.

Figure 6 The Moderation Effect of Market Turbulence



Standardized parameters estimates; * P < .05 ** P < .01 *** P < .001
H: High market turbulence; L: Low market turbulence

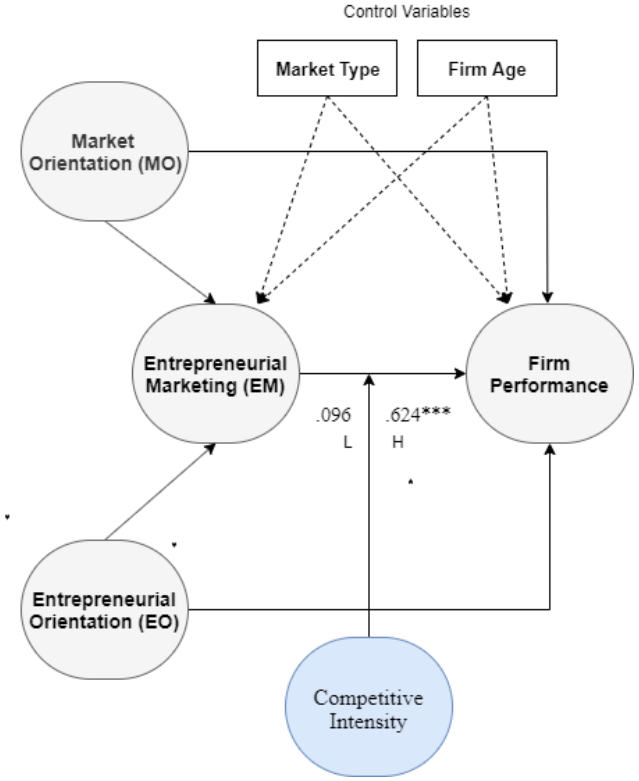
To test H5b, which suggests that EM-performance relationship is positively moderated by technological turbulence, the observations with the median technological turbulence scores were removed (Mdn. = 6; 118 obs.), and the sample was divided into high technological turbulence (102 obs.) and low technological turbulence (181 obs.). However, the chi-square difference between the fully constrained model and the freely estimated one was not significant (Δ $\chi 2$ =16.78; df= 9; p> .05), indicating that no moderation effects exist on a global level. Additionally, the chi-square difference between

the unconstrained model and the model with EM -> performance path constrained is not significant ($\Delta \chi 2 = 3.322$; $p > .05$). Therefore, H5 (b) is not supported, as shown in Table 10.

H5c proposes that the EM-performance relationship is positively moderated by competitive intensity. To test this hypothesis, the median competitive intensity score was identified, 20% median-centered observations were removed (Mdn. = 5.47[2]; 80 obs.), and the remaining observations were divided into high competitive intensity (164 obs.) and low competitive intensity (157 obs.), according to their distance from the median. The difference in chi-square between the model with EM -> performance path constrained and the unconstrained model is significant ($\Delta \chi 2 = 11.87$; $p < .005$). The results also suggest that the extent of the boost in performance triggered by EM was higher for firms that operate in highly competitive markets ($\beta = .624$; $p < .001$) than it was for those that operate in markets with low competitive intensity ($\beta = .096$; $p > .05$), supporting H5(c), as shown in Table 10. Figure 7 shows the moderating effect of competitive intensity on the EM-performance relationship in standardized estimates.

[2] As it was measured using a multi-item construct, I used the factor scores to capture the effect of competitive intensity.

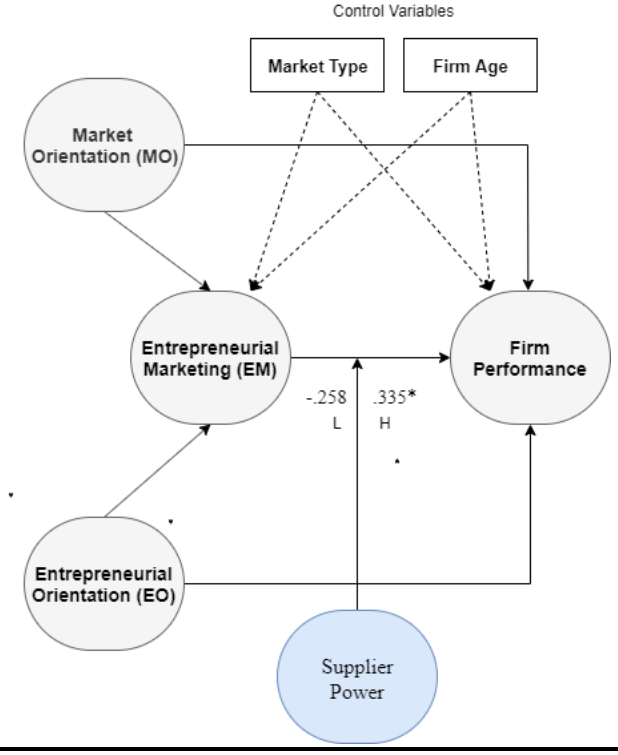
Figure 7 The Moderation Effect of Competitive Intensity



Standardized parameters estimates; * P < .05 ** P < .01 *** P < .001
H: High competitive intensity; L: Low competitive intensity

To test H5d, which suggests that EM-performance relationship is positively moderated by supplier power, the observations with the median supplier power scores were removed (Mdn. = 6; 126 observations), and the sample was divided into high supplier power (199 obs.) and low supplier power (76 obs.). The chi-square difference between the unconstrained model and the model with EM -> performance path constrained is significant ($\Delta \chi 2 = 8.158$; $p < .005$). The results also show that EM provides better assistance for firms that operate in markets where suppliers have higher power ($\beta = .335$; $p < .05$) than it does in markets where suppliers have low power ($\beta = -.258$; $p > .05$), supporting H5(d), as shown in Table 10. Figure 8 shows the moderating effect of supplier power on the EM-performance relationship in standardized estimates.

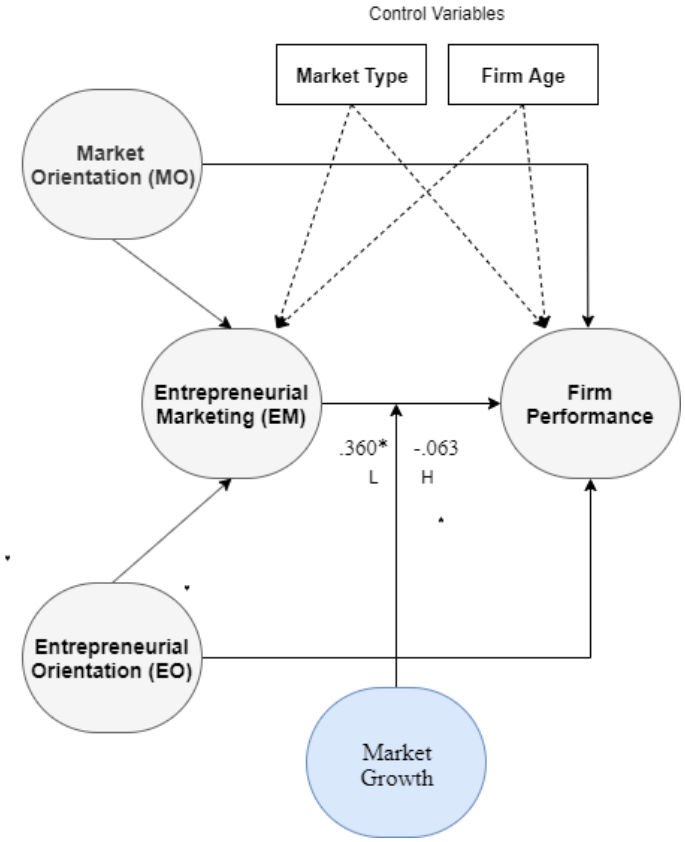
Figure 8 The Moderation Effect of Supplier Power



Standardized parameters estimates; * P < .05 ** P < .01 *** P < .001
H: High supplier power; L: Low supplier power

H5e proposes that the EM-performance relationship is negatively moderated by market growth. To test this hypothesis, the median market growth was identified, and observations with the median scores were removed (Mdn. = 5; 105 obs.). Next, observations higher than the median were labeled as high market growth (189 obs.), whereas those lower than the median were labeled as low market growth (107 obs.). The difference in chi-square between the model with EM -> performance path constrained and the unconstrained model is significant ($\Delta \chi 2 = 4.352$; $p < .05$). The results also suggest that EM works better for firms that operate in markets with low growth ($\beta = .360$; $p < .05$) than it does for those operating in markets with high growth ($\beta = -.063$; $p > .05$), supporting H5(e), as shown in Table 10. Moreover, Figure 9 shows the moderating effect of market growth on the EM-performance relationship in standardized estimates.

Figure 9 The Moderation Effect of Market Growth



Standardized parameters estimates; * P < .05 ** P < .01 *** P < .001
H: High market growth; L: Low market growth

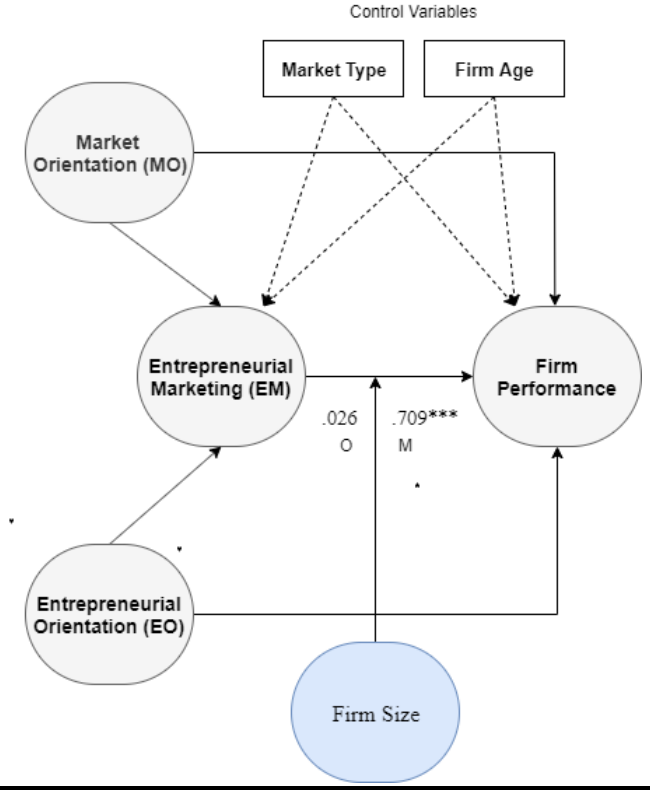
To test the moderation effects of firm size H6 to the relationship between EM and firm performance, a multigroup path analysis for firm size, based on the number of employees, was conducted. As mentioned earlier, the size was determined based on the European classification of firms into small (1 to 49 employees), medium (50 to 499 employees), and large (more than 500 employees). As H6 proposes that firm size moderates EM-performance relationship in a U-shaped manner, where medium-sized firms benefit the least from EM, observations were classified based on the number of employees into small firms (114 obs.), medium-size firms (146 obs.), and large firms (141 obs.). To conduct a multigroup moderation analysis for three groups, a two-step approach was undertaken.

First, I checked if there is heterogeneity in the effect of EM on firm performance between small and large firms. Consequently, I found the chi-square difference between the unconstrained model and the model with EM -> performance path constrained to be insignificant ($\Delta \chi 2 = 0.002$; $p > .05$). As there was no difference between small and large firms (in terms of EM -> performance path), I combined both groups in one sample. Second, I compared medium-sized firms to the rest of the sample (small and large firms combined), and conducted my multigroup invariance analysis. The difference in chi-square between the model with the EM -> performance path constrained and the unconstrained model is significant ($\Delta \chi 2 = 10.354$; $p < .005$). These results also indicate that EM provides better assistance for medium-sized firms ($\beta = .709$; $p < .001$) than it does for small and large ones ($\beta = .026$; $p > .05$). Therefore, H6 is not supported, and, surprisingly, firm size appears to moderate EM-performance relationship in an inversed U-shaped manner, as shown in Table 10. Figure 10 shows the moderating effect of firm size on the EM-performance relationship in standardized estimates.

5.2.1. Robustness check

To validate my findings on the moderation effect of firm size, further tests were conducted. That is, in order to reassure that medium-sized firms benefit the most from embracing EM, I used alternative measures of firm size and repeated the analysis. In each case, I conducted a chi-square difference test, and examined whether the moderation effect was similar to what was suggested by the results of H5 testing. First, I used alternative cut points of the number of employees in determining firm size, wherein I categorized firms

Figure 10 The Moderation Effect of Firm Size



Standardized parameters estimates; * P < .05 ** P < .01 *** P < .001
M: Medium size firms; O: Other sizes (small and large firms combined)

with less than 500 employees to be small, between 500 and 2500 employees to be medium, and more than 2500 employees to be large. The effect persisted. Furthermore, I also employed market share as a proxy, to define firm size where firms with less than 5% of market share are small, between 5% and 10% of market share are medium, and firms with more than 10% of market share are large. The effect also persisted here. Moreover, I categorized firms based on annual revenue, where firms with less than 10 million dollars are small, between 10 and 499 million dollars are medium, and firms with 500 million dollars or more in annual revenue are large. In each case, the effect was similar to what

was found earlier during hypothesis (6) testing, and medium-sized organizations appear to benefit the most from adopting EM.

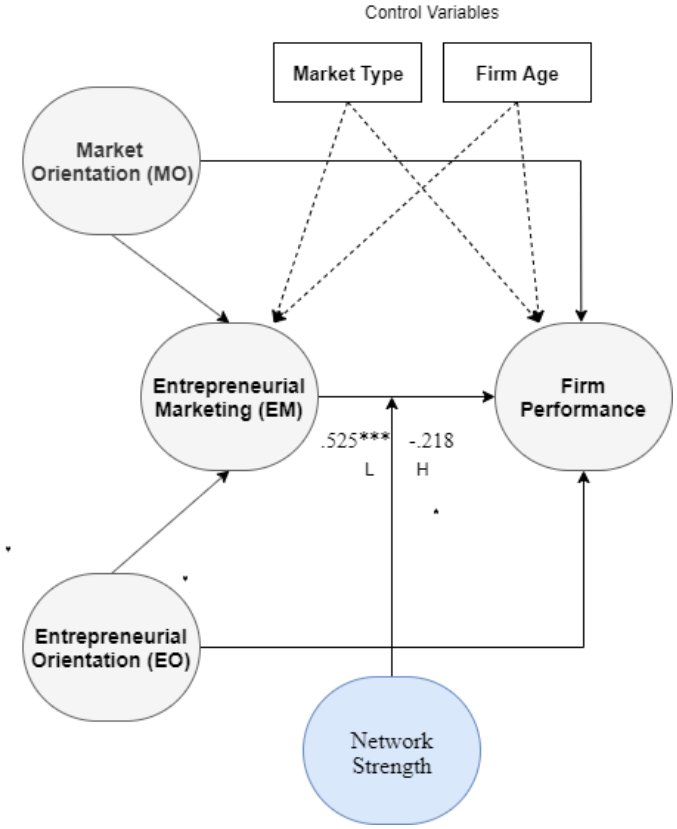
To test the moderation effect of network structure (size, diversity, and strength), I used a similar approach to what I have done for environmental variables moderators. As such, to test H7a, which suggests that EM-performance relationship is positively moderated by size of the network (number of ties), the observations with the median network size scores were removed (Mdn. = 6; 122 observations), and the sample was then divided into firms with large network size (165 obs.) and firms with small network size (114 obs.). The chi-square difference between the unconstrained model and the model with EM -> performance path constrained was not significant ($\Delta \chi 2 = .891$; $p > .05$), as shown in Table 10. Therefore, H7a is not supported. However, there seems to be a non-significant increase in the influence of EM on performance for firms with large networks ($\beta = .326$; $p < .1$), as compared to those with small networks ($\beta = .117$; $p > .05$).

As H7b proposes that EM-performance relationship is positively moderated by network diversity (variety of the ties), the observations with the median network diversity scores were removed (Mdn. = 6; 103 observations), and the sample was divided into firms with high network diversity (123 obs.) and firms with low network diversity (175 obs.). However, the chi-square difference between the unconstrained model and the model with

EM -> performance path constrained was not significant ($\Delta \chi 2 = .313$; $p > .05$), as shown in Table 10. Hence, H7b is not supported.

To test H7c, which suggests that EM-performance relationship is negatively moderated by the strength of the network (ratio of strong ties), the observations with the median network strength scores were removed (Mdn. = 6; 133 observations), and the sample was divided into firms with high strength networks (136 obs.) and firms with low strength networks (132 obs.). The chi-square difference between the unconstrained model and the model with EM -> performance path constrained was significant ($\Delta \chi 2 = 14.53$; $p < .001$). While results suggest that EM works best for firms that have low strength networks ($\beta = .525$; $p < .001$), it may detract the performance of those with high strength networks ($\beta = -0.218$; $p < .1$), as shown in Table 10. Therefore, H7 (c) is supported. Figure 11 shows the moderating effect of network strength on the EM-performance relationship in standardized estimates.

Figure 11 The Moderation Effect of Network Strength



Standardized parameters estimates; * P < .05 ** P < .01 *** P < .001
H: High network strength ; L: Low network strength

Table 10 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* [3]
	.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)[4]	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[5]; * P < .05 ** P < .01 *** P < .001

[3] The chi-square difference between the fully constrained model and the freely estimated one was also not significant.

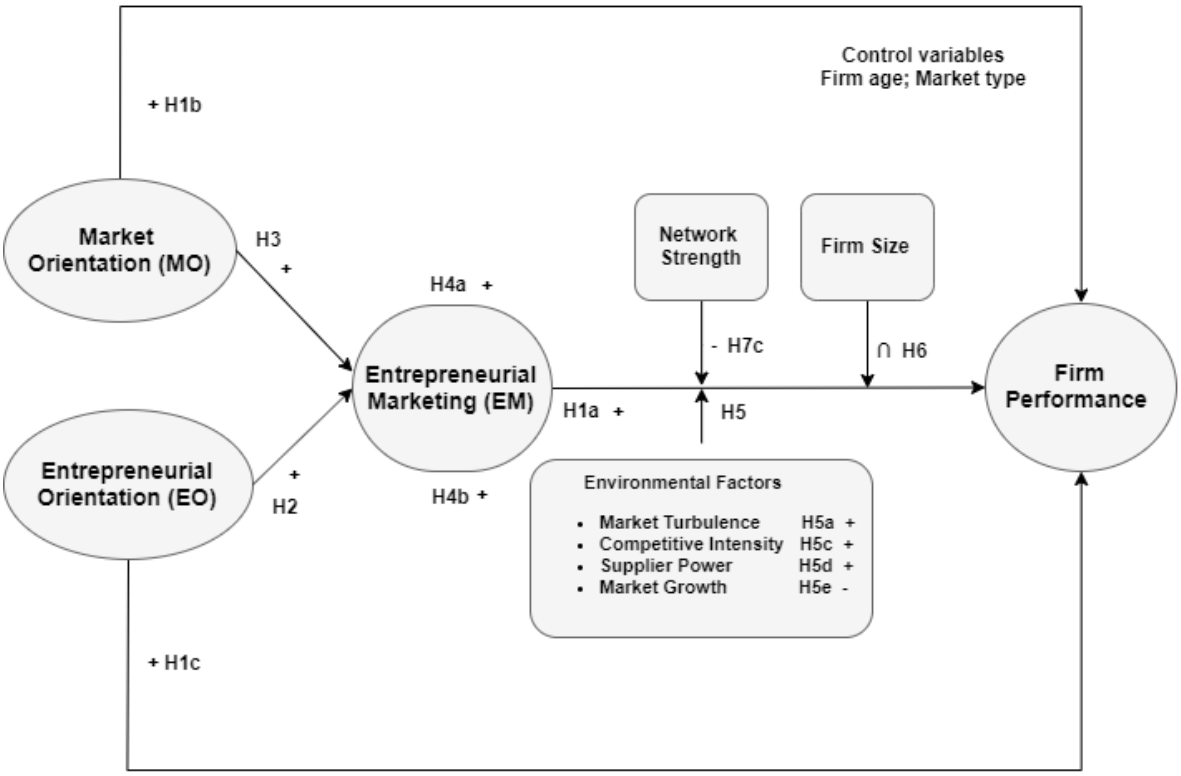
[4] Results are based on the chi-square difference between medium-sized firms vs. large and small firms combined.

[5] A table with unstandardized estimates is shown in Appendix E.

Table 11 Summary of Hypothesis Testing Results

Hypothesis	Result
Hypothesis 1a: EM positively affects firm performance.	*Supported*
Hypothesis 1b: MO positively affects firm performance.	*Supported*
Hypothesis 1c: EO positively affects firm performance.	*Supported*
Hypothesis 2: Firms' EO positively affects their EM.	*Supported*
Hypothesis 3: Firms' MO positively affects their EM.	*Supported*
Hypothesis 4a,b: EM positively and partially mediates the relationship between a) MO and firm performance, and b) EO and firm performance.	*Supported*
Hypothesis 5a,b,c,d,e: The relationship between EM and firm performance is moderated by environmental factors, such that a) market turbulence, b) technological turbulence, c) competitive intensity, and d) supplier power positively moderate the EM-firm performance relationship, while e) market growth negatively moderates the relationship.	*H5a,c,d,e Supported* *H5b Not supported*
Hypothesis 6: Firm size moderates the relationship between EM and firm performance in a U-shaped manner, such that both large and small sized firms benefit more from EM than mid-sized ones do.	*Not supported*
Hypothesis 7a,b,c: Network structure (strength, size, and diversity) moderates the relationship between EM and firm performance, such that a) network size (number of ties) and b) diversity (variety of ties) positively moderate EM-firm performance relationship, while c) strength of the network (ratio of strong ties) has a negative moderation influence on that relationship.	*H7c, Supported* *H7a,b, Not supported*

Figure 12 Entrepreneurial Marketing (EM) and Firm Performance (Final Model)



CHAPTER 6

6. Discussion

6.1. The EM

A little consensus exists on what is EM and which dimensions best describe its underlying conceptualization. Although some seminal works on EM (e.g., Morris, Schindehutte, and LaForge 2002) suggest that EM can be portrayed by seven dimensions – innovation, proactiveness, customer intensity, risk-taking, value-creation, opportunity, and resource leveraging – more recent developments on EM literature propose different dimensions (e.g., Hills et al. 2010; Kraus, Harms, and Fink 2010; Whalen et al. 2016). However, this dissertation has empirically examined the most recent and inclusive definition of EM and, consequently, finds that EM is best represented by six dimensions. That is to say, network attention, innovative marketing, acceptable risks, proactive marketing, opportunity focus, and resource leveraging are the primary components of EM. As it is supplemented by empirical investigation, present research brings more incongruence between scholars in the interface of marketing and entrepreneurship on how EM should be conceptualized and measured as a major theoretical contribution of the current work. Therefore, this dissertation will enhance scholars' understanding of EM, and will further nurture more research into the field. Although I believe the definition of EM introduced by this research will still hold, future research may investigate the viability of introducing a revised definition of EM, incorporating the revised version of the dimensions introduced by this research.

Although the presented conceptualization of EM was inspired by several seminal works (e.g., Morris, Schindehutte, and LaForge 2002), it uniquely captures the recent developments in the domain of EM, and synthesizes these developments into a more distinctive conceptualization of EM. It introduces network attention as a unique dimension of EM, that proposes paying more balanced attention to all stakeholders in the network, including customers, suppliers, and the entrepreneurial marketers themselves, in order to resolve the possibility of being shortsighted by solely focusing on customers (e.g., Christensen 1997). Moreover, the new, empirically-supported conceptualization of EM differs from how risk-taking was approached traditionally (e.g., Morris, Schindehutte, and LaForge 2002), by contending that entrepreneurial marketers are more prone to engage in acceptable risks. That is, EM promotes risking only the resources that firms can afford to lose (Sarasvathy 2001). Furthermore, current research provides support that value creation and flexibility are not unique dimensions of EM, but rather are inherently embedded in each dimension of EM. For instance, while creating value is the ultimate purpose of embracing innovation and taking risks, firms need to be flexible in order to achieve that endeavor efficiently. In the EM context, value creation is typically acknowledged as the output of the entrepreneurial activities that organizations undertake (e.g., Hills and Hultman 2011). Additionally, current research postulates that EM can be defined in terms of an agile mindset, a way of thinking that, when embraced and promoted by top management, may evolve into an organizational culture, setting the basis for competitive advantages that are difficult to imitate (Whalen et al. 2016).

Furthermore, the proposed EM conceptualization is informed by effectuation theory and service-dominant (S-D) logic (Sarasvathy 2001; Vargo and Lusch 2004). For

example, while EM is aligned with S-D logic in acknowledging all actors in the ecosystem as resource integrators and accepting operant resources as unique sources for strategic advantage, it makes use of the effectual lens to find out how entrepreneurial marketers deal with other actors in their respective environments, as well as how resources are handled in the first place. In other words, as effectuation suggests, EM makes pre-commitments and partnerships with all the actors in the ecosystem, and leverages and employs all the available means (including operant resources) to attain the desired results (e.g., Renton and Richard 2019). The intersection of these important theories crystallizes the proposed conceptualization of EM, and enhances our understanding of various institutional and environmental conditions under which EM generates better outcomes. Therefore, as the six main dimensions of my conceptualization of EM are a primary outcome of this research, they will be discussed more thoroughly in the following text.

6.1.1. Innovative marketing

Though addressed diversely in EM literature, innovation has been acknowledged as a conducive tool for organizational competitiveness and prosperity (e.g., O'Cass and Ngo 2011). Whilst some scholars recognize innovativeness as an organization-wide approach to depart from the status quo by embracing new ideas (e.g., Baker and Sinkula 2009), other scholars perceive it as an alternative approach to using new ideas in embracing marketing strategies (e.g., Morris, Schindehutte, and LaForge 2002). The present research provides support for the latter approach, and proposes that, in the EM context, innovation is infused in firms' marketing programs.

6.1.2. Proactive marketing

Relevant marketing literature introduces proactiveness as the organizational ability to seize opportunities ahead of competitors (Baker and Sinkula 2009). According to current research, in order to have proactive marketing, firms must not only identify their customers' latent needs, but also anticipate their future ones. Under highly unsettled conditions, organizations must also be proactive and flexible, to enhance their competitiveness and reduce their vulnerability. Therefore, EM is the countermeasure to the counter-productive notion of MO's full-scale attention to customers that could turn organizations blind to marketplace developments (e.g., Narver, Slater, and MacLachlan 2004). Since it allows for organizations to balance their attention to customers, as well as to the fluctuating conditions in their environments, EM can enhance their ability to create value and exploit opportunities ahead of their competitors.

6.1.3. Opportunity focus

Differently-sized organizations acknowledge the importance of an opportunity focus stance (Morris, Schindehutte, and LaForge 2002). In the EM context, this focus becomes an existential factor for firm success. According to present research, under uncertain conditions, EM amends MO's unbalanced focus on customers by stimulating decision-makers to apprehend their surroundings to detect, develop, and successfully exploit new opportunities. Additionally, flexibility becomes a crucial factor which allows firms to exploit the opportunities that arise in highly uncertain environments. Furthermore, EM acknowledges the value of exploiting contingencies (Sarasvathy 2001), and considers surprises as important venues for value creation.

6.1.4. Resource leveraging

When creating value and pursuing opportunities, organizations constantly find themselves short on resources. Consequently, they strive to achieve more with less, by employing innovative approaches and trying to access supplementary resources (Morris, Schindehutte, and LaForge 2002). This research acknowledges EM as instrumental for organizations with sparse resources in improving the use of their internal and external resources. S-D logic informs that the organizations that embrace EM see all the actors in their ecosystems as resource integrators that they can collaborate with to use operant resources for value co-creation (Lusch and Vargo 2014). By adopting an effectual lens, the present study also claims that organizations begin with accessible means to achieve outcomes and develop all the necessary partnerships for improved use of the joint resources (Sarasvathy 2001).

6.1.5. Network attention

The marketing literature is dedicating increased attention to organizations' predilection to exploit their networks and continuously create new ties (e.g., Achrol and Kotler 2012). The present dissertation proposes that attention to networks plays a vital role, and allows organizations to be proactive in identifying and exploiting opportunities, creating value for all stakeholders, and leveraging resources. It illustrates how networks provide organizations with profitable operand and operant resources (Vargo and Lusch 2008), and shows how varied stakeholders, such as customers, competitors, distributors, and suppliers, can represent unique resources which enhance the firms' competitiveness (Aarikka-Stenroos and Sandberg 2012). Furthermore, the present study argues that EM not

only focuses on consumers, but also pays inclusive and balanced attention toward various stakeholders in the value chain. EM is meant to subvert MO's threat of getting locked in by focusing excessively on customers, thus endangering organizational innovativeness (e.g., Christensen 1997). The current perspective adopts the S-D logic viewpoint, where stakeholders are resource integrators (Morrish, Miles, and Deacon 2010; Vargo and Lusch 2008), and acknowledges network partners as available means with which entrepreneurs deal while building partnerships (Sarasvathy 2001). As I conceptualize them, under optimal network attention, the EM dimensions trigger collaborations and engagement. Optimal network attention influences other EM dimensions, and enhances the ability of organizations to be innovative, value-oriented, opportunity-focused, and proactive. By adopting innovative approaches such as crowd creation, open innovation, and crowdsourcing, organizations will be able to access and make better use of resources (e.g., Cooper 2002).

6.1.6. Acceptable risks

Organizations tend to work toward mitigating risks under uncertain environments (Lumpkin and Dess 2001). Despite the fact that past literature acknowledges risk-taking as a prominent component of EM conceptualization (e.g., Kraus, Harms, and Fink 2010), the present research, by using effectuation lens, shows that EM encourages solely acceptable risk-taking in order to take advantage of opportunities and create value. While entrepreneurial organizations might undertake bold actions to beat competitors, they inherently avoid risking what they cannot afford to lose (Sarasvathy 2001).

6.2. EM as a unique construct

Establishing a distinctive EM realm and defining its main characteristics are crucial challenges for the scholars in the marketing/entrepreneurship interface (Hills and Hultman 2013). Current research theoretically establishes and empirically validates EM as a distinct construct. It is the first to distinguish EM from other overlapping domains, such as MO and EO, by successfully demonstrating its discriminant validity, and retaining that EM is beyond employing marketing and entrepreneurship in organizations (Sethna et al. 2013). Moreover, the present study empirically proves that EM is more than a simultaneous adoption of MO and EO (e.g., Hansen and Eggers 2010). By incorporating the effects of both EO and MO on firm performance in the present model, the current study shows that the distinctive contribution of EM to firm performance is beyond only being a summation of EO and MO dimensions (Morrish et al. 2010). By showing its validity as a distinctive construct, this dissertation provides empirical support for the long-lived assertion in marketing and entrepreneurship interface literature that EM is different from conventional marketing, and it demonstrates its superiority under certain institutional and environmental conditions (e.g., Hills et al. 2008). In summation, this dissertation provides a significant contribution to the research in the marketing/entrepreneurship interface by establishing EM as a distinct construct, which has network attention, innovative marketing, acceptable risks, proactive marketing, opportunity focus, and resource leveraging as its main dimensions. This distinctiveness was well-supported by introducing a scale for EM, which empirically showcases how EM is different from MO and EO.

6.3. The effect of EM on firm performance

This dissertation shows that EM has a positive influence on firm performance. Although some scholars have either explicitly contended or implicitly argued that EM enhances performance (e.g., Eggers, Hansen, and Davis 2012; Morrish and Jones 2019; Morrish, Miles, and Deacon 2010; Sadiku-Dushi, Dana, and Ramadani 2019), the current study is among the first to find empirical support for that assertion. Despite including overlapping and well-established constructs such as MO and EO in the present model, I was able to demonstrate that EM has a significant, positive, and distinctive impact on firm performance. This impact becomes more pronounced under certain conditions. Therefore, firms that excel in paying attention to networks, fostering innovation, embracing proactiveness, leveraging resources, taking acceptable risks, and being opportunity-focused will tend to have better overall performance. As such, by embracing EM, firms tend to be opportunity-focused in a manner that enables them to constantly locate, create, and take advantage of opportunities that best fit their capabilities. Consequently, they will attain a competitive edge over their competition (Morrish et al. 2010). Therefore, EM is a unique approach for firms to realize a competitive advantage in the marketplace, which, consequently, will be reflected in their financial performance (Whalen et al. 2016).

Furthermore, launching innovative marketing programs through employing EM will eventually put firms into advantaged positions, serving to further their performance. Moreover, by being more inclusive, and by paying balanced attention to all stakeholders in their networks, an EM attribute, firms will be better able to locate more opportunities, learn new information, knowledge and technologies, and build better and more mutual "win-win" relationships with their partners. Furthermore, adopting EM practices will help

organizations to leverage their resources better and, therefore, become resource-rich, less dependent on their suppliers' uncertainties, and more cost-effective. As such, their operational costs will be optimized, and, consequently, they will be able to offer better prices and greater value to their customers (Morrish 2011). Furthermore, EM empowers organizations to take advantage of opportunities and achieve growth by encouraging acceptable risk-taking. Without such risk, there are usually not many growth prospects for firms. In short, EM competencies can be perceived as unique resources that organizations can utilize to attain competitive advantage (Barney 1991). Hence, the resource-based view of firms, as a theory, might inform our understanding of EM, and more thorough investigation by researchers in the field on how this prominent theory might be of use in sharpening our comprehension of EM is warranted.

Furthermore, this study has also reassured the earlier studies' conclusions about the positive effects of MO and EO on firm performance (e.g., Kirca et al. 2005; Rauch et al. 2009). Although EO, MO, and EM were found by the current study to be highly correlated (e.g., Becherer and Maurer 1997; Hult and Ketchen 2001; Miles and Arnold 1991; Slater and Narver 2000), each construct was found to have a distinctive, significant, and positive effect on firm performance. However, while Kirca and colleagues (2005) found MO to have positive correlations with different firm performance indicators (i.e., .32 with overall performance, .27 with profits, and .26 with revenue), the current study finds the effect of MO on firm performance to be .26.[1] Furthermore, in their meta-analysis study, Rauch et al. (2009) suggest EO and performance correlation to be .24, whereas present research finds

[1] Standardized estimation (β).

EO to have an effect of .45[2] on firm performance. This difference could be attributed to the study settings, and to the fact that MO and EM may have shared a more common effect on firm performance than they do with EO. Therefore, this study suggests that EM can be a confounding variable that previous research has occasionally overlooked, and the strong MO–performance relationship suggested by early research (e.g., Kirca et al. 2005) could be reduced, if EM construct was incorporated in previous research. Moreover, this dissertation finds EM to have .18 effect on firm performance under standard settings. However, under highly turbulent conditions, that effect multiplies, and EM is found to be superior to MO and EO in its effect on firm performance.

Current research also finds evidence that younger firms have a higher chance of embracing EM. That is, EM is more prevalent among newer organizations, despite its effectiveness in improving performance. One reason can be attributed to the fact that newer organizations are more inclined to try alternative strategies (i.e., EM) to establish themselves in their respective markets. This is in-line with what early research found about newer firms having higher adoption rates for EO (e.g., Rauch et al. 2009). It is also likely that younger firms are less attached to the standard practices in their markets, and are therefore more open to trying new approaches (i.e., EM). Moreover, early research has suggested the presence of heterogeneity in the rate of adoption of EM, in respect to firm age (e.g., Kilenthong, Hultman, and Hills 2016). On the other hand, older firms demonstrated having a slightly better performance than their younger counterparts. Older firms have already demonstrated some financial acumen by their ability to survive for a long period of time. Therefore, it is of no surprise to see that older firms show a marginally

[2] Standardized estimation (β).

better overall performance. Furthermore, my results also suggest that B2B firms have a higher tendency toward embracing EM than their B2C counterparts. One possible explanation is that working with business customers requires firms to pay more attention to their networks and display a better ability to constantly introduce innovative solutions (features of EM). Therefore, B2B firms have higher rates of EM adoptions than B2C firms.

6.4. EM's antecedents, and its mediation effect to MO, EO, and performance relationships

This dissertation shows that the effect of EO on EM is positive and significant. One reason could be attributed to the fact that some of the proposed dimensions of EM (e.g., acceptable risk) have formerly originated from entrepreneurship literature (Sarasvathy 2001). Even though current research has been able to show the discriminant validity of EM, it also provides empirical evidence that the correlation between EO and EM is robust. Therefore, the current study finds that, the more a company is entrepreneurially-oriented, the more entrepreneurial its marketing tends to be. Being entrepreneurially-oriented entails certain qualities, such as being innovative, proactive, and risk-tolerant. These qualities are adopted by EM in more productive forms. For instance, EM limits the risk-taking quality of EO to certain levels of risks (i.e., acceptable risks). However, firms that aspire to adopt EM may need to consider EO as a driver of EM. As a driver of and antecedent for EM, EO warrants further investigations by researchers into the interface of marketing and entrepreneurship.

On the other hand, the present study also argues that MO positively influences EM under standard settings. It finds support for previous research assertions of the existence of

some overlaps between EM and MO conceptualizations, as demonstrated by high correlations between these two constructs (e.g., O'Cass and Ngo 2011). However, despite the overlapping notions of EM and MO, the current study was able to demonstrate the discriminant validity of EM as a distinct construct. However, as MO is mostly about delineating the marketing concept inside organizations, it is not a surprise to find a strong correlation between MO and EM, knowing that EM is already a form of marketing, in the first place. However, EM tackles marketing decisions in more productive forms than MO. For instance, it promotes a more inclusive attention approach, where entrepreneurial marketers are not short-sighted by being exclusively and excessively focused on customers (e.g., Christensen 1997), but pay attention to all partners in their networks, empowering their abilities to innovate and excel in their marketplace. Therefore, current research concludes that firms with higher MO have higher tendencies to adopt EM. Furthermore, this dissertation finds that the magnitude of the effect of MO on EM is higher than the one for EO on EM. This should not be a counterintuitive finding, given the reasons highlighted earlier. Consequently, if firms aim at employing EM to enhance their performance, they may want to consider MO as a major driver of EM adoption. As an important driver of and antecedent for EM, MO warrants further investigations by EM scholars. However, despite the absence of theoretical support, another possible alternative explanation could be that EM positively influences EO and MO, but longitudinal studies are warranted, in order to be able to either accept or reject that assertion.

Furthermore, the present study shows that the relationships between MO, EO, and firm performance are partially mediated by EM. Despite the fact that the similarity exists between MO, EO, and EM, this research finds that some of the effect of EO and MO on

firm performance comes through EM. Therefore, EM is found to be an overlooked link through which firms can effectively utilize valuable competencies of MO and EO simultaneously, and supplement these with constructive dimensions, introduced by EM, generating a higher impact on firm performance under certain conditions. These conditions, in which EM will have a greater effect on firm performance than EO and MO, appear to be mostly related to higher levels of competition and market turbulence. EM is set to resolve issues with the existing models of MO (e.g., being excessively customer-centric) and EO (e.g., being less beneficial under stable conditions), and provides a better effect on firm performance under highly uncertain conditions. Furthermore, introducing EM as a mediator to the relationships between MO, EO, and firm performance resolves some unanswered questions raised by early research. For instance, Matsuno, Mentzer, and Ozsomer (2002) found EO's effect on performance to diminish if MO was removed from their model. In other words, they suggest that EO influence on firm performance is contingent on the presence of MO. This unexplained phenomenon is now less ambiguous, after I established EM as a mediator to EO, MO, and firm performance. That is, EM was an omitted third variable, which previous research has repeatedly overlooked. Moreover, Keh, Nguyen, and Ng (2007) find the relationship between EO and performance to be partially mediated by the utilization of marketing mix (i.e., promotion and distribution) information. However, it is possible that EM is the underlying power that enhances the utilization of the marketing mix information and, therefore, mediates EO-performance relationship. That is, by paying more attention to networks and having better capabilities for leveraging resources, firms that embrace EM tend to have better utilization for marketing mix information to improve their decision-making practices.

6.5. EM and environmental variables

This dissertation shows that the association between EM and performances is moderated by environmental variables. In the context of this study, the environmental factors under examination are the following: market turbulence, technological turbulence, competitive intensity, supplier power, and market growth. Current research demonstrates how EM influence on firm performance is contingent upon environmental conditions. It empirically confirms the previous research assertion of the heterogeneity of EM effectiveness upon the firms' surrounding environment (Morris, Schindehutte, and LaForge 2002).

Current research finds that market turbulence positively moderates the EM-performance relationship. That is, the higher the market turbulence, the more benefits that firms will reap from adopting EM. Under highly turbulent markets, the effect of EM on firm performance skyrocketed. As market turbulence increases, firms need to adopt more proactive and innovative marketing programs, qualities sustained by embracing EM, to keep up with their customers' changing needs. However, in markets with low turbulence, customer preferences are stable, and therefore, those firms may not benefit best from adopting EM. Consequently, the present research provides empirical support for previous research claims about EM in being less beneficial for firms operating in markets characterized by stable demand (e.g., Morris, Schindehutte, and LaForge 2002; Yang and Gabrielsson 2017). On the other hand, current research also suggests that technological turbulence has no significant moderating influence on the relationship between EM and firm performance. Therefore, higher technological turbulence does not necessarily mean a higher need for EM. Instead, firms operating in markets with higher technological

turbulence may be better-served by adopting other strategic orientations, such as MO. That is, to survive in an ever-changing technological environment, firms may need to pay closer attention to the technologies adopted by their competitors. That could be attributed to the high capital investment associated with some advanced technologies constraining EM from providing much value. However, in low technological turbulence markets, firms may be pressured to find alternative ways to differentiate themselves from the competition, beyond merely acquiring new technologies, which might create a higher need for embracing more creative approaches (e.g., EM) in tackling their marketing activities.

The present study finds that firms adopting EM will excel in markets with high competitive intensity. That is, competitive intensity positively and significantly moderates the relationship between EM and firm performance. Markets with higher levels of competitive intensity tend to be more challenging for firms, which consequently necessitates the use of EM. Such markets require more of the flexibility and network attention warranted by EM (e.g., Morrish, Miles, and Deacon 2010). Therefore, EM is more effective under highly competitive settings, as it assists firms to innovatively and proactively exploit opportunities in their environment. The qualities empowered by EM (e.g., innovative marketing and risk-taking) enable firms to deviate from the red oceans, where competition is severely high and margins are detrimentally thin, to blue oceans, where margins are high and opportunities are ample, by elevating their abilities to innovate and create new markets. However, this research suggests that EM is less relevant in markets with low or no competitive intensity.

Furthermore, the current study finds supplier power to moderate the relationship between EM and performance positively. As the power of the firms' suppliers increases,

the positive effect of EM on firm performance becomes more pronounced. Firms that operate in ecosystems with high supplier power incur higher costs, which can be mitigated by adopting EM strategies. That is, by paying better attention to networks, an EM trait, firms will have access to more resources, and reduce their vulnerability to suppliers' uncertainties. EM will also equip these firms with better resource leveraging strategies, which will increase their efficiency in consuming resources provided by their suppliers. It will also reduce firms' sensitivity to the changes in the prices of their suppliers, by getting them to focus more on providing more value-oriented (in contrast to price-oriented) market offerings. However, current research suggests that EM becomes less relevant to firm performance as the power of suppliers diminishes.

The present research also finds support that market growth negatively moderates the EM-performance relationship. That is, as market growth increases, EM becomes less relevant. Current research shows that firms operating in low growth markets benefit the most from embracing EM. Operating in stagnant markets necessitates more differentiation (e.g., Whalen et al. 2016) and, consequently, creates an urging need for firms to launch more proactive and innovative marketing programs. Operating in low growth markets also encourages the embracement of more acceptable risks, as well as the vigilance of arising opportunities in the ecosystem, qualities warranted by EM, to create new venues for firms to grow and prosper. Therefore, firms operating in stagnant markets benefit the most from adopting EM.

6.6. EM and firm size

Different-sized firms have differences in their capabilities and resources, and, therefore, behave differently in the marketplace. Firms of various sizes adopt the EM approach to survive in hostile settings, as well as under uncertain market environments (Whalen et al. 2016). Although EM initially emerged with a sole focus on small businesses (Morris, Schindehutte, and LaForge 2002), the current study finds evidence than EM positively contributes to the performance of all sizes of organizations. However, it is evident that the extent of EM's usefulness is dependent upon firm size (e.g., Kilenthong, Hultman, and Hills 2016). Current research finds that the magnitude of EM positive effect on firm performance is contingent upon the size of the organization. It shows that medium-sized firms benefit the most from embracing EM. While the performance of small and large firms is positively and significantly influenced by EM, medium-sized firms appear to reap more benefits from adopting EM than small and large ones do.

However, the theory of "Rule of Three" might provide a unique explanation for the phenomenon observed by the current research (e.g., Sheth and Sisodia 2002; Uslay, Altintig, and Winsor 2010). This theory suggests that mature markets evolve to introduce three major players (generalists) and many small players (specialists). Therefore, attaining profitability is usually either by being one of the major three generalists, or by focusing on small niche markets or products to serve. Consequently, medium-sized organizations appear to benefit the most from EM, because they are stuck in the middle (Uslay, Altintig, and Winsor 2010; Uslay et al. 2013). They are neither large enough (i.e., generalists) to exercise control over their markets nor small enough (i.e., specialists) to take ownership over a specific market/product niche. Therefore, they are in desperate need to adopt some

pioneering approaches (i.e., EM) to deviate from the status quo and better establish themselves in their served markets. That is, they need to be more proactive and vigilant toward the arising opportunities in their markets, and they must introduce more innovative market programs to attain better performance. However, they are stuck in what Sheth and Sisodia (2002) call "the ditch", which is a place where firms usually face the least profits and the most challenges. Therefore, they will need to work hard to get farther from the ditch, and one way to achieve that is by embracing EM. Furthermore, early research defines the ditch firms to be those with 5%-10% in market share, which is aligned with my definition of medium-sized firms as described in my robustness analysis, discussed in the results section. This alignment provides more confidence in my interpretation of the observed effectiveness of EM for medium-sized organizations.

6.7. EM and network structure

This study finds the network structure to have a moderating role to the EM-performance relationship. More specifically, it investigates the moderation effects of network size, strength, and diversity as the main characteristics of network structure to the relationship between EM and firm performance. Although I found no significant moderating effect for network size on the relationship between EM and performance, results suggest a possibility that EM is more effective for firms with a larger network size (i.e., a larger number of ties). However, that effect could be attributed to the positive association between the number of ties the firm has, and the resources and information it accesses (e.g., Xie, Fang, and Zeng 2016), the opportunities it will be exposed to (e.g., Sheth and Uslay 2007), the ability it has to share risk (Grandori 1997), and the legitimacy it gains in the marketplace (Cooper 2002). However, this research's assertion for EM being

the ultimate choice for firms with well-developed networks challenges previous research assertions that MO and EO are the best options for firms with well-developed networks to improve performance (Boso, Story, and Cadogan 2013). Furthermore, network diversity is found to have no moderation role to the relationship between EM and firm performance. One reason could be attributed to the fact that, while the highly diverse networks may empower certain qualities of EM (e.g., innovation) by providing a wider set of knowledge, it may hinder EM adopters' focus, and their ability to pay inclusive network attention (a major criterion for embracing EM).

Moreover, current research finds evidence that network strength negatively moderates the relationship between EM and firm performance. That is, as the ratio of the firm's strong ties to its weak ties increases, its gain from adopting EM decreases. In other words, EM works best for firms with more weak ties. Such firms will be better-equipped to embrace and reap the benefits from EM, as their weak ties will provide them with better access to new ideas, knowledge, and information (Mu, Peng, and Love 2008). Weak ties will also grant them better access to external opportunities and knowledge (Johannisson 2000). Therefore, the aforementioned merits of having weak ties will empower innovative marketing, proactive marketing, and opportunity focus dimensions of EM, which will, in turn, increase EM efficacy. One the other hand, firms with very large portions of strong ties will run the risk of over-embeddedness in their network (Uzzi 1996), through which they may become over-dependent on knowledge, information, ideas, and practices within their network, and therefore, benefit the least from EM. Furthermore, being overly-embedded in their networks, firms will then have less ability to introduce innovative offerings and beat the competition. Network over-embeddedness will also reduce firms'

ability to launch innovative marketing, a major attribute of embracing EM, as they have limited access to new knowledge and information.

7. Managerial Implications

The findings of this dissertation should shift marketing leaders' attention from a false EO-MO dichotomy toward synergies enabled by EM. It helps these leaders by identifying some deficiencies associated with each orientation (e.g., Christensen 1997; Li et al. 2008; Matsuno, Mentzer, and Ozsomer 2002) and discussing how EM could be used as a remedy for these weaknesses. It introduces EM as an effective approach in carrying out marketing activities under highly uncertain conditions. Furthermore, the following actions and considerations will help business managers to embrace EM effectively and, consequently, reap the benefits of adopting this pioneering marketing approach. First, managers should build an exceptionally good understanding of their external environment and their internal capabilities. There is no such thing as "one size fits all". Embracing EM is contingent on many internal and external factors, as is the adoption of MO and EO. For instance, EM is very effective for firms under highly turbulent markets where customer preferences continuously change and demand fluctuates constantly. Second, managers should be aware that adopting MO or EO might eventually lead to the adoption of EM. They must understand that part of the performance improvement they enjoy because of embracing MO or EO can be partially-attributed to EM. For instance, EM might indirectly empower firms' ability to utilize marketing mix information to optimize their marketing decision-making and, consequently, improve their performance (Keh, Nguyen, and Ng 2007). Third, EM effectiveness is also dependent on how firms embrace its dimensions. As such, current research shows that, as firms excel in employing innovative marketing,

proactive marketing, opportunity focus, acceptable risk-taking, resources leveraging, and attention to networks, they will eventually obtain the most advantage from adopting EM. Fourth, managers should be well-informed that networking and holistic thinking are very crucial features of EM. That is, if they want to embrace EM effectively, they should pay considerable attention to their networking activities. This research claims that networking is very crucial to EM success. Furthermore, EM, as this dissertation conceptualizes it, informs managers not to fall into the trap of paying exhaustive attention to customers (e.g., Christensen 1997), so much so that they come up short in innovation, ignore other partners in their networks, and fail to pay the needed attention toward the developments in their markets.

With a good grasp of EM and its relationship to organizational performance, managers should be able to engage in EM more successfully and more frequently, and effectively improve their firms' performance under uncertainty. Present research introduces EM as the most viable option for firms to thrive under highly uncertain conditions. More specifically, firms operating in highly competitive markets should embrace EM to enhance their performance. EM will help managers to introduce more innovations, and, consequently, give them a competitive edge over their competitors. Furthermore, in highly turbulent markets, it is advisable that firms devote more focus to EM than to EO and MO, in order to maximize their firm performance. EM will cause marketing leaders to be more proactive in identifying the changes in market conditions and customers' preferences ahead of the competition. Furthermore, firms with high supplier power should be informed that adopting EM strategies will help them to mitigate the pressure created by the power of their suppliers. It will also help them to improve the

productivity of their current resources, lessening the need for further resources from their competitors. Additionally, it will reduce their sensitivity to price changes by their vendors, by enhancing their ability to be less price-oriented due to providing more value to their customers. Current research also informs managers to build more weak ties in their networks, to increase the effectiveness of their EM. Therefore, if managers aspire to adopt EM strategies, they should work on increasing the number of weak ties they have in their networks. The present study also suggests that management of the medium-sized organization should be more interested in adopting EM practices to improve their organizational performance. It demonstrates that those types of organizations will benefit the most from embracing EM.

Furthermore, there is no convincing reason why the upsides of EM should only be applied to profit-oriented enterprises, and it must spill over to organizations of different sizes and purposes, such as not-for-profits and social entrepreneurship organizations. As part of the study's sample represents non-profit industries, I can argue that my results apply to both profit-oriented and non-for-profit organizations. Current research provides support that EM is an effective approach to embracing marketing activities for various sizes of organizations. Despite the variance in the magnitude of the benefit from embracing EM, this research recommends using EM to the mangers at all sizes of organizations. The current dissertation finds that EM is applicable for all types of industries, and its findings should be generalizable across industries. It shows how EM is effective for firms that operate in different industries, and how EM is not limited to profit-oriented organizations. Therefore, present research introduces EM as a viable alternative to different types of organizations operating in a broad set of industries.

8. Conclusion

In dynamic and uncertain markets, practitioners have an increasing need to be agile and proactive (Matsuno and Kohlbacher 2019). This type of uncertainty in markets generates a pressing need for employing continuous marketing experimentation and revising conventional marketing practices. Consequently, as opposed to MO and EO, EM, as presented by this dissertation, provides an appropriate balance between entrepreneurial focus and attention to markets, thus offering firms the opportunity to outperform other players in their competitive landscapes. Though past research shows MO and EO to strongly and positively influence organizational performance (e.g., Kirca, Jayachandran, and Bearden 2005; Lisboa, Skarmeas, and Saridakis 2016; Rauch et al. 2009; Shan, Song, and Ju 2016), both constructs present deficiencies when adopted singularly by organizations. For instance, some scholars consider MO excessively customer-centric, to such an extent that it undermines innovativeness and proactiveness (e.g., Christensen 1997), while other scholars argue that adopting EO alone may not suffice to enhance performance (e.g., Matsuno, Mentzer, and Ozsomer 2002). Due to the predominant issues with extant EO and MO models, present research establishes EM as the missing link that can be optimized to enhance performance. Therefore, by demonstrating that MO, EO, and performance relationships are partially mediated by EM, this research argues that EM could be an alternative approach that allows firms to effectively take advantage of the valuable qualities of EO and MO simultaneously, and complement them with EM's constructive dimensions, thus generating higher organizational performance. Nonetheless, the benefits of embracing EM depend on various environmental and organizational circumstances.

Current research empirically designates EM as a unique construct with a positive and significant influence on organizational performance. My imperative research hypotheses are based on an extensive EM literature exploration, the study of its conceptualization and development, the investigation of its antecedents (i.e. EO and MO), the study of the role of environmental factors, the observation of EM relevance to different sizes of organizations, and the exploration of the role of networks in EM contexts. Although there have been earlier attempts to introduce a scale for EM (e.g., Eggers et al. 2018), a further effort was nevertheless warranted in order to develop a robust scale, with applicability to all organizations. Therefore, I introduce a scale to measure EM, and I empirically investigate the interrelationships between EM, MO, EO, and firm performance. I illustrate that both MO and EO have positive effects on EM, and their positive impact on firm performance is partially mediated by EM. Then, I explore the moderation role of various environmental and institutional variables to the EM-performance relationship. More specifically, I find EM to influence firm performance positively, and that relationship is positively moderated by market turbulence, competitive intensity, and supplier power. However, I show that the EM-performance relationship is negatively moderated by market growth. I also investigate the moderation effect of network structure (i.e., size, diversity, and strength) to the relationship between EM and firm performance, and I find the EM-performance relationship to be negatively moderated by network strength. Furthermore, this research demonstrates that EM effectiveness is contingent on firm size. As such, medium-sized organizations benefit the most from embracing EM.

9. Limitations and Future Research

This research is not without limitations. Although it provides a thorough review for the literature, a model of EM, a scale for its measurement, an empirical investigation for its interrelationships with MO, EO, and firm performance, and a thorough examination of various environmental and institutional moderation variables, future replication studies are warranted to reinforce this study's generalizability to different settings. For instance, it will be very fruitful and insightful to employ the proposed EM scale in highly entrepreneurial settings, such as Silicon Valley's startups ecosystem. If it performs significantly better in such settings, I will be more confident about its relevance and validity. Furthermore, one limitation that should be mentioned about the present research is the complexity of the proposed model, because it includes a new scale for EM, two antecedents, firm performance as a dependent variable, two control variables, and nine more moderation variables. This complexity limited my ability to examine the effects of EM on a dimensional level. Such examination warrants various reliability and discriminant validity tests to create more confidence in the drawn conclusions on a dimensional level, which represents a great venue for future research. Furthermore, such an inclusive model necessitates the use of a lengthy questionnaire, which might have resulted in a lower quality of responses. For instance, the reliability of EO, although being within the acceptable range (Nunnally & Bernstein 1994), may have been better if a smaller survey (or different, and more concise, scale for EO) had been employed. However, as this dissertation has successfully established the discriminant validity of EM, future research may discard MO and EO and employ shorter surveys to answer different research questions about EM. Moreover, as the current study employs cross-sectional data, causal inferences are not

defensible. For instance, although the current study suggests that MO and EO influence EM, another alternative explanation could be that EM is the driving force that influences EO and MO. Therefore, longitudinal studies are warranted, in order to either accept or reject that assertion. In short, future longitudinal studies that investigate EM will build more confidence in the relationships introduced by the current study.

Moreover, as the proposed scale of EM employs a relatively large number of questions (i.e., 20 items) to measure its underlying dimensions, there is a unique opportunity for future research to introduce a reduced measure for EM. Also, such efforts might take the proposed scale by the present study as a starting point, from which they can introduce a more concise, yet valid, measure. Furthermore, as this study was conducted in the United States, international studies on EM are also warranted. Such studies will increase the generalizability of my findings, and investigate the possibility of cultural differences in approaching EM. This will be of unique benefit for multinational corporations (MNC's) in particular. In addition, studying the relationship between other orientations, such as learning orientation (LO), and EM may be useful. For instance, Baker and Sinkula (1999) suggest that LO moderates the relationship between MO and organizational performance. Given the similarity of some of the underlying dimensions of MO and EM, a similar moderation effect might hold to the relationship between EM and firm performance. Future research may also investigate the relationship between EM and what early research found as mediators to MO, EO, and firm performance relationships. For instance, Keh, Nguyen, and Ng (2007) showed that the relationship between EO and performance is mediated by the utilization of marketing mix information. However, it is possible that EM is the underlying power which enhances the utilization of marketing mix

information, and therefore, future research is warranted to examine this possibility. Moreover, in today's increasingly turbulent environment, there are many aspects which might affect firms' strategies and effectiveness in improving performance. Thus, it would be useful for future studies to investigate additional environmental factors (e.g., consumer bargaining power), as these may also influence the relationship between EM and firm performance (Peterson 2018). Finally, by introducing a rigorous scale to measure EM, this research will advance the research on the marketing/entrepreneurship interface, and provide marketing scholars with ample opportunities to study EM further.

REFERENCES

Aarikka-Stenroos, Leena and Birgitta Sandberg (2012), "From New-Product Development to Commercialization through Networks," *Journal of Business Research*, 65 (2), 198–206.

Achrol, Ravi S. and Philip Kotler (2012), "Frontiers of the Marketing Paradigm in the Third Millennium," *Journal of the Academy of Marketing Science*, 40 (1), 35–52.

Ahmadi, Hormoz and Aron O'Cass (2016), "The Role of Entrepreneurial Marketing in New Technology Ventures First Product Commercialisation," *Journal of Strategic Marketing*, 24 (1), 47–60.

Akaka, Melissa Archpru, Stephen L. Vargo, and Robert F. Lusch (2013), "The Complexity of Context: A Service Ecosystems Approach for International Marketing," *Journal of International Marketing*, 21 (4), 1–20.

Amit, Raphael and Christoph Zott (2001), "Value Creation in E-Business," *Strategic Management Journal*, 22 (6/7), 493–520.

Anderson, James C. (1987), "An Approach for Confirmatory Measurement and Structural Equation Modeling of Organizational Properties," *Management Science*, 33 (4), 525–41.

Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological bulletin*, 103 (3), 411–23.

Armstrong, J. Scott and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, 14 (3), 396–402.

Bagozzi, Richard P., Youjae Yi, and Lynn W. Phillips (1991), "Assessing Construct Validity in Organizational Research," *Administrative Science Quarterly*, 36 (3), 421–58.

Baker, William E. and James M. Sinkula (1999), "The Synergistic Effect of Market Orientation and Learning Orientation on Organizational Performance," *Journal of the Academy of Marketing Science*, 27 (4), 411.

Baker, William E. and James M. Sinkula (2009), "The Complementary Effects of Market Orientation and Entrepreneurial Orientation on Profitability in Small Businesses*," *Journal of Small Business Management*, 47 (4), 443–64.

Barney, Jay (1991), "Firm Resources and Sustained Competitive Advantage," *Journal of Management*, 17 (1), 99–120.

Baron, Reuben M. and David A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, 51 (6), 1173–82.

Baum, Joel A. C., Tony Calabrese, and Brian S. Silverman (2000), "Don't Go It Alone: Alliance Network Composition and Startups' Performance in Canadian Biotechnology," *Strategic Management Journal*, 21 (3), 267–94.

Becherer, Richard C., Marilyn M. Helms, and John P. McDonald (2012), "The Effect of Entrepreneurial Marketing on Outcome Goals in SMEs," *New England Journal of Entrepreneurship*, 15 (1), 7–18.

Becherer, Richard C. and John G. Maurer (1997), "The Moderating Effect of Environmental Variables on the Entrepreneurial and Marketing Orientation of Entrepreneur-Led Firms," *Entrepreneurship Theory and Practice*, 22 (1), 47–58.

Bentler, Peter M. (1989), *EQS: Structural Equations Program Manual*. Encino, CA: Multivariate Software.

Berthon, Pierre, James M. Hulbert, and Leyland F. Pitt (1999), "To Serve or Create? Strategic Orientations toward Customers and Innovation," *California Management Review*, 42 (1), 37–58.

Bhuian, Shahid N., Bulent Menguc, and Simon J. Bell (2005), "Just Entrepreneurial Enough: The Moderating Effect of Entrepreneurship on the Relationship between Market Orientation and Performance," *Journal of Business Research*, 58 (1), 9–17.

Bjerke, Björn and Claes M. Hultman (2002), *Entrepreneurial Marketing: The Growth of Small Firms in the New Economic Era*. Cheltenham, UK: Edward Elgar.

Borgatti, Stephen P. and Pacey C. Foster (2003), "The Network Paradigm in Organizational Research: A Review and Typology," *Journal of Management*, 29 (6), 991–1013.

Boso, Nathaniel, Vicky M. Story, and John W. Cadogan (2013), "Entrepreneurial orientation, market orientation, network ties, and performance: Study of entrepreneurial firms in a developing economy," *Journal of Business Venturing*, *28* (6), 708-727.

Brockman, Beverly K., Michael A. Jones, and Richard C. Becherer (2012), "Customer Orientation and Performance in Small Firms: Examining the Moderating Influence of Risk-Taking, Innovativeness, and Opportunity Focus," *Journal of Small Business Management*, 50 (3), 429–46.

Brouthers, Keith D., George Nakos, and Pavlos Dimitratos (2015), "SME Entrepreneurial Orientation, International Performance, and the Moderating Role of Strategic Alliances," *Entrepreneurship Theory and Practice*, 39 (5), 1161–87.

Brown, Brad and John E. Butler (1995), "Competitors as Allies: A Study of Entrepreneurial Networks in the US Wine Industry," *Journal of Small Business Management*, 33 (3), 57–66.

Brüderl, Josef and Peter Preisendörfer (1998), "Network Support and the Success of Newly Founded Business," *Small Business Economics*, 10 (3), 213–25.

Burt, Ronald S. (2000), "The Network Structure of Social Capital," *Research in Organizational Behavior*, 22, 345–423.

Capaldo, Antonio (2007), "Network Structure and Innovation: The Leveraging of a Dual Network as a Distinctive Relational Capability," *Strategic Management Journal*, 28 (6), 585–608.

Chen, Wenhong and Justin Tan (2009), "Understanding Transnational Entrepreneurship through a Network Lens: Theoretical and Methodological Considerations," *Entrepreneurship Theory and Practice*, 33 (5), 1079–91.

Christensen, Clayton M. (1997), *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, MA: Harvard Business School Press.

Churchill, Gilbert A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (1), 64–73.

Collinson, Elaine and Eleanor Shaw (2001), "Entrepreneurial Marketing – a Historical Perspective on Development and Practice," *Management Decision*, 39 (9), 761–66.

Conner, Kathleen R. and Coimbatore K. Prahalad (1996), "A Resource-Based Theory of the Firm: Knowledge Versus Opportunism," *Organization Science*, 7 (5), 477–501.

Constantin, James A. and Robert F. Lusch (1994), *Understanding Resource Management: How to Deploy Your People, Products, and Processes for Maximum Productivity*. Oxford: Planning Forum.

Cooper, Arnold C. (2002), "Networks, Alliances and Entrepreneurship," in *Strategic Entrepreneurship: Creating a New Mindset*, Michael A. Hitt and R. Duane Ireland and S. Michael Camp and Donald L. Sexton, eds. Oxford, UK: Blackwell.

Coviello, Nicole E. and Richard M. Joseph (2012), "Creating Major Innovations with Customers: Insights from Small and Young Technology Firms," *Journal of Marketing*, 76 (6), 87–104.

Covin, Jeffrey G. and Dennis P. Slevin (1989), "Strategic Management of Small Firms in Hostile and Benign Environments," *Strategic Management Journal*, 10 (1), 75–87.

Covin, Jeffrey G. and Dennis P. Slevin (1991), "A Conceptual Model of Entrepreneurship as Firm Behavior," *Entrepreneurship Theory and Practice*, 16 (1), 7–26.

Davidsson, Per (2005), "What Is Entrepreneurship?," in *Researching Entrepreneurship*, Chap. 1. Boston, MA: Springer US.

Davidsson, Per and Benson Honig (2003), "The Role of Social and Human Capital among Nascent Entrepreneurs," *Journal of Business Venturing*, 18 (3), 301–31.

Day, George S. (1994), "The Capabilities of Market-Driven Organizations," *Journal of Marketing*, 58 (4), 37–52.

Deshpandé, Rohit and John U. Farley (1998), "Measuring Market Orientation: Generalization and Synthesis," *Journal of Market-Focused Management*, 2 (3), 213–32.

Drucker, Peter. F. (1954), *The practice of management*, New York: Harper & Brothers.

Duus, Henrik Johannsen (1997), "Economic Foundations for an Entrepreneurial Marketing Concept," *Scandinavian Journal of Management*, 13 (3), 287–305.

Eggers, Fabian, David J. Hansen, and Amy E. Davis (2012), "Examining the Relationship between Customer and Entrepreneurial Orientation on Nascent Firms' Marketing Strategy," *International Entrepreneurship and Management Journal*, 8 (2), 203–22.

Eggers, Fabian, Thomas Niemand, Sascha Kraus, and Matthias Breier (2018), "Developing a Scale for Entrepreneurial Marketing: Revealing Its Inner Frame and Prediction of Performance," *Journal of Business Research*, forthcoming, DOI:10.1016/j.jbusres.2018.11.051.

Elfring, Tom and Willem Hulsink (2003), "Networks in Entrepreneurship: The Case of High-Technology Firms," *Small Business Economics*, 21 (4), 409–22.

Fiore, Ann Marie , Linda S. Niehm, Jessica L. Hurst, Jihyeong Son, and Amrut Sadachar (2013), "Entrepreneurial Marketing: Scale Validation with Small, Independently-Owned Businesses," *Journal of Marketing Development and Competitiveness*, 7 (4), 63–86.

Fisher, Greg (2012), "Effectuation, Causation, and Bricolage: A Behavioral Comparison of Emerging Theories in Entrepreneurship Research," *Entrepreneurship Theory and Practice*, 36 (5), 1019–51.

Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39–50.

Frishammar, Johan and Sven Åke Hörte (2007), "The Role of Market Orientation and Entrepreneurial Orientation for New Product Development Performance in Manufacturing Firms," *Technology Analysis & Strategic Management*, 19 (6), 765–88.

Gardner, David M. (1994), "Marketing/Entrepreneurship Interface: A Conceptualization," in *Marketing and Entrepreneurship: Research Ideas and Opportunities*, Gerald E. Hills, ed., Westport, CT: Quorum Books.

Gargiulo, Martin and Mario Benassi (1999), "The Dark Side of Social Capital," in *Corporate Social Capital and Liability*, Roger Th A. J. Leenders and Shaul M. G Boston, MA: Springer US.

George, Bradley A. (2011), "Entrepreneurial Orientation: A Theoretical and Empirical Examination of the Consequences of Differing Construct Representations," *Journal of Management Studies*, 48 (6), 1291–313.

Grandori, Anna (1997), "An Organizational Assessment of Interfirm Coordination Modes," *Organization Studies*, 18 (6), 897–925.

Guercini, Simone and Silvia Ranfagni (2016), "Conviviality Behavior in Entrepreneurial Communities and Business Networks," *Journal of Business Research*, 69 (2), 770–76.

Gulati, Ranjay, Nitin Nohria, and Akbar Zaheer (2000), "Strategic networks," *Strategic management journal*, *21*(3), 203-215.

Hakala, Henri (2011), "Strategic Orientations in Management Literature: Three Approaches to Understanding the Interaction between Market, Technology, Entrepreneurial and Learning Orientations," *International Journal of Management Reviews*, 13 (2), 199–217.

Hamel, Gary and Coimbatore K. Prahalad (1994), *Competing for the Future*. Boston, MA: Harvard Business School Press.

Han, Jin K., Namwoon Kim, and Rajendra K. Srivastava (1998), "Market Orientation and Organizational Performance: Is Innovation a Missing Link?," *Journal of Marketing*, 62 (4), 30–45.

Hanna, Victoria and Kathryn Walsh (2008), "Interfirm Cooperation among Small Manufacturing Firms," *International Small Business Journal*, 26 (3), 299–321.

Hansen, David J. and Fabian Eggers (2010), "The Marketing/Entrepreneurship Interface: A Report on the 'Charleston Summit'," *Journal of Research in Marketing and Entrepreneurship*, 12 (1), 42–53.

Hansen, Eric L. (1995), "Entrepreneurial Networks and New Organization Growth," *Entrepreneurship Theory and Practice*, 19 (4), 7–19.

Harris, Lloyd C. (2001), "Market Orientation and Performance: Objective and Subjective Empirical Evidence from UK Companies," *Journal of Management Studies*, 38 (1), 17–43.

Hills, Gerald E. and Claes M. Hultman (2006), "Entrepreneurial Marketing," in *Marketing: Broadening the Horizons* Stefan Lagrosen and Göran Svensson, eds. Lund: Studentlitteratur.

Hills, Gerald E. and Claes M. Hultman (2011), "Academic Roots: The Past and Present of Entrepreneurial Marketing," *Journal of Small Business & Entrepreneurship*, 24 (1), 1–10.

Hills, Gerald E. and Claes M. Hultman (2013), "Entrepreneurial Marketing: Conceptual and Empirical Research Opportunities," *Entrepreneurship Research Journal*, 3 (4), 437–48.

Hills, Gerald E., Claes M. Hultman, Sascha Kraus, and Reinhard Schulte (2009), "History, Theory and Evidence of Entrepreneurial Marketing – an Overview," *International Journal of Entrepreneurship and Innovation Management*, 11 (1), 3–18.

Hills, Gerald E., Claes M. Hultman, and Morgan P. Miles (2008), "The Evolution and Development of Entrepreneurial Marketing," *Journal of Small Business Management*, 46 (1), 99–112.

Hills, Gerald E., G. T. Lumpkin, and Robert P. Singh (1997), "Opportunity Recognition: Perceptions and Behaviors of Entrepreneurs," *Frontiers of Entrepreneurship Research*, 17 (4), 168–82.

Hite, Julie M. and William S. Hesterly (2001), "The Evolution of Firm Networks: From Emergence to Early Growth of the Firm," *Strategic Management Journal*, 22 (3), 275–86.

Hitt, Michael A., R. Duane Ireland, S. Michael Camp, and Donald L. Sexton (2001), "Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation," *Strategic Management Journal*, 22 (6/7), 479–91.

Hitt, Michael A. and Timothy S. Reed (2000), "Entrepreneurship in the New Competitive Landscape," in *Entrepreneurship as Strategy: Competing on the Entrepreneurial Edge*, G. Dale Meyer and Kurt A. Heppard, eds. Thousand Oaks, CA: SAGE.

Hoang, Ha and Bostjan Antoncic (2003), "Network-Based Research in Entrepreneurship: A Critical Review," *Journal of Business Venturing*, 18 (2), 165–87.

Hofer, Charles W. (1990), "Toward a Contingency Theory of Business Strategy," in *Strategische Unternehmungsführung: Stand Und Entwicklungstendenzen*, Dietger Hahn and Bernard Taylor, eds. Heidelberg: Physica-Verlag.

Homburg, Christian, Martin Artz, and Jan Wieseke (2012), "Marketing Performance Measurement Systems: Does Comprehensiveness Really Improve Performance?," *Journal of Marketing*, 76 (3), 56–77.

Hull, Jay G., Judith C. Tedlie, and Daniel A. Lehn (1995), "Modeling the Relation of Personality Variables to Symptom Complaints: The Unique Role of Negative Affectivity," in *Structural Equation Modeling: Concepts, Issues, and Applications.*, Rick H. Hoyle, ed., Thousand Oaks, CA: SAGE.

Hult, G. Tomas M., Robert F. Hurley, and Gary A. Knight (2004), "Innovativeness: Its Antecedents and Impact on Business Performance," *Industrial Marketing Management*, 33 (5), 429–38.

Hult, G. Tomas M. and David J. Ketchen (2001), "Does Market Orientation Matter?: A Test of the Relationship between Positional Advantage and Performance," *Strategic Management Journal*, 22 (9), 899–906.

Hunt, Shelby D. and C. Jay Lambe (2000), "Marketing's Contribution to Business Strategy: Market Orientation, Relationship Marketing and Resource-Advantage Theory," *International Journal of Management Reviews*, 2 (1), 17–43.

Hunter, John E. and David W. Gerbing (1982), "Unidimensional Measurement, Second-Order Factor Analysis, and Causal Models," *Research in organizational behavior*, 4, 267–320.

Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *Journal of Marketing*, 57 (3), 53–70.

Jaworski, Bernard, Ajay K. Kohli, and Arvind Sahay (2000), "Market-Driven Versus Driving Markets," *Journal of the Academy of Marketing Science*, 28 (1), 45–54.

Jiang, Ruihua Joy, Qingjiu Tom Tao, and Michael D. Santoro (2010), "Alliance Portfolio Diversity and Firm Performance," *Strategic Management Journal*, 31 (10), 1136–44.

Johannisson, Bengt (2000), "Networking and Entrepreneurial Growth," in *The Blackwell Handbook of Entrepreneurship*, Donald L. Sexton and Hans Landström, eds. London: Blackwell.

Johannisson, Bengt, Ola Alexanderson, Krzysztof Nowicki, and Knut Senneseth (1994), "Beyond Anarchy and Organization: Entrepreneurs in Contextual Networks," *Entrepreneurship & Regional Development*, 6 (4), 329–56.

Jones, Rosalind and Jennifer Rowley (2011), "Entrepreneurial Marketing in Small Businesses: A Conceptual Exploration," *International Small Business Journal*, 29 (1), 25–36.

Jones, Rosalind, Mari Suoranta, and Jennifer Rowley (2013), "Entrepreneurial Marketing: A Comparative Study," *Service Industries Journal*, 33 (7/8), 705–19.

Jöreskog, Karl Gustav and Dag Sörbom (1989), *LISREL 7: A Guide to the Program and Applications*. Chicago: SPSS.

Kasouf, Chickery J., Jenny Darroch, Claes M. Hultman, and Miles P. Morgan (2008), "Service Dominant Logic," *Journal of Research in Marketing and Entrepreneurship*, 10 (1), 57–69.

Keh, Hean Tat, Thi Tuyet Mai Nguyen, and Hwei Ping Ng (2007), "The Effects of Entrepreneurial Orientation and Marketing Information on the Performance of SMEs," *Journal of Business Venturing*, 22 (4), 592–611.

Kilenthong, Pitsamorn, Claes M. Hultman, and Gerald E. Hills (2016), "Entrepreneurial Marketing Behaviours: Impact of Firm Age, Firm Size and Firm's Founder," *Journal of Research in Marketing and Entrepreneurship*, 18 (1), 127–45.

Kirca, Ahmet H., Satish Jayachandran, and William O. Bearden (2005), "Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance," *Journal of Marketing*, 69 (2), 24–41.

Kocak, Akin and Temi Abimbola (2009), "The Effects of Entrepreneurial Marketing on Born Global Performance," *International Marketing Review*, 26 (4/5), 439–52.

Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (2), 1–18.

Kotler, Philip (2003), *Marketing Management*, 3rd ed. Upper Saddle River, NJ: Prentice Hall.

Kraus, Sascha, Rainer Harms, and Matthias Fink (2010), "Entrepreneurial Marketing: Moving Beyond Marketing in New Ventures," *International Journal of Entrepreneurship and Innovation Management*, 11 (1), 19–34.

Kumar, Kamalesh, Ram Subramanian, and Charles Yauger (1998), "Examining the Market Orientation-Performance Relationship: A Context-Specific Study," *Journal of Management*, 24 (2), 201–33.

Kumar, Nirmalya, Louis W. Stern, and James C. Anderson (1993), "Conducting Interorganizational Research Using Key Informants," *Academy of Management Journal*, 36 (6), 1633–51.

Lam, Wing and Michael J. Harker (2013), "Marketing and Entrepreneurship: An Integrated View from the Entrepreneur's Perspective," *International Small Business Journal*, 33 (3), 321–48.

Larson, Andrea and Jennifer A. Starr (1993), "A Network Model of Organization Formation," *Entrepreneurship Theory and Practice*, 17 (2), 5–15.

Latour, Bruno (2005), *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

Lawrence, Paul R. and Jay W. Lorsch (1967), "Differentiation and Integration in Complex Organizations," *Administrative Science Quarterly*, 12 (1), 1–47.

Lee, Sang M., David L. Olson, and Silvana Trimi (2012), "Co-Innovation: Convergenomics, Collaboration, and Co-Creation for Organizational Values," *Management Decision*, 50 (5), 817–31.

Li, Yuan, Yongbin Zhao, Justin Tan, and Yi Liu (2008), "Moderating Effects of Entrepreneurial Orientation on Market Orientation-Performance Linkage: Evidence from Chinese Small Firms*," *Journal of Small Business Management*, 46 (1), 113–33.

Light, Ivan Hubert and Steven J. Gold (2000), *Ethnic Economies*. San Diego: Academic Press.

Lin, Feng-Jyh and Yi-Hsin Lin (2016), "The Effect of Network Relationship on the Performance of SMEs," *Journal of Business Research*, 69 (5), 1780–84.

Lisboa, Ana, Dionysis Skarmeas, and Charalampos Saridakis (2016), "Entrepreneurial Orientation Pathways to Performance: A Fuzzy-Set Analysis," *Journal of Business Research*, 69 (4), 1319–24.

Lumpkin, George T. and Gregory G. Dess (1996), "Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance," *Academy of Management Review*, 21 (1), 135–72.

Lumpkin, George T. and Gregory G. Dess (2001), "Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance: The Moderating Role of Environment and Industry Life Cycle," *Journal of Business Venturing*, 16 (5), 429–51.

Lusch, Robert F. (2011), "Reframing Supply Chain Management: A Service-Dominant Logic Perspective," *Journal of Supply Chain Management*, 47 (1), 14–18.

Lusch, Robert F. and Stephen L. Vargo (2014), *Service-Dominant Logic: Premises, Perspectives, Possibilities*. Cambridge: Cambridge University Press.

Lusch, Robert F., Stephen L. Vargo, and Matthew O'Brien (2007), "Competing through Service: Insights from Service-Dominant Logic," *Journal of Retailing*, 83 (1), 5–18.

Ma, Rong, Yen-Chih Huang, and Oded Shenkar (2011), "Social Networks and Opportunity Recognition: A Cultural Comparison between Taiwan and the United States," *Strategic Management Journal*, 32 (11), 1183–205.

Maritz, Alex, Howard Frederick, and Michael Valos (2010), "A Discursive Approach to Entrepreneurial Marketing: Integrating Academic and Practice Theory," *Small Enterprise Research*, 17 (1), 74–86.

Martin, Silvia L. and Rajshekhar G. Javalgi (2016), "Entrepreneurial Orientation, Marketing Capabilities and Performance: The Moderating Role of Competitive Intensity on Latin American International New Ventures," *Journal of Business Research*, 69 (6), 2040–51.

Matsuno, Ken and Florian Kohlbacher (2019), "Proactive Marketing Response to Population Aging: The Roles of Capabilities and Commitment of Firms," *Journal of Business Research*, forthcoming, DOI:10.1016/j.jbusres.2019.01.042.

Matsuno, Ken, John T. Mentzer, and Ayşegül Özsomer (2002), "The Effects of Entrepreneurial Proclivity and Market Orientation on Business Performance," *Journal of Marketing*, 66 (3), 18–32.

McGrath, Helen and Thomas O'Toole (2013), "Enablers and Inhibitors of the Development of Network Capability in Entrepreneurial Firms: A Study of the Irish Micro-Brewing Network," *Industrial Marketing Management*, 42 (7), 1141–53.

Merz, Michael A., Yi He, and Stephen L. Vargo (2009), "The Evolving Brand Logic: A Service-Dominant Logic Perspective," *Journal of the Academy of Marketing Science*, 37 (3), 328–44.

Miles, Morgan, Audrey Gilmore, Paul Harrigan, Gemma Lewis, and Zubin Sethna (2015), "Exploring Entrepreneurial Marketing," *Journal of Strategic Marketing*, 23 (2), 94–111.

Miles, Morgan P. and Danny R. Arnold (1991), "The Relationship between Marketing Orientation and Entrepreneurial Orientation," *Entrepreneurship Theory and Practice*, 15 (4), 49–66.

Miles, Morgan P. and Jenny Darroch (2006), "Large Firms, Entrepreneurial Marketing Processes, and the Cycle of Competitive Advantage," *European Journal of Marketing*, 40 (5/6), 485–501.

Miles, Morgan P., Gemma K. Lewis, Adrienne Hall-Phillips, Sussie C. Morrish, Audrey Gilmore, and Chickery J. Kasouf (2016), "The Influence of Entrepreneurial Marketing Processes and Entrepreneurial Self-Efficacy on Community Vulnerability, Risk, and Resilience," *Journal of Strategic Marketing*, 24 (1), 34–46.

Miller, Danny (1983), "The Correlates of Entrepreneurship in Three Types of Firms," *Management Science*, 29 (7), 770–91.

Miller, Danny and Peter H. Friesen (1978), "Archetypes of Strategy Formulation," *Management Science*, 24 (9), 921–33.

Morgan, Neil A., Douglas W. Vorhies, and Charlotte H. Mason (2009), "Market Orientation, Marketing Capabilities, and Firm Performance," *Strategic Management Journal*, 30 (8), 909–20.

Morris, Michael H., Minet Schindehutte, and Raymond W. LaForge (2002), "Entrepreneurial Marketing: A Construct for Integrating Emerging Entrepreneurship and Marketing Perspectives," *Journal of Marketing Theory and Practice*, 10 (4), 1–19.

Morrish, Sussie C. (2011), "Entrepreneurial Marketing: A Strategy for the Twenty-First Century?," *Journal of Research in Marketing and Entrepreneurship*, 13 (2), 110–19.

Morrish, Sussie C. and Rosalind Jones (2019), "Post-Disaster Business Recovery: An Entrepreneurial Marketing Perspective," *Journal of Business Research*, forthcoming, DOI:10.1016/j.jbusres.2019.03.041.

Morrish, Sussie C., Morgan P. Miles, and Jonathan H. Deacon (2010), "Entrepreneurial Marketing: Acknowledging the Entrepreneur and Customer-Centric Interrelationship," *Journal of Strategic Marketing*, 18 (4), 303–16.

Mort, Gillian Sullivan, Jay Weerawardena, and Peter Liesch (2012), "Advancing Entrepreneurial Marketing," *European Journal of Marketing*, 46 (3/4), 542–61.

Mu, Jifeng and C. Anthony Di Benedetto (2011), "Strategic Orientations and New Product Commercialization: Mediator, Moderator, and Interplay," *R&D Management*, 41 (4), 337–59.

Mu, Jifeng, Gang Peng, and Edwin Love (2008), "Interfirm Networks, Social Capital, and Knowledge Flow," *Journal of Knowledge Management*, 12 (4), 86–100.

Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing*, 54 (4), 20–35.

Narver, John C., Stanley F. Slater, and Douglas L. MacLachlan (2004), "Responsive and Proactive Market Orientation and New-Product Success*," *Journal of Product Innovation Management*, 21 (5), 334–47.

Núñez-Pomar, Juan, Vicente Prado-Gascó, Vicente Añó Sanz, Josep Crespo Hervás, and Ferran Calabuig Moreno (2016), "Does Size Matter? Entrepreneurial Orientation and Performance in Spanish Sports Firms," *Journal of Business Research*, 69 (11), 5336–41.

Nunnally, Jum C. (1978), *Psychometric Theory*, 2nd ed. New York: McGraw-Hill.

Nunnally, Jum C. and Bernstein, Ira H. (1994), "The assessment of reliability." *Psychometric Theory*, 3, 248-292.

O'Cass, Aron and Sussie Morrish (2016), "Anatomy of Entrepreneurial Marketing," *Journal of Strategic Marketing*, 24 (1), 2–4.

O'Cass, Aron and Liem Viet Ngo (2011), "Winning through Innovation and Marketing: Lessons from Australia and Vietnam," *Industrial Marketing Management*, 40 (8), 1319–29.

Pane-Haden, Stephanie S., Courtney R. Kernek, and Leslie A. Toombs (2016), "The Entrepreneurial Marketing of Trumpet Records," *Journal of Research in Marketing and Entrepreneurship*, 18 (1), 109–26.

Parida, Vinit and Daniel Örtqvist (2015), "Interactive Effects of Network Capability, Ict Capability, and Financial Slack on Technology-Based Small Firm Innovation Performance," *Journal of Small Business Management*, 53, 278–98.

Peterson, Mark (2018), "Modeling Country Entrepreneurial Activity to Inform Entrepreneurial-Marketing Research," *Journal of Business Research*, forthcoming, DOI:10.1016/j.jbusres.2018.11.042.

Pitt, Leyland, Albert Caruana, and R. Berthon Pierre (1996), "Market Orientation and Business Performance: Some European Evidence," *International Marketing Review*, 13 (1), 5–18.

Podsakoff, Philip M. and Dennis W. Organ (1986), "Self-Reports in Organizational Research: Problems and Prospects," *Journal of Management*, 12 (4), 531–44.

Prahalad, Coimbatore K. and Ramaswamy Venkatram (2000), "Co-Opting Customer Competence," *Harvard business Review*, 78 (1), 79–90.

Rauch, Andreas, Nina Rosenbusch, Jens Unger, and Michael Frese (2016), "The Effectiveness of Cohesive and Diversified Networks: A Meta-Analysis," *Journal of Business Research*, 69 (2), 554–68.

Rauch, Andreas, Johan Wiklund, G. T. Lumpkin, and Michael Frese (2009), "Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future," *Entrepreneurship Theory and Practice*, 33 (3), 761–87.

Read, Stuart, Nicholas Dew, Saras D. Sarasvathy, Michael Song, and Robert Wiltbank (2009), "Marketing under Uncertainty: The Logic of an Effectual Approach," *Journal of Marketing*, 73 (3), 1–18.

Read, Stuart, Michael Song, and Willem Smit (2009), "A Meta-Analytic Review of Effectuation and Venture Performance," *Journal of Business Venturing*, 24 (6), 573–87.

Reibstein, David J., George Day, and Jerry Wind (2009), "Guest Editorial: Is Marketing Academia Losing Its Way?," *Journal of Marketing*, 73 (4), 1–3.

Renton, Michelle and James E. Richard (2019), "Entrepreneurship in Marketing: Socializing Partners for Brand Governance in Em Firms," *Journal of Business Research*, forthcoming, DOI:10.1016/j.jbusres.2019.03.012.

Rowley, Tim, Dean Behrens, and David Krackhardt (2000), "Redundant Governance Structures: An Analysis of Structural and Relational Embeddedness in the Steel and Semiconductor Industries," *Strategic Management Journal*, 21 (3), 369–86.

Sadiku-Dushi, Nora, Léo-Paul Dana, and Veland Ramadani (2019), "Entrepreneurial Marketing Dimensions and SMEs Performance," *Journal of Business Research*, 100, 86–99.

Sarasvathy, Saras D. (2001), "Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency," *Academy of Management Review*, 26 (2), 243–63.

Schindehutte, Minet, Michael H. Morris, and Akin Kocak (2008), "Understanding Market-Driving Behavior: The Role of Entrepreneurship," *Journal of Small Business Management*, 46 (1), 4–26.

Seidler, John (1974), "On Using Informants: A Technique for Collecting Quantitative Data and Controlling Measurement Error in Organization Analysis," *American Sociological Review*, 39 (6), 816–31.

Sethna, Zubin, Rosalind Jones, and Paul Harrigan (2013), *Entrepreneurial Marketing: Global Perspectives*, 1st ed. Bingley, UK: Emerald.

Shan, Peng, Michael Song, and Xiaofeng Ju (2016), "Entrepreneurial Orientation and Performance: Is Innovation Speed a Missing Link?," *Journal of Business Research*, 69 (2), 683–90.

Sheth, Jagdish N. and Rajendra Sisodia (2002), *The Rule of Three: Surviving and Thriving in Competitive Markets*. New York: Free Press.

Sheth, Jagdish N. and Rajendra Sisodia Eds. (2006), *Does Marketing Need Reform? Fresh Perspectives on the Future*. Chicago: ME Sharpe.

Sheth, Jagdish N. and Rajendra Sisodia (1999), "Revisiting Marketing's Lawlike Generalizations," *Journal of the Academy of Marketing Science*, 27 (1), 71.

Sheth, Jagdish N. and Can Uslay (2007), "Implications of the Revised Definition of Marketing: From Exchange to Value Creation," *Journal of Public Policy & Marketing*, 26 (2), 302–07.

Silverman, Brian S. and A. C. Baum Joel (2002), "Alliance-Based Competitive Dynamics," *Academy of Management Journal*, 45 (4), 791–806.

Singh, Robert P., Gerald E. Hills, G. T. Lumpkin, and Ralph C. Hybels (1999), "The Entrepreneurial Opportunity Recognition Process: Examining the Role of Self-Perceived Alertness and Social Networks," *Academy of Management Proceedings*, 1999 (1), G1–G6.

Slater, Stanley F. and John C. Narver (1994), "Does Competitive Environment Moderate the Market Orientation-Performance Relationship?," *Journal of Marketing*, 58 (1), 46–55.

Slater, Stanley F. and John C. Narver (1995), "Market Orientation and the Learning Organization," *Journal of Marketing*, 59 (3), 63–74.

Slotte–Kock, Susanna and Nicole Coviello (2010), "Entrepreneurship Research on Network Processes: A Review and Ways Forward," *Entrepreneurship Theory and Practice*, 34 (1), 31–57.

Solé, Mar (2013), "Entrepreneurial Marketing: Conceptual Exploration and Link to Performance," *Journal of Research in Marketing and Entrepreneurship*, 15 (1), 23–38.

Stearns, Timothy M. (1996), "Strategic Alliances and Performance of High Technology New Firms," *Frontiers of Entrepreneurship Research*, 7 (2), 268–81.

Stevenson, Howard H. and David E. Gumpert (1985), "The Heart of Entrepreneurship," *Harvard Business Review*, 63 (2), 85–94.

Stevenson, Howard H. and J. Carlos Jarillo (2007), "A Paradigm of Entrepreneurship: Entrepreneurial Management*," in *Entrepreneurship: Concepts, Theory and Perspective*, Álvaro Cuervo and Domingo Ribeiro and Salvador Roig, eds. Berlin: Springer.

Stokes, David (2000), "Putting Entrepreneurship into Marketing: The Processes of Entrepreneurial Marketing," *Journal of Research in Marketing and Entrepreneurship*, 2 (1), 1–16.

Stuart, Toby E., Ha Hoang, and Ralph C. Hybels (1999), "Interorganizational Endorsements and the Performance of Entrepreneurial Ventures," *Administrative Science Quarterly*, 44 (2), 315–49.

Tajeddini, Kayhan, Myfanwy Trueman, and Gretchen Larsen (2006), "Examining the Effect of Market Orientation on Innovativeness," *Journal of Marketing Management*, 22 (5/6), 529–51.

Thompson, Bruce (2004), *Exploratory and Confirmatory Factor Analysis: Understanding Concepts and Applications*, 1st ed. Washington, DC: American Psychological Association.

Thoumrungroje, Amonrat and Olimpia Racela (2013), "The Contingent Role of Customer Orientation and Entrepreneurial Orientation on Product Innovation and Performance," *Journal of Strategic Marketing*, 21 (2), 140–59.

Tyebjee, Tyzoon T., Albert V. Bruno, and Shelby H. McIntyre (1983), "Growing Ventures Can Anticipate Marketing Stages," *Harvard Business Review*, 61 (1), 83–102.

Tzokas, Nikolaos, Sara Carter, and Panagiotis Kyriazopoulos (2001), "Marketing and Entrepreneurial Orientation in Small Firms," *Enterprise and Innovation Management Studies*, 2 (1), 19–33.

Ulwick, Anthony W. (2002), "Turn Customer Input into Innovation," *Harvard Business Review*, 80 (1), 91–97.

Uslay, Can, Z. Ayca Altintig, and Robert D. Winsor (2010), "An Empirical Examination of the 'Rule of Three': Strategy Implications for Top Management, Marketers, and Investors," *Journal of Marketing*, 74 (2), 20–39.

Uslay, Can, Ekaterina Karniouchina, Ayca Altintig, and Martin Reeves (2017), “Do Businesses Get Stuck in the Middle? The Peril of Intermediate Market Share,” September 28, 2017, accessed September 24, 2019.

Uslay, Can and Emine Erdogan (2014), "The Mediating Role of Mindful Entrepreneurial Marketing (MEM) between Production and Consumption," *Journal of Research in Marketing and Entrepreneurship*, 16 (1), 47–62.

Uslay, Can and Jagdish N. Sheth (2008), "Exploring the Relationship between Market Orientation, Entrepreneurial Orientation, and Learning Orientation," paper presented at Global Research Symposium on Marketing & Entrepreneurship, Stockholm, Sweden.

Uslay, Can and Richard D. Teach (2008), "Marketing/Entrepreneurship Interface Research Priorities (2010-2012)," *Journal of Research in Marketing and Entrepreneurship*, 10 (1), 70–75.

Uzzi, Brian (1996), "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect," *American Sociological Review*, 61 (4), 674–98.

Uzzi, Brian (1997), "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness," *Administrative Science Quarterly*, 42 (1), 35–67.

Vargo, Stephen L. and Robert F. Lusch (2004), "Evolving to a New Dominant Logic for Marketing," *Journal of Marketing*, 68 (1), 1–17.

Vargo, Stephen L. and Robert F. Lusch (2008), "Service-Dominant Logic: Continuing the Evolution," *Journal of the Academy of Marketing Science*, 36 (1), 1–10.

Vargo, Stephen L. and Robert F. Lusch (2011), "It's All B2B…and Beyond: Toward a Systems Perspective of the Market," *Industrial Marketing Management*, 40 (2), 181–87.

Vasilchenko, Elena and Sussie Morrish (2011), "The Role of Entrepreneurial Networks in the Exploration and Exploitation of Internationalization Opportunities by Information and Communication Technology Firms," *Journal of International Marketing*, 19 (4), 88–105.

Venkatraman, Nirmala (1989), "The Concept of Fit in Strategy Research: Toward Verbal and Statistical Correspondence," *Academy of Management Review*, 14 (3), 423–44.

Walter, Achim, Michael Auer, and Thomas Ritter (2006), "The Impact of Network Capabilities and Entrepreneurial Orientation on University Spin-Off Performance," *Journal of Business Venturing*, 21 (4), 541–67.

Webster, Frederick E. (1981), "Top Management's Concerns About Marketing: Issues for the 1980's," *Journal of Marketing*, 45 (3), 9–16.

Whalen, Peter S. and Melissa A. Akaka (2016), "A Dynamic Market Conceptualization for Entrepreneurial Marketing: The Co-Creation of Opportunities," *Journal of Strategic Marketing*, 24 (1), 61–75.

Whalen, Peter, Can Uslay, Vincent J. Pascal, Glenn Omura, Andrew McAuley, Chickery J. Kasouf, Rosalind Jones, Claes M. Hultman, Gerald E. Hills, David J. Hansen, Audrey Gilmore, Joe Giglierano, Fabian Eggers, and Jonathan Deacon (2016), "Anatomy of Competitive Advantage: Towards a Contingency Theory of Entrepreneurial Marketing," *Journal of Strategic Marketing*, 24 (1), 5–19.

Wu, Fang, Sengun Yeniyurt, Daekwan Kim, and S. Tamer Cavusgil (2006), "The Impact of Information Technology on Supply Chain Capabilities and Firm Performance: A Resource-Based View," *Industrial Marketing Management*, 35 (4), 493–504.

Xie, Xuemei, Liangxiu Fang, and Saixing Zeng (2016), "Collaborative Innovation Network and Knowledge Transfer Performance: A fsQCA Approach," *Journal of Business Research*, 69 (11), 5210–15.

Yang, Man and Peter Gabrielsson (2017), "Entrepreneurial Marketing of International High-Tech Business-to-Business New Ventures: A Decision-Making Process Perspective," *Industrial Marketing Management*, 64, 147–60.

Yeniyurt, Sengun, John W. Henke, and Goksel Yalcinkaya (2014), "A Longitudinal Analysis of Supplier Involvement in Buyers' New Product Development: Working Relations, Inter-Dependence, Co-Innovation, and Performance Outcomes," *Journal of the Academy of Marketing Science*, 42 (3), 291–308.

Yoo, Boonghee (2002), "Cross-Group Comparisons: A Cautionary Note," *Psychology & Marketing*, 19 (4), 357–68.

Zeithaml, Carl P. and Valarie A. Zeithaml (1984), "Environmental Management: Revising the Marketing Perspective," *Journal of Marketing*, 48 (2), 46–53.

Zhao, Liming and John D. Aram (1995), "Networking and Growth of Young Technology-Intensive Ventures in China," *Journal of Business Venturing*, 10 (5), 349–70.

Zou, Shaoming and S. Tamer Cavusgil (2002), "The GMS: A Broad Conceptualization of Global Marketing Strategy and Its Effect on Firm Performance," *Journal of Marketing*, 66 (4), 40–56.

APPENDICES

Appendix A: The Details of the Questionnaire Items

Table 12 Final Entrepreneurial Marketing (EM) Scale (Appendix A) [1]

Dimension	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.

[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".

	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.

Table 13 The Study's Other Questionnaire Items (Appendix A)

Construct/Source	Dimension/Source	Items
Market Orientation (Narver and Slater 1990)[3]	**Customer orientation**	1. We constantly monitor our level of commitment and orientation to serving customers' needs.
		2. Our business objectives are driven primarily by customer satisfaction.
		3, Our strategy for competitive advantage is based on our understanding of customer needs.
		4. Our business strategies are driven by our beliefs about how we can create greater value for customers.
		5. We measure customer satisfaction systematically and frequently.
		6. We give close attention to after-sales service.
	Competitor orientation	7. We rapidly respond to competitive actions that threaten us.
		8. Our salespeople regularly share information within our organization concerning competitors' strategies.
		9. Our top management regularly discusses competitors' strengths and strategies.

[3] Anchored to a seven-point Likert scale with 1 = "strongly disagree" and 7 = "strongly agree".

		10. We target customers where we have an opportunity for competitive advantage.
	Inter-functional coordination	11. 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. 12. We share resources with other business units in our firm. 13. Our top managers from every function regularly visit our current and prospective customers. 14. We freely communicate information about our successful and unsuccessful customer experiences across all business functions. 15. Our managers understand how everyone in our business can contribute to creating customer value.
Entrepreneurial Orientation (Covin and Slevin 1989) [4]	**Innovativeness**	1. 'At my firm, there is a strong emphasis on the marketing of true and tried products or services' ***VS.*** 'At my firm, there exists a very strong emphasis on R&D, technological leadership and innovations'. 2. How many new products or services has your firm marketed in the past five years? 'No new products or services in the past five years' ***VS.*** So many new products or services in the past five years'. 3. 'Changes in products/services have been mostly of a minor nature' ***VS.*** 'Changes in products/services have usually been dramatic'.
	Proactiveness	4. 'In dealing with its competitors, my firm typically responds to actions that competitors' initiate' ***VS.*** 'Typically initiates actions that competitors then respond to'. 5. 'In dealing with its competitors, my firm is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc.' ***VS.*** 'Is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.'.

[4] Anchored to seven-point paired statements (1-7).

		6. 'In dealing with its competitors, my firm typically seeks to avoid competitive clashes, preferring a "live-and-let-live" posture' ***VS.*** 'Typically adopts a very competitive, "undo the competitors" posture'.
	Risk-taking	7. 'My firm 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)'. 8. 'My firm believes that owing to the nature of the environment, it is best to explore it gradually via timid, incremental behavior' ***VS.*** 'Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives'. 9. 'When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, "wait and see" posture in order to minimize the probability of making costly decisions' ***VS.*** 'Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities'.
Network Structure[5] In an analogy to (Ma, Huang, and Shenkar 2011)	**Strength**	Compared to our competitors, we have stronger relationships with your partners (e.g., customers, suppliers, distributors, etc.).
	Size	Compared to our competitors, we are connected to a larger number of partners (e.g., customers, suppliers, distributors, etc.).
	Diversity	Compared to our competitors, we have access to more diverse types of partners (e.g., customers, suppliers, distributors, etc.).
Environmental Variable**: Competitive intensity** (Homburg, Artz, and Wieseke 2012; Kohli and Jaworski 1993).[5]		1. Competition in our industry is cutthroat. 2. There are many competitive rivalries in our industry. 3. Our competitors are relatively strong.

[5] Anchored to a seven-point Likert scale with 1 = "strongly disagree" and 7 = "strongly agree".

[5] Anchored to a seven-point Likert scale with 1 = "strongly disagree" and 7 = "strongly agree".

		4. Intensive competitor-related activities are a hallmark in our industry.
Environmental Variable[6]: **Market turbulence** (Baker and Sinkula 1999; Narver and Slater 1990)		The extent to which customer preferences in your principal market has changed over the past 3 years.
Environmental Variable: **Market growth** (Baker and Sinkula 1999; Narver and Slater 1990)		The average annual growth rate over the past 3 years of total sales in your principal served market segment.
Environmental Variable: **Technological turbulence** (Baker and Sinkula 1999; Narver and Slater 1990)		The extent to which production technology in your principal market has changed over the past 3 years.
Environmental Variable: **Supplier power** (Baker and Sinkula 1999; Narver and Slater 1990)		The extent to which your unit is able to negotiate lower prices from its suppliers.
Firm Performance	**Overall** (Kohli and Jaworski 1993) [7]	Overall performance of your business unit last year. Overall performance relative to your major competitors last year.
	Market effectiveness (Morgan et al. 2009) [8]	Market share growth relative to competition. Growth in sales revenue.
	Profitability (Morgan et al. 2009)	Business unit profitability. Reaching financial goal.

[6] Market turbulence, market growth, technological turbulence, and supplier power are all anchored on a seven-point scale (1 = low and 7 = high).
[7] Anchored on a seven-point scale (1 = poor 7 = excellent).
[8] Marker effectiveness and profitability are anchored on a seven-point scale (1= much worse than competitors 7=much better than competitors).

Firm Size	**Number of employees**	1= <50; 2= 50–99; 3=100-249; 4= 250–499; 5=500–999; 6= 1000–2499; 7=2,500–9,999; 8= >10,000
	Annual Sales	1= less than $1 million; 2= $1 -$10 million; 3= $11-$49 million; 4= $50-$249 million; 5= $250-$499 million; 6= $500-$999 million; 7= more than $1 billion
Control Variables	**Market Type**	B2B *vs.*B2C
	Firm age	1= Less than 5 years; 2= 5–10 years; 3= 11–20 years; 4= 21-30 years; 5 = More than 30 years

Appendix B: Standardized Coefficients and R-Squares for First-Order Factors

Table 14 Standardized Coefficients and R-Squares for First-Order Factors (Appendix B)

Structural Paths			Standardized Regression Weights (β)	Variable	R-Square
EO	--->	PR	0.967	PR	0.934
EO	--->	IN	0.882	IN	0.777
EO	--->	RT	0.856	RT	0.732
IN	--->	EOIN1	0.41	EOIN1	0.168
IN	--->	EOIN2	0.737	EOIN2	0.543
IN	--->	EOIN3	0.625	EOIN3	0.39
PR	--->	EOPR1	0.559	EOPR1	0.312
PR	--->	EOPR2	0.691	EOPR2	0.478
PR	--->	EOPR3	0.613	EOPR3	0.376
RT	--->	EORT1	0.652	EORT1	0.425
RT	--->	EORT2	0.611	EORT2	0.373
RT	--->	EORT3	0.699	EORT3	0.488
MO	--->	IFC	0.98	IFC	0.96
MO	--->	CO	0.883	CO	0.78
MO	--->	COM	0.936	COM	0.876
CO	--->	MOCO1	0.79	MOCO1	0.625
CO	--->	MOCO2	0.793	MOCO2	0.629
CO	--->	MOCO3	0.777	MOCO3	0.603
CO	--->	MOCO4	0.77	MOCO4	0.593
CO	--->	MOCO5	0.796	MOCO5	0.634
CO	--->	MOCO6	0.7	MOCO6	0.49
COM	--->	MOCOM1	0.744	MOCOM1	0.554
COM	--->	MOCOM2	0.768	MOCOM2	0.589
COM	--->	MOCOM3	0.789	MOCOM3	0.622
COM	--->	MOCOM4	0.679	MOCOM4	0.461
IFC	--->	MOIFC1	0.748	MOIFC1	0.559
IFC	--->	MOIFC2	0.656	MOIFC2	0.43
IFC	--->	MOIFC3	0.698	MOIFC3	0.487
IFC	--->	MOIFC4	0.684	MOIFC4	0.468
IFC	--->	MOIFC5	0.722	MOIFC5	0.521
EM	--->	IM	0.858	IM	0.736
EM	--->	AR	0.888	AR	0.789
EM	--->	PM	0.907	PM	0.822
EM	--->	RL	0.93	RL	0.865
EM	--->	NA	0.939	NA	0.881

EM	--->	OF	0.944	OF	0.891
AR	--->	EMAR1	0.664	EMAR1	0.441
AR	--->	EMAR2	0.724	EMAR2	0.524
AR	--->	EMAR3	0.646	EMAR3	0.417
IM	--->	EMIM1	0.782	EMIM1	0.612
IM	--->	EMIM2	0.837	EMIM2	0.7
IM	--->	EMIM3	0.768	EMIM3	0.59
NA	--->	EMNA1	0.736	EMNA1	0.542
NA	--->	EMNA2	0.746	EMNA2	0.557
NA	--->	EMNA3	0.757	EMNA3	0.572
NA	--->	EMNA4	0.791	EMNA4	0.626
OF	--->	EMOF1	0.816	EMOF1	0.666
OF	--->	EMOF2	0.814	EMOF2	0.663
OF	--->	EMOF3	0.778	EMOF3	0.606
OF	--->	EMOF4	0.829	EMOF4	0.688
PM	--->	EMPM1	0.805	EMPM1	0.649
PM	--->	EMPM2	0.777	EMPM2	0.604
PM	--->	EMPM3	0.715	EMPM3	0.512
RL	--->	EMRL1	0.72	EMRL1	0.519
RL	--->	EMRL2	0.808	EMRL2	0.653
RL	--->	EMRL3	0.781	EMRL3	0.61
Performance	--->	PERF1	0.824	PERF1	0.679
Performance	--->	PERF2	0.862	PERF2	0.742
Performance	--->	PERF3	0.79	PERF3	0.624
Performance	--->	PERF4	0.821	PERF4	0.675
Performance	--->	PERF5	0.822	PERF5	0.676
Performance	--->	PERF6	0.756	PERF6	0.572

Appendix C: Standardized Coefficients and R-Squares for Second-Order Factors

Table 15 Standardized Coefficients and R-Squares for Second-Order Factors (Appendix C)

Structural Paths			Standardized Regression Weights (β)	Variable	R-Square
EO	--->	EM	.058	EM	0.893
MO	--->	EM	.895	Performance	0.674
Firm_Age	--->	EM	-.107		
B2B_B2C	--->	EM	.052		
MO	--->	Performance	.258		
EO	--->	Performance	.455		
EM	--->	Performance	.18		
Firm_Age	--->	Performance	.061		
B2B_B2C	--->	Performance	.035		

Appendix D: Descriptive Statistics

Table 16 The Sample Breakdown by Industry

Industry	Count	Percent
Health/Social Care	63	15.71%
Retail	49	12.22%
Arts, Entertainment, and Recreation	44	10.97%
Information and Technology	43	10.72%
Finance and Insurance	40	9.98%
Wholesale	29	7.23%
Manufacturing	26	6.48%
Other	27	6.73%
Professional Services	18	4.49%
Real Estate and Rental and Leasing	13	3.24%
Education	13	3.24%
Consumer-packaged Goods	9	2.24%
Construction and Transportation	9	2.24%
Hospitality	6	1.50%
Non-Profit	6	1.50%
Agriculture and Mining	4	1.00%
Legal/Law	2	.50%

As shown in Table 16, this study's sample includes a diverse set of industries. While the health/social care industry constitutes 15.7% of the sample, the retail industry is represented by 12.2% of the study participants. Moreover, around 11% of my respondents came from the arts, entertainment, and recreation industry. The information and technology industry represents 10.7% of the sample, whereas finance and insurance constitutes approximately 10% of my sample. While wholesale and manufacturing comprise 7.2% and 6.5%, respectively, of my sample, about 6.7% of my sample opted-in from other industries. Furthermore, the professional services, real estate, education, consumer packaged goods, construction and transportation, hospitality, non-profit, agriculture and mining, and law industries where all fairly represented in my sample, with representation ranging between .5% and 4.5%, as shown in Table 16.

Table 17 Sample Breakdown by Annual Revenue

Firm annual revenue	Count	Percent
Less than $1 million	80	20
$1 - $10 million	74	18.5
$11 - $49 million	36	9
$50 - $249 million	45	11.2
$250 - $499 million	33	8.2
$500-$999 million	52	13
More than $1 billion	81	20.2

My sample incorporates firms of different sizes. While 28.4% of the sample is considered to be small firms with less than 50 employees, about 36.4% of the sample is represented by medium-size firms with between 50 and 499 employees. However, large firms with 500 employees or more were also fairly represented in my study, constituting 35.2% of the sample. As shown in Table 17, annual revenues vary among the studied firms, ranging from less than a million to one billion dollars or more. For instance, while 20% of the sampled firms have less than one million dollars of revenue annually, about 20.2% of the sample generates more than one billion dollars in revenue annually. Moreover, while 55.4% of the sampled firms operate primarily in consumer markets (B2C), 44.6% of the sample have other businesses as their primary customers (B2B). However, participating organizations range in their market share in their served markets. While 13.2% of the sample owns less than 10% of the markets, about 6.2% have monopolistic positions in their markets. However, 45.7% of the sampled firms own between 5% to 50% of their served markets. Moreover, while 14.2% of the sample has been in business for less than 5 years, 18% of the sampled firms have been conducting business for more than 30 years. Additionally, about 33.4% of the sampled firms have been operating between 11 to 20 years in their primary markets.

I believe that the respondents are qualified to represent their firms.[9] While 71.8% of the respondents had spent between 1 to 10 years in the same firm when they received the survey, about 21.2% of the sampled individuals have been working with the same firm for more than ten years. All participants are responsible for marketing in their respective organizations, and they all have leadership positions in their organizations. While 41.1% have C-level (e.g., CEO, CFO, CMO, and president) positions at their firms, about 10% are vice presidents (VPs) in their respective organizations. Moreover, about 48.9% of the sampled individuals occupy director positions (e.g., marketing director, group director, and senior director) in their firms.

[9] Only those with "4" or higher in the qualification index were included in the results.

Appendix E: Additional Results of the Multigroup Path Analyses

Table 18 The Results of the Multigroup Path Analyses Based on the Unstandardized Estimates (Appendix E)

Moderator	**Moderation Effects on EM →Performance path**				Hypotheses testing
Market Turbulence (H5a)	High Market Turbulence	Low Market Turbulence	**Δ χ2**	**p-value**	*Supported*
	.671***	-.094	12.65	<.001	
Tech Turbulence (H5b)	High Tech Turbulence	Low Tech Turbulence	**Δ χ2**	**p-value**	Not supported[10]
	.002	.370*	3.322	.068	
Comp Int (H5c)	High Comp Int	Low Comp Int	**Δ χ2**	**p-value**	*Supported*
	.842***	.102	11.87	.001	
Suppl Power (H5d)	High Suppl Power	Low Suppl Power	**Δ χ2**	**p-value**	*Supported*
	.362*	-.198	8.158	.004	
Market Growth (H5e)	High Market Growth	Low Market Growth	**Δ χ2**	**p-value**	*Supported*
	-.049	.415*	4.352	.037	
Firm Size (H6)[11]	Medium sized firms	Small and large firms	**Δ χ2**	**p-value**	Not supported
	.656***	.029	10.354	.001	
Network Size (7a)	Large network size	Small network size	**Δ χ2**	**p-value**	Not supported
	.347	.132	0.891	.345	
Network Diver (7B)	High Network Diver	Low Network Diver	**Δ χ2**	**p-value**	Not supported
	-.015	.106	0.313	.579	
Network Strength (7c)	High strength networks	Low strength networks	**Δ χ2**	**p-value**	*Supported*
	-.232	.610***	14.53	<.001	

Unstandardized parameters estimates; * P < .05 ** P < .01 *** P < .001

[10] The chi-square difference between the fully constrained model and the freely estimated one was also not significant.

[11] Results are based on the chi-square difference between medium-sized firms vs. large and small firms combined.