THE IMPACT OF NETWORKING CHARACTERISTICS ON ENTREPRENEURIAL MARKETING: THE CASE OF TECHNOLOGY-BASED FIRMS IN ANKARA

A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF SOCIAL SCIENCES OF MIDDLE EAST TECHNICAL UNIVERSITY

BY

BAŞAK DURUKAN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE DEPARTMENT OF SCIENCE AND TECHNOLOGY POLICY STUDIES

NOVEMBER 2019

Approval of the Graduate School of Social Sciences	
	Prof. Dr. Yaşar Kondakçı
	Director
I certify that this thesis satisfies all the requirements as Master of Science.	s a thesis for the degree of
Prof.	Dr. Mehmet Teoman Pamukçu Head of Department
This is to certify that we have read this thesis and that adequate, in scope and quality, as a thesis for the degree	
Assoc. Prof	E. Dr. İbrahim Semih Akçomak Supervisor
Examining Committee Members	
Prof. Dr. Çetin Önder (Ankara Sosyal Bilimler Uni., E	BUS)
Assoc. Prof. Dr. İ. Semih Akçomak (METU, STPS)	
Assist. Prof. Dr. Arsev Umur Aydınoğlu (METU, STF	PS)

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.					
	Name, Last name: Başak Durukan				
	Signature :				

ABSTRACT

THE IMPACT OF NETWORKING CHARACTERISTICS ON ENTREPRENEURIAL MARKETING: THE CASE OF TECHNOLOGY-BASED FIRMS IN ANKARA

Durukan, Başak

M.Sc., Department of Science and Technology Policy Studies Supervisor: Assoc. Prof. Dr. İbrahim Semih Akçomak

November 2019, 103 pages

The main objective of this thesis is to investigate how network characteristics of Small and Medium Sized Enterprises (SMEs) affect their entrepreneurial marketing practices by using a quantitative research approach. The dimensions of network characteristics and entrepreneurial marketing are defined according to the literature, the scales are adapted, and data is collected using a questionnaire. One hundred and forty-five surveys have been conducted on SMEs located at Technology Development Zones (TDZs) in Ankara. The model has been tested through structural equation modeling. The findings reveal that network structure, activity and exchanges positively affects future, customer and value orientations of entrepreneurial marketing whilst risk management dimension of entrepreneurial marketing is affected only by network activity. In addition, the results imply that existence of foreign shareholders in the firm negatively affect risk management.

Keywords: Entrepreneurial marketing, Network characteristics, SMEs, Marketing innovation.

İLİŞKİ AĞI ÖZELLİKLERİNİN GİRİŞİMCİ PAZARLAMAYA ETKİSİ: ANKARA'DAKİ TEKNOLOJİ FİRMALARI ÖRNEĞİ

Durukan, Başak

Yüksek Lisans, Bilim ve Teknoloji Politikası Çalışmaları Bölümü Tez Yöneticisi: Doç. Dr. İbrahim Semih Akçomak

Kasım 2019, 103 sayfa

Bu tezin temel amacı, nicel araştırma yaklaşımı kullanarak Küçük ve Orta Büyüklükteki İşletmelerin (KOBİ) ağ oluşturma özelliklerinin girişimci pazarlama uygulamalarını nasıl etkilediğini araştırmaktır. İlişki ağı özelliklerinin ve girişimci pazarlamanın boyutları literatüre göre tanımlandıktan sonra, her ikisi için de ölçekler uyarlanmış ve anket yoluyla veri toplanmıştır. Ankara'daki TGB'lerde yer alan yüz kırk beş KOBİ'ye anket uygulanmıştır. Tezdeki model yapısal eşitlik modeli ile test edilmiştir. Bulgular, ağ yapısının, ağ etkinliğinin ve ağ etkileşimlerinin girişimci pazarlamanın gelecek, müşteri ve değer odaklılık boyutlarını olumlu yönde etkilediğini, girişimci pazarlamanın risk yönetimi boyutununsa sadece ağ faaliyetlerinden etkilendiğini ortaya koymaktadır. Ek olarak bulgular, yabancı hissedarların şirketteki varlığının risk yönetimini olumsuz yönde etkilediğini göstermektedir.

Anahtar Kelimeler: Girişimci pazarlama, ilişki ağı özellikleri, KOBİ'ler, Pazarlama yeniliği.

To My Mother

ACKNOWLEDGMENTS

I would first like to thank my supervisor Prof. Dr. İ. Semih Akçomak for his patience, guidance and encouragement.

I would also like to thank Prof. Dr. Çetin Önder for his so valuable support.

Also, I would like to express my special thanks to M. Uğurcan Güngör for his effort and moral support.

Moreover, I would like to thank all the participants of survey for the time and patience they spent answering.

Last but not least; I am grateful to my mother and brother because they are always there for me.

TABLE OF CONTENTS

PLAGIARI	SM		iii
ABSTRAC	Γ		iv
ÖZ			v
DEDICATI	ON		vi
ACKNOWI	LEDGMENTS		vii
TABLE OF	CONTENTS		viii
LIST OF TA	ABLES		xi
LIST OF FI	GURES		xii
LIST ABBF	REVIATIONS.		xiii
CHAPTER			
1. INTR	ODUCTION		1
2. LITE	RATURE REV	TEW	5
2.1	Why Do SME	Es Need Entrepreneurial Marketing?	5
2.2	What Is Entre	preneurial Marketing?	9
2.3	Exploring Ent	repreneurial Marketing Literature	11
2.4	Networking and Entrepreneurial Marketing		
2.5	Marketing In	novation and Entrepreneurial Marketing	23
2.6	What Do We	Learn from the Literature?	26
3. MET	HODOLOGY .		28
3.1	The Research	Strategy: Quantitative Research	28
3.2	Sampling and	Data Collection	29
	3.2.1 Sampl	ing Procedure	29
	3.2.2 Data (Collection	30
3.3	Measurement	of Variables	31
	3.3.1 Measu	ring Entrepreneurial Marketing	32
	3.3.1.1	Opportunity orientation	33
	3.3.1.2	2 Proactiveness	34
	3.3.1.3	Innovation orientation	34

		3.3.1.4	Customer orientation	35
		3.3.1.5	Risk management	35
		3.3.1.6	Resource orientation	36
		3.3.1.7	Value orientation	36
	3.3.2	Measuri	ng Networking Characteristics	37
		3.3.2.1	Propensity to network	38
		3.3.2.2	Network activity	39
		3.3.2.3	Network density	39
		3.3.2.4	Network intensity	39
		3.3.2.5	Content of network exchanges	40
	3.3.3	Control	Variables	41
		3.3.3.1	Firm age	41
		3.3.3.2	Firm size	42
		3.3.3.3	Exports	42
		3.3.3.4	Foreign investment	43
		3.3.3.5	Research and development	43
3.4	The R	esearch D	Design and Analyses	43
	3.4.1	Validity	and Reliability Analysis	44
	3.4.2	Formati	ve Scale of Networking Characteristics	45
4. RESU	JLTS	•••••		47
4.1	Sampl	e Charact	eristics	47
4.2	Validi	Validity and Reliability of EM Scale		47
4.3	Descriptive Statistics		52	
4.4	Struct	Structural Model		57
5. DISC	USSIO	N		61
5.1	Conce	ptual Imp	olications of the Findings	61
5.2	Praction	cal Implic	eations for SMEs and Entrepreneurs	63
5.3	Policy	Implicat	ions for Government	67
5.4	5.4 Limitations and Future Research			68
REFERENC	CES			70

APPENDICES

A. QUESTIONNAIRE FORM	78
B. APPROVAL OF METU HUMAN SUBJECTS ETHICS COMMITTEE	91
C. TURKISH SUMMARY/TÜRKÇE ÖZET	82
D TEZ İZİN FORMU/THESIS PERMISSION FORM	103

LIST OF TABLES

Table 1. The Number of SMEs and Respondents in the four TDZs	.30
Table 2. Entrepreneurial Marketing Dimensions in the Literature	.33
Table 3. Networking Characteristics Dimensions in the Literature	.38
Table 4. Comparison of Reflective and Formative Measures	.45
Table 5. Profile of the Respondent Firms	.48
Table 6. EFA on EM Scale (Initial 7-factor exploratory analysis with 46 items)	.50
Table 7. EFA with Proactiveness, Opportunity and Innovation Orientation Items	
(1-factor solution)	.51
Table 8. Cronbach Alphas of EM Dimensions	.51
Table 9. Measurement of the Variables in Structural Model	.54
Table 10. Descriptive Statistics of Variables	.55
Table 11. Correlation Matrix for the Variables	.56
Table 12. Goodness of Fit Statistics for Structural Model	.58
Table 13. Coefficient Estimates from the Structural Model	.59

LIST OF FIGURES

Figure 1. Proposed Model	. 41
Figure 2. Structural Model	. 57

LIST OF ABBREVIATIONS

EM Entrepreneurial Marketing

SMEs Small and Medium-sized Enterprises

SEM Structural Equation Modeling

AMA American Marketing Association

INVs International New Ventures

TPP Technological Product and Process

TDZs Technology Development Zones

CFA Confirmatory Factor Analysis

CRM Customer Relationship Management

SRM Supplier Relationship Management

KOSGEB Küçük ve Orta Ölçekli İşletmeleri Geliştirme ve Destekleme

İdaresi Başkanlığı

TÜBİTAK Türkiye Bilimsel ve Teknolojik Araştırma Kurum

CHAPTER 1

INTRODUCTION

Marketing is one of the core activities of firms. Today firms increasingly use marketing practices to maintain and improve their competitive advantage. Marketing is the way of creating customer value, communicating it, and finally gaining benefit in return. Therefore, it should be considered carefully and strategically by all firms. In recent years, new ways of marketing have emerged because traditional ones cannot meet the needs of contemporary business environment. The new era is mainly associated with being "innovative" and "entrepreneurial", so marketing practices are expected to fit the needs of this changing economic context (Bjerke and Hultman, 2002).

Entrepreneurial Marketing (EM) is one of the contemporary ways of using marketing practices. As its name implies, it advocates being entrepreneurial in marketing practices. Entrepreneurial orientation is generally associated with being flexible, proactive, and innovative (Lumpkin and Dess, 1996). Accordingly, some important dimensions of EM are defined as proactiveness, innovation-orientation, opportunity focus, and calculated risk taking (Ahmadi and O'Cass, 2016, Morris et al, 2002). Other essential dimensions of EM are stated as value creation, customer focus, and resource leveraging, which are essential and permanent aspects of marketing (Morris et al., 2002). As a result, EM can be viewed as entrepreneurial orientation in performing marketing.

There are various reasons why having an entrepreneurial orientation in marketing is important nowadays. As technology develops, the rules of business change where characteristics of the new economic era are generally defined by volatility and

¹ <u>https://opentext.wsu.edu/marketing/chapter/1-1-defining-marketing/</u> accessed on 19.09.2019

uncertainty. Because of such characteristics of the new economic era, firms should find new ways of adjusting their marketing practices to be able to obtain and maintain their competitive advantage. In such an environment, firms should be able to show risk-taking attitude, define opportunities, take them proactively, and innovate frequently, which all together refer to entrepreneurial orientation. So, EM may be the new way of marketing to cope with complications of the new business context.

Additionally, it is widely accepted that small and medium-sized enterprises (SMEs) are seen as the locomotive of economic growth in the contemporary business context. The importance and advantages of SMEs increase as do the need for being more flexible and proactive. The reports show that more than 95% of all enterprises worldwide are SMEs, whilst the ratio is 99% in Turkey (Hall, 1995; TUIK, 2016). As a result, it might be concluded that the growth engines of new economic era are SMEs and their role in the economy increase. Therefore, understanding their business dynamics more deeply and focusing on the ways of enhancing their performance seem essential in the new context.

SMEs differ from the larger firms mainly in terms of organizational structure and management types, which affect how they react to environmental changes and compete with others (Man and Chan, 2002). SMEs generally do not have well-defined organizational structures, which results in less hierarchy and more flexibility most of the time. So, SMEs are expected to react quickly to the changing business context (Bjerke and Hultman, 2002). Consistent with the characteristics of SMEs, they are expected to prefer to adopt an entrepreneurial orientation in marketing practices (Hills et al., 2008; Mort et al., 2010, Gilmore, 2011, Miles et al., 2015). In addition, resource scarcity might be taken as another reason why SMEs choose to perform EM rather than traditional methods (Gilmore, 2011; Bettiol et al., 2012; Miles et al., 2015). SMEs should be able to manage their resources carefully because the resources that can be used for marketing activities are restricted in SMEs. One of the essential dimensions of entrepreneurial marketing is "resource leveraging"

(Morris et al, 2002), which means doing more with less. This might be another reason why EM better applies to the marketing practices of SMEs.

As seen, there is an apparent need to have new ways of marketing in a rapidly changing business context where the importance of SMEs increases. EM could be the rational way to address and tackle such changing requirements of doing business in the new economic era. Therefore, EM should be investigated further. The literature review in Chapter 2 indicates that most of the studies on EM are exploratory, which try to conceptualize EM (Collinson and Shaw, 2001; Morris et al., 2002; Hills et al., 2008; Gilmore, 2011). On the other hand, some others intend to examine the impact of EM on various performance outcomes (Mort et al., 2010; Bulut et al., 2013; Franco et al., 2014; Yang and Gabrielsson, 2017). However, to our knowledge, there is no empirical research that investigates the factors that affect EM.

Throughout the literature review, it is seen that networking is presented as an essential activity for EM. Most of the studies refer to networking as an important asset for EM (Shaw, 1999; Gilmore, 1999; Carson and Gilmore, 2000, Kılıçer, 2013). Networking is crucial for EM because it provides access to resources and knowledge, and consequently increase competitive advantage (Kılıcer, 2013). Networking is also seen as way of defining opportunities, innovation, and customer access (Stokes, 2000; Collinson and Shaw, 2001; Gilmore, 2011; Franco et al., 2014; Kilenthong et al., 2015; Miles et al., 2015). Nevertheless, none of these studies explore the effect of networking on EM empirically. So, this study aims to investigate empirically whether networking characteristics of SMEs have impact on their EM practices.

In order to answer this research question, quantitative research approach was used and a questionnaire was administered to SMEs at technology development zones (TDZs) in Ankara. The data were collected via online survey. Prior to data collection, potential respondents were phoned and informed about the survey. The survey link was sent to 633 firms located in ODTÜ Teknokent, Bilkent Cyberpark, Hacettepe Teknokent, and Gazi Teknopark and 145 (almost 23%) of them completed the questionnaire. Then, the data were analyzed by using Stata. After validity and

reliability analysis of the scales, the substantive model was tested by using Structural Equation Modeling (SEM).

The findings of this study are generally consistent with what the literature claims and reveal that networking characteristics have an impact on EM practices in SMEs. Network structure, activity and exchanges affect future, customer, and value orientation dimensions of EM. On the other hand, only network activity among networking characteristics relates to risk management dimension of EM. Besides, except the presence foreign investors in the firm, none of the control variables have a significant impact on EM dimensions. Foreign investment seems to impact risk management dimension of EM negatively. Thus, the main contribution of this thesis to the literature is to empirically show that networking affects EM.

The thesis is composed of six chapters. Following the introduction, Chapter 2 examines the literature on EM, networking, and marketing innovation, which is followed by the presentation of the research question and a discussion of how this study is expected to serve enhancing extant knowledge in the literature. Chapter 3 describes the research methodology, sampling procedure, data collection, measurement of variables, and presents the proposed research model. In Chapter 4, the structural model is presented based on findings from validity and reliability analyses. The chapter also presents finding from empirical test of the structural model. Finally, in Chapter 5 the findings are discussed in detail, some policy implications are stated, and recommendations are made for future research after stating the limitations of this one.

CHAPTER 2

LITERATURE REVIEW

This chapter presents a review of the literature on marketing practices by focusing on entrepreneurial marketing (EM) and intends to show why and how EM has emerged and gained importance as a new type of marketing and how it can be explored in detail to leverage it. Initially, the need for EM in the context of new economic era is stated by presenting the characteristics of the new economic era as being highly volatile and uncertain besides the increased role of SMEs in the economy. After introducing and defining the concept, EM literature is explored in relation to some other variables. Then, a separate section presents the literature on the relationship between networking and EM as the thesis delves in to this relationship. As a result of the review of literature, it is understood that although networking has been mentioned as having considerable impact on EM, there is no study that explores the relationship between these two variables empirically, which is the focus of this thesis. Finally, the last section of literature review states how EM can be defined as a marketing innovation to be able to suggest policy tools and practical implications in Chapter 6.

2.1. Why Do SMEs Need Entrepreneurial Marketing?

There are several reasons for the emergence of contemporary marketing practices as the traditional ones have not been able to meet the current needs. The reasons can be classified as the changing business context in general, the necessity of innovativeness, and increased importance of small and medium sized enterprises (SMEs) which are all closely related to each other.

In recent years, traditional marketing practices have been criticized increasingly and new perspectives have emerged in the field of marketing such as guerrilla marketing, buzz marketing, and digital marketing (Morris et al., 2002). New approaches to

marketing have emerged in order to answer the needs of the changing context. Since marketing is highly context-dependent, as the context changes it should adjust. However, traditional marketing approach is found to be inadequate for answering the changing business context because it is not sufficiently "innovative and entrepreneurial" (Morris et al., 2002).

Bjerke and Hultman (2002) study the changing context and marketing practices by separating new and old economic eras (p. 24). According to them, the new economic era has unique characteristics which are expected to lead to a new type of marketing. Some of these characteristics are stated as high uncertainty, decreased importance of financial capital as a strategic resource, increased importance of knowledge and change-oriented behavior, ability to response quickly, intense competition, and impact of fast-changing technology on businesses. They claim that all of these characteristics of the new economic era resulted in change in marketing practices to be able to survive.

To begin with, innovativeness is seen as one of the most essential requirements of the rapidly changing and uncertain environment. Innovativeness is defined as "seeking of creative, unusual, or novel solutions to problems and needs" (Morris et al., 2002, p. 4). Thus, it can be concluded that being innovative helps you to be one step ahead of the competitors in a context that is rapidly changing and uncertain. Bjerke and Hultman (2002) also claim that entrepreneurship is one of the essential aspects of this new economic era, because the pre-mentioned characteristics of the new economic era make entrepreneurs the driving force of the economy as innovative agents. Because innovativeness is seen as one of the integral aspects of entrepreneurship, an entrepreneurial perspective is essential for surviving in the new economic era.

Furthermore, according to some scholars, although all businesses can be entrepreneurial in a way, generally SMEs are expected to be more entrepreneurial. As Bjerke and Hultman (2002) argue, entrepreneurial behavior that is observed in SMEs deserves much more attention compared to big companies because SMEs have become the most important growth engine of economies. That is why this study focuses on the SMEs in Turkey.

Bjerke and Hultman (2002) also mention that SMEs have been favored much more than big firms in the new economic era because of increased importance of knowledge-based competition, low entry barriers in many sectors, improved technology, increased importance of flexibility as a result of increased uncertainty and rapidly changing context, rise of service-based economy, and emergence of niche markets. According to Hall (1995), 98% of all enterprises around the world are SMEs, which constitute 50% of employment, 50% of GDP and almost 30% of exports by generating 70% of new jobs. On the other hand, in Turkey, SMEs constitute almost 75% of employment; 55% of total value added and also 55% of all exports (TÜİK, 2016). Therefore, assessing the marketing practices of SMEs is important for understanding the emerging type of marketing.

As it is expected, small firms are not able to perform marketing as big firms do because of several reasons such as limited resources and lack of a well-defined business structure or marketing plans (Bjerke and Hultman, 2002; Gilmore, 2011). First of all, limited resources (financial resources, human resources, and customers) are one of the reasons why marketing of small firms is different than the bigger ones. Traditional marketing practices that rely on continuous market research usually require huge amounts of money so it is not surprising that small firms have trouble in affording it (Morris et al., 2002; Whalen et al., 2016). That is why small firms should find cheaper ways of marketing. Additionally, most of the time SMEs consist of a few people who are responsible for more than one task in the firm, so it is hard to establish a separate marketing department that handles the marketing strategy of the firm (Bjerke and Hultman, 2002). So, instead of assigning marketing tasks to a specialized department, the whole firm should be able to perform marketing tasks. Furthermore, limited customer base might be taken as another resource limitation for small firms because the most important aim of marketing is creating customer value. Especially at the beginning stages of the business, lack of a well-defined customer base makes marketing more difficult to perform for small firms compared to big ones that have a well-established customer base (Bjerke and Hultman, 2002).

Secondly, lack of well-defined business structure and marketing plans are other characteristics of small firms. As mentioned before, small firms generally consist of a few people in charge of all the tasks. In other words, there is no specialized marketing department and usually no marketing plans. Unlike big firms, there are few hierarchical layers in small firms, which results in unstructured decision making, flexibility, and adaptability (Bjerke and Hultman, 2002). Since there is no well-defined structure or hierarchy in small firms, decision making is not so structured as well, which brings flexibility and adaptation to changes faster. Therefore, the marketing decisions of small firms can be tailored quickly based on the needs of the customers (Bjerke and Hultman, 2002).

According to Hills et al. (2008), although marketing and entrepreneurship are seen as separate disciplines, there is no strict line between them, especially as the importance of SMEs in the economy has increased. It is also stated that the marketing research has generally focused on large firms that have well-defined structures and small firms have been ignored until recent years. As the visibility of SMEs increased and the role of entrepreneurship is crucial, traditional marketing practices which have been established based on large and bureaucratic firms have weakened and new types of marketing practices have emerged such as "EM".

Morris et al. (2002) contrasted traditional and entrepreneurial marketing in terms of their basic premises, orientation, context, role of marketer, market approach, customer needs, risk and resource management, new product/service development, and role of customers. It is claimed that EM differs from traditional marketing initially by the main purpose of marketing. While traditional marketing aims to facilitate market transactions and control market, EM aims to maintain competitive advantage through innovative value creation. Mainly, EM differs from traditional marketing through its innovative and proactive approach in practice, as well as creative orientation in risk and resource management. All of these characteristics make EM more adaptable to volatile circumstances and uncertain environments.

As explained above, changing business context and increased role of SMEs in the economy makes marketing innovations necessary. When these contemporary factors

are considered all together entrepreneurial marketing seems as one of the emerging marketing innovations.

2.2. What Is Entrepreneurial Marketing?

The concept of EM has emerged at the beginning of 2000s and since then three main perspectives addressing it have been proposed. The first view says that EM is performing marketing entrepreneurially (Miles and Daroch, 2004). The second view states that EM is the marketing practices which are performed by entrepreneurs (Stokes, 2000; Mort et al., 2010; Gilmore, 2011). The last one claims that EM is a new concept independent from the separate disciplines of "entrepreneurship" and "marketing" and something that is a combination of both (Collinson and Shaw, 2001; Morris et al., 2002; Whalen et al., 2016). Based on the third point of view, EM can be either performing marketing entrepreneurially or marketing performed by entrepreneurs. So, the last one is a more comprehensive perspective which is generally accepted in the literature.

The first perspective on EM is supported by Miles and Daroch (2004) who argue that especially large firms should perform marketing in an entrepreneurial manner to be able to maintain competitive advantage. The article suggests that EM is about discovering and exploiting entrepreneurial opportunities in marketing and creating and boosting customer value. They mention that since entrepreneurial marketing is associated to being highly innovative, leveraging resources, and meeting changing customer tastes quickly, all firms regardless of size should implement EM because adapting to the changing context by creating customer value and gaining competitive advantage is a prerequisite for survival. Additionally, literature strongly supports that EM is generally performed by SMEs not only because of their size or scarce resources but also for the need of surviving in a highly volatile environment (Whalen et al, 2016). So, EM is a way of coping with volatile and increasingly competitive business environment rather than being a practice of only small firms.

Consistent with the second perspective on EM, Gilmore (2011) focuses on the differences between small and large organizations and mentions that EM seems to be

more appropriate for SMEs. According to the article, EM emerges as entrepreneurs need to perform marketing practices considering their limited resources and unstructured organizational operations (Gilmore, 2011). However, Gilmore does not consider the changing context and uncertain business environment where both small and large organizations have to find out ways of survival. Although it is accepted that marketing practices of SMEs and large firms cannot be the same because of some pre-mentioned factors, being innovative and acting entrepreneurially might be seen as a way of surviving for large firms as well. On the other hand, analyzing the business practices of SMEs is getting more attention thanks to their ability to adapt to the changing business context faster and easier than bigger ones. This might be the reason why most of the research on EM focuses on SMEs.

Especially at the beginning of 1990s, it was argued that entrepreneurship is important for economic growth and the marketing scholars have noticed that some of the aspects related to both marketing and entrepreneurship should be investigated deeply in terms of availability of various resources, organizational structure, and decision-making practices (Hills et al., 2008). Actually, it is realized that the context of business has been changing and as the context changes marketing should adapt to perform properly. So, the marketing researchers and professionals concluded that EM should be a new type of marketing which is used in the new era characterized by rapid changes, scarce resources, and uncertainty (Hills et al., 2008).

According to Morris et al. (2002), EM is appropriate for a business environment that is chaotic, complex, rapidly changing, and characterized with limited resources. EM has been defined as "the proactive identification and exploitation of opportunities for acquiring and retaining customers through innovative approaches to risk management, resource leveraging and value creation" (p.5). The seven dimensions of EM have been stated as proactiveness, calculated risk-taking, innovation-orientation, opportunity focus, resource leveraging, customer intensity, and value creation (Morris et al, 2002). First four of these dimensions are stated as being related to entrepreneurial side whilst the other ones are related to marketing and all of them together constitute the EM. As understood by the definition above, EM is not

something holds only for new and small firms but it is actually about realizing opportunities, appreciating them through innovative approaches by managing the risks, leveraging resources, and creating customer value. Thus, EM should be taken as a kind of marketing innovation which is suited for the business context of the contemporary world. In addition, when the seven dimensions of Morris et al. (2002) have been considered, it is obvious that EM should be considered as more than entrepreneurship or marketing, but it is something more comprehensive and inclusive as a new type of marketing.

According to Marangoz and Erboy (2011), emergence of EM can be taken as a paradigm shift at marketing. Their argument is based on the increased importance of SMEs as building blocks of the economy especially in the past 30 years. Because SMEs have different characteristics than large firms, traditional marketing practices should be revised as well. Furthermore, since the economies are dominated by SMEs in recent years, the practices applied by them might be taken as constituting a paradigm shift in the business environment which demands new paradigms in marketing as well, such as the EM.

So far, the literature review manifests that EM cannot only be defined as a practice of small firms. EM is a kind of marketing innovation which emerges from meeting the requirements of highly volatile, competitive, and uncertain business environment as a means of creating customer value and maintaining competitive advantage. On the other hand, SMEs are associated with the use of EM because SMEs have dominated the economy in recent years and the marketing principles have been altering based on the practices of SMEs and micro firms.

2.3. Exploring the Entrepreneurial Marketing Literature

As mentioned previously, EM literature has been around since the beginning of 2000s and is relatively a new research area of marketing. While most of the studies are exploratory which try to constitute a theoretical background and conceptualize EM, other part of the literature manifests the factors and determinants of it.

Furthermore, some others examine whether EM has impact on the performance outcomes like output, turnover, and innovativeness.

As one of the first studies on EM, Stokes (2000) has conducted qualitative analysis of data from 40 entrepreneurs, who were sampled according to growth, size, age, sector, and locality of the firm. The findings of the research have indicated that marketing practices used by entrepreneurs are unusual in some ways. Traditional marketing concepts have been examined in entrepreneurial context to conceptualize EM and results show that innovation-orientation comes before customer-orientation. Also, strategy is generally bottom-up, which first serves for a defined need and then tries to expand the customer base rather than top-down traditional marketing, which first defines the target and then serves accordingly. Marketing mix is also defined differently than traditional marketing because networks are seen essential instead of the 4Ps (Product, Price, Place, and Promotion). Similarly, the way of gathering information is through networks rather than market research.

Collinson and Shaw (2001) present the history and development of EM. They show how the areas of "marketing" and "entrepreneurship" have been gathered together in the recent years. The main argument of the writers is that the interfaces between marketing and entrepreneurship is worth to examine deeply as the environment gets more and more volatile. According to the article, being change focused, having an opportunistic nature, and being innovation-oriented in management are the interfaced areas of marketing and entrepreneurship. The article represents how the definition of EM has emerged since late 1990s by mentioning how the rise of entrepreneurial culture has affected the marketing practices through time (Carson et al, 1995; Stokes, 1995; Collinson and Quinn, 1999). Networking is stated as the most essential EM tool enabling access to market information to identify the opportunities and take innovative action. Actually, networks have been stated as substitutes for expensive market research and analysis. Networks might consist of customers, competitors, suppliers, and other agencies from which strategic market information can be gathered.

As mentioned previously, the main objective of Morris et al. (2002) is defining the dimensions of EM and constructing a theoretical background for EM studies. A theoretical framework has been stated for EM by identifying seven dimensions of EM as proactiveness, calculated risk-taking, innovativeness, opportunity focus, resource leveraging, customer intensity, and value creation (p.5). In fact, seven dimensions of EM is a kind of an integration of marketing and entrepreneurship because proactiveness, calculated risk-taking, innovativeness, and opportunity focus are entrepreneurially oriented but consistent with marketing whilst resource leveraging, customer intensity and value creation are marketing oriented but consistent with entrepreneurship. So, it is important to notice that seven of them combine and constitute EM (Morris et al., 2002, Table 1, p. 3). Then, each element of EM has been applied at three different levels of marketing which are culture, strategy, and tactics (p.10). Culture represents the relationship of the firm with external environment. Strategy means how the firm decides to achieve competitive advantage in a particular market. Finally, tactics are about how to implement marketing practices. The article emphasizes that since the environment has been volatile and uncertain nowadays, the culture of the firm should be rearranged accordingly. Similarly, the strategy of the firm should be entrepreneurial in nature to be able to achieve competitive advantage and finally marketing tactics would also be proactive, highly innovative, opportunity-focused, and resource-leveraged to create customer value, which define EM all together.

Hills et al. (2008) also emphasize the evolution of EM by focusing on some marketing behavior of SMEs and identifying the differences between EM and traditional marketing. The idea of the article has been grounded on the contemporary marketing definition of the American Marketing Association (AMA) stating that marketing is context-dependent, which means that organizational context of the firms affects their marketing perspectives and practices. Based on their observations of almost 60 firms, they have concluded that EM differs from traditional marketing through "strategic orientation, commitment to opportunities, opportunity-recognition skills, commitment of resources, control of resources and management structure" (pp.107-109). In other words, entrepreneurial strategies in marketing, being

opportunity driven, low commitment to resources, and flexibility at management have been found to be the main characteristics of EM. As realized, the characteristics of EM are consistent with the seven dimensions of Morris et al. (2002), as well.

Furthermore, Gilmore (2011) tries to examine how SMEs and entrepreneurs perform marketing when their specific requirements are considered. Gilmore's (2011) main argument is that EM is generally used by SMEs as a result of having limited resources and different operational structure than big firms. According to the article, the difference of EM from the traditional marketing framework is mainly networking to build and support marketing activities and to improve marketing management competencies to be innovative as much as possible.

Jones and Rowley (2011), just like Gilmore (2011), focus on SMEs to propose a model for EM. To begin with, the main assumptions of the study are that applying traditional marketing to SMEs has not been successful because of the context dependent factors of SMEs and existence of strong correlation between marketing and entrepreneurial orientations. The new model of EM has been defined as an integration of market orientation, entrepreneurial orientation, innovation orientation, and customer orientation. Besides, the interaction among these orientations is stated as affected by the size of firm, market sector, and development stage. In sum, the article emphasizes that creating customer value (customer orientation) through innovation (innovation orientation) is essential in EM and EM is the best way of marketing for SMEs.

Miles et al. (2015) aim to explore EM more deeply by assuming that firm performance is highly affected by both marketing and entrepreneurial competences. Then, it is emphasized that marketing and entrepreneurship have many elements in common such as innovation, opportunity orientation, and risk-seeking for achievement. Thus, conceptualization of EM is seen as crucial in contemporary marketplaces as a way of gaining and maintaining competitive advantage. They claim that although EM has emerged as marketing by SMEs it might be adopted by all firms irrespective of their size. EM might be either the strategy of top management teams vertically, a process adopted by the whole organization

horizontally, or a response to any temporary environmental volatility (pp. 102-103). It is emphasized that being innovative in creating customer value by taking the advantages of risks is essential for EM, which might be embraced by big firms as well as SMEs.

Besides the literature that aim to define EM in a structured way and construct a theoretical background, there are some empirical studies whose purpose is testing EM in relation to some other variables such as the role of entrepreneurs, performance outcomes (competitive advantage and growth), and firm characteristics.

One of the variables which have been tested in relation to EM is the role of entrepreneurs. To begin with, using qualitative analysis Franco et al. (2014) aimed to understand whether the entrepreneur has an impact on the EM process. They argue that marketing practices of SMEs should be different based on their context and EM might be seen as the one tailored for SMEs. They employ case study method on two SMEs in Portugal. The data were collected via interviews and observations besides the documentation supplied by the firms. It is concluded that both cases have similar characteristics in terms of the existence of marketing department, type of marketing, and communication methods. For instance, in both cases there are no separate marketing departments and marketing activities are usually informal and reactive based on the founder-entrepreneurs' decisions because they believe they have necessary competences and they are the decision-making authority in the firm. Another important result is about the communication methods of marketing which were found to be highly network-dependent. In sum, entrepreneurs have been found to be very influential on EM not only through their experiences or competences but also the networks they have and the utilization of this network for marketing practices.

Another study on the relationship between EM and entrepreneurs is Yang and Gabrielsson (2017), who examine the impact of decision-making process of entrepreneurs on EM in the context of international new ventures (INVs) in the high-tech sector. Multiple case study method has been used and the data were collected via in-depth interviews with 13 firms. To begin with, it is stated that uncertainty is

the main factor impacting decision-making process, which affects EM. As a result it is concluded that EM practices might vary according to the decision-making process of entrepreneurs. Besides, a model was developed based on the empirical results. The marketing decision-making process can alter depending on whether uncertainty is high or not, which in turn affects the EM of INVs. To sum up, the decision-making process of entrepreneurs was found to be influential on EM of the firms where the process is defined in relation to uncertainty.

Besides the role of entrepreneur, another variable which is examined in relation to EM is firm characteristics. Kilenthong (2015) tests empirically whether firm characteristics such as firm age, firm size, and firm's founder have an impact on the level of EM. Structured interviews were conducted with more than 700 SMEs in the USA. The hypothesis was that younger, smaller, and founder-operated firms would engage in a higher level of EM than older, larger and non-founder-operated ones. The results indicate that whilst the younger firms seem to engage in a higher level of EM, the firm size was found to be related only when age is taken in to account. Otherwise there is no direct impact of the firm size on EM. In addition, it was shown that being founder or non-founder operated has no impact on the level of EM while the founder's entrepreneurial orientation matters.

In addition, performance outcomes have been one of the most important variables which have been analyzed in relation to EM. Because the main objective of businesses is enhancing their performance through various practices, it is not surprising that the relationship between EM and different performance outcomes such as innovativeness, growth, and competitive advantage are investigated. For instance, Mort et al. (2010) aim to analyze how EM impacts the performance outcomes of SMEs in their internationalization process. For that purpose, nine firms were examined via in-depth interviews. The results indicate that EM affects performance outcomes of international SMEs through four strategies of EM which are opportunity creation, customer-oriented innovation, resource enhancement, and legitimacy (p.549). The performance outcomes that are impacted by EM are stated as speed of market entry and rapid internationalization for new born global SMEs. In

sum, the article implies that the characteristics of EM like opportunity orientation, customer intensity, innovation orientation, and resource enhancement have positive impact on the performance outcomes of global born firms by enhancing the speed of new market entry and internationalization in general.

Another performance outcome which is examined is innovativeness of firms. Hacloğlu et al. (2012) and Bulut et al. (2013) are the examples of empirical studies that aim to analyze how EM affects the innovative performance of firms. Hacloğlu et al. (2012) conducted an analysis on more than 500 manufacturing firms in Turkey in order to identify the impact of EM on their innovative performance. To be able to define the relationship between EM and innovative performance, seven dimensions of EM that are defined by Morris et al. (2002) were used. Results show that especially four dimensions of EM which are proactiveness, innovativeness, customer intensity, and resource leveraging, significantly affect the innovative performance. On the other hand, there is no significant impact of opportunity focus, calculated risk taking, and value creation on innovative performance.

Bulut et al. (2013) examine the impact of EM on innovation and financial performance. Similar to Hacioğlu et al. (2012), seven dimensions of EM were used to identify the effect of EM on innovative and financial performance through quantitative research conducted on 45 SMEs in İzmir. Contrary to Hacioğlu (2012), Bulut et al. (2013) found that opportunity focus and calculated risk taking have significant effect on innovative performance whilst only value creation has significant impact on financial performance. However, it is important to note that the sample size of the study might be too small to draw reliable conclusions.

Growth is another variable which is examined in relation to EM. For instance, Hallback et al. (2013) try to identify the impact of EM on global growth of international new ventures (INVs) through semi-structured interviews with representatives of four firms. The results indicate that EM is used by INVs during their global growth and innovativeness and adaptation are the key dimensions of EM for INVs. Moreover, environmental factors were found to be highly influential on EM practices. On the other hand, Jones et al. (2013) aim to explore the relationship

between firm growth and EM in small software technology firms as a specific context. The study is a cross-country comparison on Silicon Valley, USA and North West Wales, UK using qualitative research techniques on six firms from each country. It was found that the relationship between EM and firm growth varies based on the growth stage of firms, network clusters, and countries.

Competitive advantage might be defined as another performance outcome affected by EM. Miles and Daroch (2004) conducted a study on the effect of EM on competitive advantage of large firms using interviews that were conducted between 1999 and 2003 in the USA, UK, New Zealand, and Sweden. It is found that not only SMEs but also large firms can benefit from EM to enhance their competitive advantage. It is concluded that EM helps to gain and maintain competitive advantage by creating superior value for the customers and leveraging opportunities in the firm.

2.4. Networking and Entrepreneurial Marketing

Networks are defined as combinations of nodes and connections (Gilmore and Carson, 1999). Nodes and connections are replaced with actors and social ties respectively to form social networks (Davern, 1997). Since the very beginning of 1990s, networks have been a critical research area for entrepreneurship because entrepreneurs have strong personal ties which makes them connected to a broader network of actors (Hoang and Antoncic, 2003). Thanks to these networks, entrepreneurs can get many benefits such as recognizing the opportunities, getting access to various resources, and making effective decisions.

Accordingly, entrepreneurial networks are mainly defined as "the sum of relationships in which an entrepreneur participates, and which provide an important resource for his/her activities" (Dodd and Patra, 2002, p. 117). Based on the stated definition, two main aspects of the entrepreneurial networks are "relationships" and "resources". Entrepreneurial networking occurs when entrepreneurs engage in relationships in order to gain access to crucial resources needed to maintain the business. The type of the relationships might vary from the personal contacts which

are basically friends and family to the links with suppliers, distributors or customers and to the ones that are built by membership in formal organizations.

According to Hoang and Antoncic (2003), content, governance, and social structure are three essential aspects of entrepreneurial networks. To begin with, networks might be constituted by either personal or organizational relations through which the entrepreneurs can access tangible and intangible resources. Governance of these networks generally relies on mutual trust that lowers the cost of governance. In addition, the number of actors included in an entrepreneur's network (network size) and how the entrepreneur links with others (centrality) are the main aspects of the entrepreneurial network structure.

How entrepreneurs leverage these networks for their business depends on firm characteristics, entrepreneur characteristics, firm life stage, and sector (Gilmore and Carson, 1999). Networking might be opportunistic, informal, interactive, or spontaneous according to the entrepreneurs' business style. Moreover, networks at the early stage of the firms and when firms are mature are not the same (Gilmore, 2011).

One of the most critical areas where the networks are used by entrepreneurs is marketing. Marketing management is a core activity for both large and small firms. Compared to large firms, small firms generally lack many resources to manage marketing activities. Also, there are many other factors which have been mentioned previously why small firms engage in EM instead of traditional marketing techniques. According to EM literature, networking is a core aspect of EM (Shaw, 1999; Gilmore, 1999; Carson and Gilmore, 2000, Kılıçer, 2013).

The study of Kilicer (2013) is a literature review on networking and its impact on entrepreneurial marketing assuming that networking and the management of the networks are the key components of EM. The research indicate that effective networking enables the firms to cope with the resource problems, and increase their competitive advantage by identifying customer needs properly, enhancing new product development, and marketing communication (p. 143-144).

The types of networks might be either formal (organizational) or informal (personal) that is constituted by the relations of entrepreneurs with persons (family and friends) and group of persons and organizations (customers, competitors, suppliers, professionals, and regulators) (Kılıçer, 2013). However, entrepreneurs generally use and benefit from their personal networks. Studies indicate that marketing activities of SMEs are generally shaped by networking processes that are carried personally by owner-managers (Gilmore et al., 1999). Shaw (1999) also shows that personal networks of entrepreneurs increase marketing effectiveness of the firms by boosting their marketing competencies and improving marketing tactics which results in high quality products and customer loyalty (p.31-32).

Gilmore et al. (2006) show how networking has been used by the firms for their marketing activities. The research focuses on SMEs by conducting an analysis on a food distribution channel consisting of 12 owner-managers. It is showed that networking is used for marketing activities by the owner-managers and improves their firms' performance by providing market knowledge, improving distribution, product decisions, promotional activity and pricing, getting access to resources, and boosting marketing innovation (p.282).

The literature review mainly indicates that networks and networking are essential for entrepreneurial marketing in which the entrepreneurs that lack marketing expertise try to manage marketing activities with limited resources in a rapidly changing environment. So, EM benefits from networks and networking to reach resources, information, and expertise.

It is important to define what networking characteristics are and how the networking capacity is measured. For instance, Brand et al. (2018) claim that networks have three typical dimensions which are structural, resource-related, and relational. Firstly, network size and network position (centrality) are the indicators of network structure which implies "where you reach". Secondly, resource characteristics that refer to "whom you reach" indicate any resources accessed through the networks. Finally, the strength of the network, distance in the network, and duration or frequency of communication refer to the relational characteristics which indicates "how you

reach" (Brand et al., 2018). Additionally, "network utilization", defined as the ability of an actor to benefit from the network, is also important in terms of measuring the capacity of a network.

Ostgaard and Birley (1994) define five main variables of personal networks which are the propensity to network, network activity, network density, and network intensity, and the content of network exchanges. The propensity to network is associated with the number of memberships in trade, social and/or professional organizations. Network activity refers to communication pattern with various network members (family, friends, customers, and suppliers etc.) and making new networks. Network density is related to the size of the network whilst intensity refers to duration and frequency of the network relations. Finally, the content of network exchanges indicates how the actor utilizes the network relations and for what purposes these network relations are used (Ostgaard and Birley, 1994, Appendix A).

As it is illustrated, the characteristics used to measure network capacity are generally size, centrality, communication duration and frequency, and network utilization (Brand, 2018; Ostgaard and Birley, 1994; Hoang and Antoncic, 2003). In this thesis, the scale developed by Ostgaard and Birley (1994) is used to define network characteristics when trying to identify how those network characteristics affect the EM practices of the firms. Ostgaard and Birley's (1994) scale is more comprehensive than other scales. In the literature it is found that networking and use of networks play critical roles in EM processes. Many researchers highlight networks and their relation with EM (Stokes, 2000; Collinson and Shaw, 2001; Gilmore, 2011; Kılıçer, 2013; Franco et al., 2014; Kilenthong et al., 2015; Miles et al., 2015).

Stokes (2000) refers the pivotal role of networking in EM conceptualizations and concludes that networking is one of the four essential aspects of EM process in terms of gathering information. It is stated that the information is gathered through informal networks rather than formal market research in the EM process. Networks also define new opportunities.

Collinson and Shaw (2001) refer to the importance of networking in the management of EM. In the article, networking is defined as a core competency of EM as networks are used for gathering market information only with limited resources.

Gilmore (2011) states that networking is one of the most essential tools of EM in terms of building and maintaining marketing activity. Gilmore conceptualizes EM as not only adapting standard frameworks but also marketing by networking, developing marketing competence, and using innovative marketing. So, the crucial role of networking on EM has been emphasized by Gilmore (2011).

Besides, Franco et al. (2014) argue that the role of entrepreneur-founder is important in EM process of the firm which is based on networking by entrepreneur to have successful marketing activity in the firm. The study concludes that there is impact of entrepreneur-founder on the EM process of the firm through communication and networking abilities. The two cases examined in the study prove the impact of networking on EM practices. For instance, one of the entrepreneur-founder mentions that "networking strategy was best, regarding marketing, because it is suited to the company's limited resources as the cost is practically zero." (p. 274).

Kilenthong et al. (2015) state that entrepreneurial networks do not only consist of suppliers but also customers and competitors. These networks can be utilized for information gathering, customer access, improving product quality, creating competitive advantage, and obtaining critical resources, which are very essential for EM process. Whether a relationship exists between value creation by networks and firm age is also examined. It is found that younger firms rely on networking more than older ones in value creation.

In the Turkish literature, the only study which mentions the relationship between networking and EM is Kılıçer (2013) that explores the related literature on importance of networking in marketing to increase the awareness of SMEs regarding networking. It mainly claims that SMEs have different marketing practices than large firms, which requires leveraging networking carefully. Firstly, it manifests the types of networks as organizational and personal, and then focuses on the personal ones

because they seem more crucial for SMEs' operations. The study also states that the characteristics of SMEs, the life stage of SMEs, and sector/market norms are the factors affecting the use of networks by SMEs. Finally, it is mentioned that networks might be used for many purposes by SMEs, which ranges from gathering market information and defining opportunities to gaining access to new markets. So, the study concludes that networking and networks are essential for SMEs in their marketing decisions and practices.

Although networking has been stated as essential in EM processes and practices, none of the studies above explore the relationship between EM and networking empirically, which this thesis focuses on. The aim of this thesis is to understand whether networking characteristics have significant impact on EM and whether the results differ for networking type and individual elements of EM.

2.5. Marketing Innovation and Entrepreneurial Marketing

Marketing innovation has been defined in the third edition of the Oslo Manual because it has been accepted that technological product and process (TPP) definition of innovation is inadequate in terms of capturing non-technological innovation (Oslo Manual, 3rd edition). The manual emphasizes that new marketing practices might have crucial impact on the performance of firms and novel ways of targeting, segmenting, promoting, or pricing can be influential on the development of products and processes. Marketing innovation should be taken as a separate category because it may affect firm performance directly. Also, it focuses on the markets, customers, sales, and market share which are different than product and/or process quality that is captured by TPP point of view (Oslo Manual, 3rd edition). As a result, marketing innovation is one of the four types of innovation covered by the Oslo Manual besides product, process, and organizational innovation.

According to the manual, "marketing innovations involve the implementation of new marketing methods" (p. 17). Besides, the recent definition of marketing by American Marketing Association (AMA) is "the set of institutions and processes for creating, communicating, delivering, and exchanging offerings that have value for customers,

clients, partners, and society at large" (AMA Website).² So, any novelty in institutions and processes for creating, communicating, delivering, and exchanging the value-created might be taken as a marketing innovation. In this sense, EM might be taken as a kind of marketing innovation because it offers different methods for market research, customer interactions, value creation, and exchange than traditional marketing. EM is generally found to be more appropriate for the volatile business context and the nature of SMEs by improving firm performance. It is believed that SMEs gain competitive advantage by innovative products, processes, and marketing of the value-created (O'Dwyer et al., 2009).

On the other hand, in the Oslo Manual, marketing innovation is stated in relation to only 4Ps of the marketing by emphasizing that new marketing methods can include changes in product design and packaging, promotion and placement, and product pricing (p. 17). This is however an incomplete definition because marketing is more than 4Ps. Marketing is for creating customer value and demand. Not only the changes in the 4Ps but also the changes in the marketing methods in creating this value may be taken as marketing innovation. Therefore, marketing innovation should be seen more than novelty concerning the 4Ps of marketing. It involves any proactive and creative solution to the contextual problems such as lack of resources or high uncertainty (O'Dwyer et al., 2009; Bocconcelli et al., 2018). EM has emerged as a response to highly volatile and uncertain context of contemporary business environment and it is more appropriate for SMEs as they are more proactive, opportunity and innovation-oriented, able to create customer value with limited resources, and effective risk management. Thus, EM may be defined as a new method of marketing or as a marketing innovation which resolves some of the contextual problems.

Beside conceptual comparison, marketing innovation and EM can be compared in terms of measurement. Marketing mix refers to the marketing tools which are used by the firms to bring their marketing strategy into practice. Therefore, marketing mix components might be used as measures to control effectiveness of marketing

⁻

² https://www.ama.org/the-definition-of-marketing/ accessed on 24.05.2019

strategies or practices (Khan, 2014). Various marketing mix models have been defined since 1960s which include 4Ps, 7Ps (product, place, price, promotion, participants, process and physical evidence) or 4Cs (customer needs and values, cost, convenience and communication). To begin with, the most popular one, the marketing 4Ps has been defined by E. Jerome McCarthy in 1960s as a combination of *product, place, promotion* and *price*. Then, this mix of 4Ps was modified by Booms and Bitner to cover services beside tangible products in 1980s. They introduced 7Ps model which has been generated by adding "physical evidence (environment), processes, and people" into 4Ps (Rafiq and Ahmed, 1995). Furthermore, in 1990s another marketing mix model was suggested by Robert Lauterborn which presents the perspective of buyers rather than sellers and is called 4Cs that consist of *customer needs and values, cost, convenience*, and *communication* (Khan, 2014).

The marketing mix is also used as measuring "marketing innovation" by the Oslo Manual. The manual implies that 4Ps are used to measure marketing innovation and significant changes in product design, placement, promotion, and pricing are considered as marketing innovation (3rd edition, pp. 50-51). However, as mentioned previously, 4Ps might be inadequate in capturing all types of marketing innovations because the classification is very much product-oriented. Therefore, to be able to capture all types of marketing innovations, other pre-mentioned marketing mix models should be considered. EM is measured as neither product nor pricing change which can be considered as a marketing innovation, but it offers many important novelties in marketing when it is considered in terms of 7Ps or 4Cs perspectives. Seven dimensions of EM that are commonly mentioned in the literature are opportunity-orientation, proactiveness, innovation-orientation, risk management, resource leveraging, value creation, and customer intensity (Morris et al., 2002). Although 4Ps mix seems inadequate to measure these dimensions, 7Ps together with 4Cs constitute a basis for EM definition and measurement. For instance, 7Ps take into consideration environment, processes, and people as the aspects of marketing mix and can be used to measure processes of resource leveraging or risk management. On the other hand, 4Cs measure value creation or customer intensity of EM. As a result, although marketing mix might be used to measure marketing innovation, it is not correct to define the mix as 4Ps because it cannot capture some essential aspects of marketing novelties in terms of people, processes, and customers.

2.6. What Do We Learn from the Literature?

The literature review reveals some important results that inspire this thesis. Firstly, the review shows that marketing should be aligned with changing business context to function appropriately. As the context evolves the marketing practices should adjust and that is why there is search for new marketing practices. EM is seen as an important marketing innovation as being able to adjust to the highly volatile and uncertain business context and meet rapidly changing customer needs. This is one of the reasons why EM is worth investigating further.

On the other hand, the increased role of SMEs in economy puts effectiveness of traditional marketing practices at risk because of scale and resource constraints of small firms. The characteristics of SMEs, which are mentioned in section 2.1, enabled and to some extent forced them to discover new marketing practices. Thus, how SMEs form EM strategies is a fertile soil for research. This thesis highlights the link between networks and EM in this regard.

Besides, the scales used in this study are adopted from the literature. One of the scales is for measuring EM and the other one is to measure networking characteristics. EM scale consists of seven dimensions which are named by Morris et al. (2002) as opportunity orientation, proactiveness, innovation orientation, customer orientation, risk management, resource orientation, and value orientation. Items of the scale are mostly adopted from the study of Bulut et al. (2013). Some other items are derived from the studies of Kilenthong et al. (2015) and Ahmadi and O'Cass (2016). Networking characteristics scale is adopted from Ostgaard and Birley (1994) because the dimensions comprise most of the aspects mentioned in the literature (thus is a more comprehensive scale) which are propensity to network, network activity, network density, network intensity, and content of network exchanges. The

details about the scales including the dimensions and the items used to measure them, are presented in the following section.

As the literature on EM is explored further, it is seen that most of the studies on EM are about conceptualization through defining the determinants and dimensions of EM. There are also some studies which examine the relationship between EM and performance outcomes like turnover, output, competitiveness, or innovativeness. Besides, networking stands out as the most salient variable in relation to EM. Networking is stated as one of the most essential activities of SMEs in marketing practices and decisions. Although most studies mention the impact of networking on EM, none of them examines the relationship empirically. The novelty of this study is to empirically investigate whether networking characteristics have an impact on EM using data from a sample of technology-based SMEs in Ankara, Turkey. Thus, this thesis fills an important gap in the literature.

CHAPTER 3

METHODOLOGY

This chapter describes the research methodology and the procedure followed throughout the research process. The chapter starts with the discussion of the research strategy used in the study. Then, sampling procedure and data collection are described. Following section gives information about measurement of variables. The final section presents research design and analysis methods used in the study.

This study aims to identify the relationship between networking capacity and entrepreneurial marketing by conducting research on SMEs. In other words, it aims to understand whether networking characteristics of SMEs impact the EM practices. To understand this relationship a quantitative research has been conducted on a sample of technology-based SMEs in Ankara.

3.1. The Research Strategy: Quantitative Research

This study uses quantitative research strategy to identify the impact of networking characteristics on the EM practices. According to Neuman (2014), quantitative research is best to test hypotheses where the concepts can be specified as distinct variables and measures are standardized. In quantitative research the approach is often deductive which means the hypothesis is defined and then the data can be collected based on the concepts that form the hypothesis (Bryman, 2012).

Bryman (2012) conceptualizes quantitative research and summarizes the steps as follows: specification of the hypotheses, selecting a research design which is followed by planning measurement of variables, defining research site, sampling, and data collection. Final step is analysis of collected data and interpretation of the findings. So, it is important to follow each step cautiously whilst conducting quantitative research.

3.2. Sampling and Data Collection

3.2.1. Sampling Procedure

In this thesis, SMEs that are located in "Technology Development Zones (TDZs)" in Ankara have been defined as the sampling frame (i.e., the collection of entities from which I drew my sample). This sampling frame can be considered adequate in a number of aspects: most of the companies in TDZs are SMEs with an entrepreneurial and/or innovative background; they are expected to perform new ways of marketing such as EM due to technology-based focus; and TDZs facilitate various networking activities. In 2001 "Technology Development Zones Law No. 4691" was enacted and as of April 2019 total number of TDZs in Turkey was 83. Only 63 of them were operational at the time of data collection (Ministry of Industry and Technology).

There are some reasons why TDZs in Ankara has been chosen as research site. Firstly, the history of TDZs in Turkey starts in Ankara as ODTÜ Teknokent is the first to be established in Turkey (Ministry of Industry and Technology, 2019). Secondly, because headquarters of funding agencies like KOSGEB and TÜBİTAK are in Ankara, the technology-based entrepreneurship ecosystem is more vivid compared to other provinces. Thirdly, Ankara hosts the highest number of TDZs (as of 2019, seven TDZs), İstanbul ranking second with six TDZs (Ministry of Industry and Technology, 2019).

Four of the TDZs in Ankara were selected. These TDZS are ODTÜ Teknokent, Bilkent Cyberpark, Hacettepe Teknokent, and Gazi Teknopark. First of all, following the enactment of the TDZs Law in 2001, ODTÜ Teknokent (established in 2001), Bilkent Cyberpark (established in 2002) and Hacettepe Teknokent (established in 2003) have been among the first established technology parks. Thus, their structure and operations are rather established (Ministry of Industry and Technology, 2019). For example, in 2008 when there were only 18 TDZs in Turkey, six of them were in Ankara and ODTÜ, Bilkent, Hacettepe, and Gazi (established in 2007) were among

³https://btgm.sanayi.gov.tr/Handlers/DokumanGetHandler.ashx?dokumanId=007366 00-7d5d-41bf-9cf4-2279aa97263e accessed on 20.06.2019

those six TDZs. In addition, according to the ranking of TDZs in 2017, ODTÜ Teknokent (2nd), Bilkent Cyberpark (3rd), Gazi Teknopark (14th) and Hacettepe Teknokent (18th) were among the top 20 TDZs in Turkey.⁴

In the table below, the number of SMEs in the four TDZs is presented by specifying how many of them responded to the survey.

The Number of SMFs and Respondents in the four TD7s

Name of TDZ	Number of SMEs*	Number of completed surveys	Response rate
ODTÜ	186	44	23,66%
BİLKENT	191	34	17,80%
HACETTEPE	187	45	24,06%
GAZİ	69	22	31,88%
TOTAL	633	145	22,91%

^{*}The number of SMEs shows those that were known to be active as of May 2019

3.2.2. Data Collection

Table 1

In this study survey is the data collection method and the instrument is a self-administered questionnaire. A questionnaire consists of items which are answered by the respondents. There are various ways of administering a questionnaire such as mailed questionnaire, collective administration, and administration in a public place (Kumar, 2011). In this thesis, the questionnaire was developed online and sent to the respondents via e-mail.

The questionnaire consists of nine main sections which are firm information, entrepreneurial marketing, network characteristics, current status of R&D and design activities, current status of innovation activities, product innovation, process

⁴http://www.ufuk2020.com/haberler/turkiyenin-en-iyi-teknoloji-gelistirme-bolgeleri-2017.html accessed on 21.06.2019

innovation, financing of product/process innovation activities, and finally organizational and marketing innovation (see Appendix A).

Before collecting the main data of the study, the questionnaire was calibrated based on expert views and a pilot study. Initially, the items were listed for each dimension, translated into Turkish, and expert views were received. Based on the feedback, some of the items were eliminated and subsections were reordered. Before conducting the pilot study, one more review was done by the supervisor and some wordings were changed. Then, the survey was sent to 10 firms as a pilot study, but only three of them were completed properly. Based on the results of pilot study, some of the wordings were revised, a few items were excluded because they were found to be hard to understand by respondents and some questions were added, which resulted in the final version of the survey.

To be more flexible in collecting the answers, the questionnaire was converted into an online form through Google Forms and the link to the survey was sent to the respondents by e-mail. Since the response rate for online surveys are known to be very low, phone calls were made to all firms and a confirmation was received about the completion of the survey. After receiving the confirmation, the online survey link was sent to the respondent simultaneously.

As Table 1 presents, the response rates are approximately 24% for ODTÜ, 18% for Bilkent, 24% for Hacettepe, and 32% for Gazi, which corresponds to about 23% on average.

3.3. Measurement of Variables

The dependent variable is entrepreneurial marketing and the independent variable is networking characteristics of SMEs because this study intends to identify whether networking characteristics impacts EM practices of SMEs.

To explore this relationship, the first step is to develop measurement scales for the variables of EM and networking characteristics. The development and measurement

of EM, and the scale used to measure networking characteristics is described in detail below. Finally, the overall model and hypotheses are presented.

3.3.1. Measuring Entrepreneurial Marketing

In the literature there are some assumptions to define EM conceptually which exhibit some dimensions of EM. For instance, Morris et al. (2002) defines seven dimensions of EM which are proactiveness, opportunity focus, innovation focus, calculated risk taking, resource leveraging, customer intensity, and value creation. Besides, Kilenthong et al. (2015) identifies six dimensions of EM as growth orientation, opportunity orientation, total customer focus, value creation through networks, informal market analysis, and closeness to the market. In addition, Ahmadi and O'Cass (2016) define the dimensions of EM broadly as entrepreneurial orientation (EO), marketing capabilities (MC), and marketing orientation (MO). EO is constituted by the dimensions of innovativeness, proactiveness, risk-taking, and exploitative and exploratory activities. MC dimensions are defined by the variables related to customer value creation, whereas MO dimensions are intelligence generation, responsiveness, and intelligence dissemination. Finally, in the Turkish literature Bulut et al. (2013) use the dimensions of resource orientation, value orientation, proactive orientation, risk-taking orientation, customer-oriented innovativeness, and opportunity orientation.

When the mentioned studies are examined, it is realized that they have a lot in common (see Table 2) and Morris et al. (2002) and Bulut et al. (2013) appear to be the most comprehensive ones. On the other hand, although Kilenthong et al. (2015) differs from others, actually the dimensions can be classified as related to the keywords in Table 2. For example, informal market analysis and closeness to the market might be associated with proactiveness, innovativeness, or resources in broader terms. So, based on the analysis on the dimensions of EM, the dimensions used in the current study are defined as opportunity orientation, proactiveness, innovation orientation, customer orientation, risk management, resource orientation, and value orientation.

Table 2

Entrepreneurial Marketing Dimensions in the Literature

Dimension Keyword	Morris et al.(2002)	Kilenthong et al. (2015)	Ahmadi and O'Cass (2016)	Bulut et al. (2013)
Proactiveness	X		X	X
Opportunity	X	X	X	X
Innovativeness	X		X	X
Risk-taking	X		X	X
Resources	X			X
Customers	X	X	X	X
Value	X	X	X	X

To measure each of these dimensions, the scales were developed by combining and contrasting the scales used by Morris et al. (2002), Kilenthong et al. (2015), Ahmadi and O'Cass (2016), and Bulut et al. (2013). As a result, opportunity orientation (5 items), proactiveness (7 items), innovation orientation (6 items), customer orientation (7 items), risk management (6 items), resource orientation (7 items), and value orientation (8 items) were measured on 5-point Likert scales whose responses ranged from 1-not at all important- to 5-very important- (see Appendix A). The details about the dimensions and how they were measured are presented below.

3.3.1.1. Opportunity orientation

According to Morris et al. (2002), one of the principles of entrepreneurship is searching for and being aware of opportunities. Thus, opportunity orientation is a key dimension of EM. The volatile and uncertain business environment presents lots of opportunities which might be creatively used for EM. Furthermore, Kilenthong et al. (2015) claim that entrepreneurial marketers generally seek for new opportunities and they compete with others for exploring and utilizing them. On the other hand, Ahmadi and O'Cass (2016) consider exploratory activities as a dimension of entrepreneurial orientation and these activities are highly associated with opportunity recognition of marketers. They define exploratory activities as discovering new market or technical knowledge to be able to improve current position of the firm. As

it is seen, while measuring EM, opportunity orientation appears as a critical dimension. Some examples that were used to measure opportunity orientation dimension of EM are how important "looking for new business opportunities consistently" or "real-time and proactive reasoning to uncover opportunities" are.

3.3.1.2. Proactiveness

Firms have to find new ways of gaining and maintaining competitive advantage in the highly volatile business context, where being proactive means leading the change and adapting quickly to changing environment (Morris et al., 2002). Bulut et al. (2013) state that proactive orientation means being a pioneer in meeting the needs, which have been unidentified before. New markets and competition are created as a result of proactive behavior. In addition, Ahmadi and O'Cass (2016) refer to proactiveness as a dimension of entrepreneurial orientation which is one of the building stones of EM. As a result, proactiveness is examined as a dimension of EM in this thesis as well and items like how important it is to "quickly identify changes in customer tastes and satisfaction" or "rapidly detect important changes in the sector" were used.

3.3.1.3. Innovation orientation

To obtain and maintain competitive advantage, innovation is one of the main activities of marketing. Innovation is defined as an integral part of EM as sustainable generation of new products, services, markets, and processes (Morris et al., 2002). According to Kilenthong et al. (2015), to be able to realize opportunities, innovation should be a crucial ongoing process of marketing. Ahmadi and O'Cass (2016) also mention the importance of innovation for marketing activities and categorize innovation activities as exploratory and exploitative. They claim that entrepreneurial and marketing orientations are the key assets for innovation activities. So as a kind of combination of both orientations, EM takes innovation orientation as a pivotal activity. Thus, innovation orientation appears as one of the dimensions for measuring EM. How important "developing creative approaches to new product/service

development" and "to trigger marketing decisions with creativity" are some examples for the items measuring innovation orientation dimension of EM.

3.3.1.4. Customer orientation

According to Morris et al. (2002), customer orientation in marketing is crucial because of two main reasons: to create new customers and to maintain relationships with existing ones. Although traditional marketing attempts to take rational decisions based on market research, EM focuses on more emotional aspects to get customers' attention in the short run and have their commitment in the long run. Customer focus is also defined as a core dimension of EM by Kilenthong et al. (2015). They emphasize that EM accepts the customers as active participants in marketing decision process which distinguishes it from the traditional marketing perspective. On the other hand, according to Ahmadi and O'Cass (2016), customer focus is an integral aspect of market orientation which is one of the two orientations that constitute EM. Thus, customer orientation cannot be neglected when measuring EM. Customer orientation of EM is measured by items like how important it is "to measure customer satisfaction continuously and systematically" or how important "being flexible and adapting to the specific needs of your customers" is.

3.3.1.5. Risk management

It is widely known that entrepreneurship is associated with calculated risk-taking, so EM approves that marketing has an essential role in managing the risk profile of a firm. Therefore, marketing activities also comprise examining the external environment to decrease environmental uncertainty, firm's vulnerability and dependency, in addition to enhancing the flexibility of the firm (Morris et al., 2002). Bulut et al. (2013) mentions that EM is not only meeting the customer demand but also actively taking risks to create new opportunities for the firm. Thus, management of risk is an important task of EM. Besides, Ahmadi and O'Cass (2016) considers risk-taking as a crucial aspect of entrepreneurial orientation and claims that EM is associated with taking risks for new products and being a "risk-taker" is a positive attribute. Consequently, risk management is defined as the fifth dimension of EM

and some items to measure this dimension are how important "taking risks to get advantage of new opportunities even though uncertainty is high" and "accepting the term of risk-taker as a positive feature among your employees" are.

3.3.1.6. Resource orientation

As it is accepted, SMEs do not have plenty of resources to run their business so they should find ways of leveraging the resources they have. Morris et al. (2002) define resource leveraging as

stretching resources much further than others have done in the past, getting uses out of resources that others are unable to realize, using other people's (or firm's) resources to accomplish one's own purpose, complementing one resource with another to create higher combined value, using certain resources to obtain other resources (p. 8)

and claim that EM is associated with leveraging resources through any one of these methods. According to Hacıoğlu (2012), resource leveraging is a kind of alternative to cope with resource scarcity and EM is also about being able to leverage resources effectively. As a result, resource orientation is used as another dimension in measuring EM. Sample items are how important it is "to learn from your competitors" and "to utilize your links to help developing and marketing products/services".

3.3.1.7. Value orientation

Value creation is seen as an integral part of marketing activities because value is the way of transactions and relationships with the customers, thus innovative value creation is defined as an important aspect of EM (Morris et al., 2002; Kilenthong et al., 2015). In Bulut et al. (2013), value orientation is found to be consequential for both financial and innovative performance of the firms, so it is concluded that seeking ways of creating value is an essential role of an entrepreneurial marketer. Furthermore, Ahmadi and O'Cass (2016) mention that the intersection point of entrepreneurship and marketing is value creation by the commercialization of new ideas, products, or services. As seen, value creation is crucial for EM thus value orientation is defined as the last dimension of measuring EM in this study. This

dimension is measured by items like how important "creating value through customer relationship management" or "implementing immediately innovative marketing methods that are believed to add value to your company" are.

3.3.2. Measuring Networking Characteristics

Although various measures have been proposed in the literature to measure networking characteristics, it is seen that they can be collected under three main aspects which are "network structure", "network activity", and "the benefits of networking". For instance, Brand et al. (2018) which aim to test the relationship between entrepreneurial networking characteristics and performance defines three dimensions of entrepreneurs' network which are structural characteristics (refers to network size and position), resource characteristics (refers to the benefits gathered by the network), and relational characteristics (refers to the nature of interactions). Besides, Witt (2004) states that "time spent on networking, frequency of communication with network partners, number of network partners, network diversity, density of network, frequency of new information being provided and extent of support from network partners" are the dimensions to measure entrepreneurial networks (p. 395). On the other hand, Ostgaard and Birley (1994) use five dimensions of networking characteristics in testing the relationship between personal networks and competitive strategy of new ventures. These are "propensity to network, network activity, network density, network intensity and content of network exchanges" (p. 304). As it is seen, in line with the literature, the dimensions are related to network activity, structure, and benefits.

It is seen that the studies in the literature have many common aspects in terms of the dimensions used to define networking characteristics (see Table 3). Ostgaard and Birley (1994) is the most comprehensive one in terms of dimensions and the items that are used to measure each dimension. So, in this study the dimensions used by Ostgaard and Birley (1994) have been adopted to measure networking characteristics of entrepreneurs which are propensity to network (3 items), network activity (5 items), network density (2 items), network intensity (2 items), and content of network exchanges (7 items) (see Appendix A).

Table 3

Networking Characteristics Dimensions in the Literature

	How netwo	orking is measured in the	literature
Main Aspects	Ostgaard and Birley (1994)	Witt (2004)	Brand et al. (2018)
Network Structure	 propensity to network network density network intensity 	 number of network partners network diversity density of network 	network size and position
Network Activity	 total time spent for communication frequency of communication 	 time spent on networking frequency of communication with network partners 	nature of interactions
Benefits of network	content of network exchanges	 frequency of new information being provided extent of support from network partners 	partner quality

3.3.2.1. Propensity to network

According to Ostgaard and Birley (1994), propensity to network aims to measure the intention of entrepreneurs to have networks and extend the existing ones. It indicates how many professional or social network partners the entrepreneurs have. Witt (2004) states that number of network partners is one of the essential aspects of measuring networking characteristics and it is one of the structural aspects of networks. Additionally, Brand et al. (2018) emphasize that the entrepreneur's network size is important to understand the structure of overall network. So, propensity to network is one of the dimensions used to measure network characteristics in this study. The dimension aims to define number of total network partners of the entrepreneurs socially and professionally.

3.3.2.2. Network activity

Ostgaard and Birley (1994) claim that network activity refers to the time spent to have and maintain contacts with network partners. So, total amount of time spent by the entrepreneur for communication with customers, suppliers, investors, or family and friends is an indicator of network activity. In addition, the frequency of communication with existing and potential network partners is used as another indicator for network activity. On the other hand, according to Witt (2004), activities to build and sustain network contacts are an integral part of networking and "time spent on networking", "frequency of communication with actual and potential network partners" are the measures to define network activity dimension. Besides, Brand et al. (2018) define relational characteristics of networks as reflecting the nature of interactions and it is mentioned that frequent interactions with network partners indicate strong ties and strong ties are associated with higher network activity. As a result, network activity is used as another dimension to measure network characteristics and defined by the frequency of communication with actual and potential network partners. Because the scale for network activity is formative, the sum of the values is used for measuring network activity of a firm.

3.3.2.3. Network density

Both Ostgaard and Birley (1994) and Witt (2004) mention network density as a dimension of network structure. Network density refers to the diversity of the entrepreneur's network which implies that as the network partners get diverse and the number of direct relations between network partners of the entrepreneur increase, the density of the network grows. So, network density is one of the dimensions to measure network characteristics, which is captured by defining "the number of partners, among the first five closest ones, who do not know one of the others" and "the number of people the entrepreneur knows among those five closest partners".

3.3.2.4. Network intensity

Network intensity is also stated as one of the structural dimensions of networks and it is defined as an indicator of the strength of the network ties (Ostgaard and Birley,

1994). Network intensity is measured by the "total number of years the entrepreneur has known his/her five important network partners" and "how frequently the entrepreneur communicates with those five in a week". Because the scales are formative again, average across the variables is used for measuring network intensity.

3.3.2.5. Content of network exchanges

As stated in Table 3, the benefits gained through network exchanges constitute another aspect of network characteristic. Brand et al. (2018) define the benefits as resource characteristics which reflect the exchange of knowledge and expertise to improve business performance and measures it by partner quality. On the other hand, Witt (2014) considers new information and support provided by network partners as benefits received from the network. Ostgaard and Birley (1994) argue that network exchanges represent the quality of a network by enhancing competitive strategy, process, and product development of the firm. In general, information gathering, getting advice, service/product development, creating investment opportunities, and enhancing marketing are defined as the content of network exchanges (Ostgaard and Birley, 1994). As a result, in this study, the items measured as the content of network exchanges are gathering market and competitor information, access to distribution channels, word-of-mouth advertising, getting general advice, product/service development, and access to financial resources. Because the scale is formative, the summative score is used to measure network exchanges.

In conclusion, the thesis intends to investigate whether network characteristics have impact on entrepreneurial marketing (EM) (see. Figure 1). The scale used to measure EM consists of seven dimensions: opportunity orientation, proactiveness, innovation orientation, customer orientation, risk management, resource orientation, and value orientation. Network characteristics scale has five dimensions: propensity to network, network activity, network density, network intensity, and content of network exchanges.

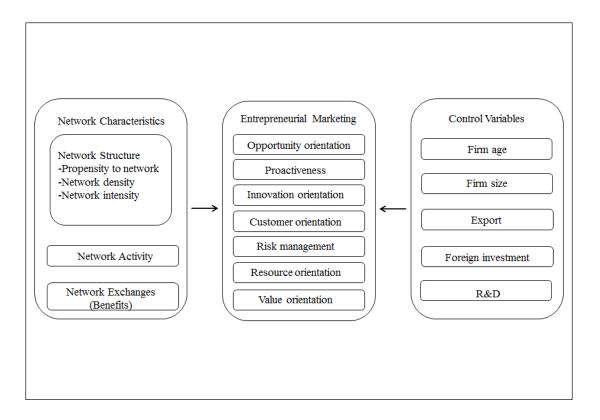


Figure 1. Proposed Model

3.3.3. Control Variables

Besides the dependent and independent variables, the model in this study includes control variables which are firm age, firm size, exports, foreign investment, and R&D. Control variables are not the primary focus of a research but are extraneous factors that may affect the results (Salkind, 2012). The impact of control variables should either be controlled or eliminated otherwise they might bias findings regarding impact of independent variables. Therefore, in this model the variables which are expected to influence EM practices of firms other than networking characteristics are defined as control variables.

3.3.3.1. Firm age

Firm age represents the time between the establishment of a firm and present time (Kieschnick and Moussawi, 2017). Some studies claim that EM activities are affected by firm age and Kilenthong et al. (2015) state three reasons why firm age might have an impact on EM. Firstly, the flexible structures of young firms make

them more innovative and opportunity oriented than older ones. Secondly, because young firms do not have well-defined knowledge management procedures, they are expected to be more proactive, creative, and customer-oriented. Thirdly, younger firms engage in networking activities more than old ones, so they get important market information directly and leverage their resources. Based on these claims firm age is expected to have an impact on EM practices of firms and measured as the time between 2019 and the foundation year of the firm. The firms that were established in 2019 were considered as 1-year-old.

3.3.3.2. Firm size

Measures of firm size can vary from capital investment to production level, from plant size to number of employees in the firm (Dang et al., 2017). In this study number of the employees is used as the measure of firm size because the study is on SMEs and they are classified in size according to the number of employees they have. Firm size is stated as impacting EM practices of the firms in the literature (Jones and Rowley, 2011; Gilmore, 2011). Jones and Rowley (2011) claims that market orientation, entrepreneurial orientation, customer orientation, and innovation orientation which are the dimensions of EM can vary based on the firm size. In addition, Gilmore (2011) says that EM is more favorable for small and medium sized firms rather than large ones because of the availability of resources and operational structures.

3.3.3.3. Exports

Exporting is seen as a quick way of business growth and believed to be performed by SMEs (Anil et al., 2016). Additionally, it is claimed that SMEs can gain access to new opportunities and markets through exporting while spreading their risks (Hilmersson, 2013). Exporting also enables SMEs to reach new technologies and helps foster innovation (Filatotchev et al., 2009). Because exporting is stated as having impact on entrepreneurial and marketing practices of firms, it is defined as a control variable and operationalized as a dummy variable that takes the value 1 if the firm engages in exporting activity and 0 otherwise.

3.3.3.4. Foreign investment

Foreign investment is defined as the investments which are made by a country's residents to have ownership stakes in another country's companies and assets (Rai and Bhanumurthy, 2004). Foreign shareholders can have a voice in marketing decisions of firms. That is why the presence of foreign investment is measured by a dummy variable that takes the value 1 if a certain share of a firm is owned by a foreign company and 0 otherwise.

3.3.3.5. Research and development (R&D)

R&D refers to all kind of activities to innovate, develop new products/services or improve existing ones (Rogers, 1998). R&D is taken as one of the most important engines of business growth (Okamura et al., 2019). However, to foster business growth the results of R&D should be marketed successfully (Rogers, 1998). Therefore, R&D may be related to EM of firms.

3.4. The Research Design and Analysis

The research design of the study is cross-sectional which is defined as proper for the studies which intend to find out the "prevalence of a phenomenon, situation, problem, attitude or issue, by taking a cross-section of the population" (Kumar, 2011, p .107). As is the case for cross-sectional data, firms in the sample were observed at a single point in time.

In this study relational hypotheses are tested to examine how networking characteristics relate to the dimensions of EM as presented in Figure 1 above. To test these relational hypotheses Structural Equation Modeling (SEM) was used. SEM is used to test theoretical models which examine various hypotheses (Schumacker and Lomax, 2004). The hypotheses of "how sets of variables define constructs and how these constructs are related to each other" can be investigated through SEM (p. 2). SEM uses observed variables to identify the relationship between unobserved constructs (Kline, 2016). SEM has been a widely used statistical tool in social sciences especially since 1980s thanks to its flexibility and unique capabilities

(Tomarken and Waller, 2004). By using SEM very complex models can be tested as well (Schumacker and Lomax, 2004). In addition, various analyses can be conducted through SEM such as regression, path analysis, or confirmatory factor analysis (CFA) (Tomarken and Waller, 2004).

3.4.1. Validity and Reliability Analysis

In this study, two scales are used which are the EM scale and networking characteristics scale. These two vary in terms of the nature of measures used in the scales that means EM scale consists of reflective items whereas networking characteristics scale includes formative ones.

Reflective and formative measures differ both theoretically and empirically (Edwards, 2011; Coltman et al, 2008). Theoretically, nature of construct, direction of causality between items and latent variable, and characteristics of items used to measure the construct varies between reflective and formative measures. Besides, empirically, item intercorrelation, item relationship with construct, and measurement error and collinearity are the aspects that separate reflective measures from formative ones (Coltman et al, 2008). The table below (Table 4) indicates in detail how these two type measures differ theoretically and empirically.

As a result of the differences between reflective and formative measures, validity and reliability assessment of two scales are not same. Initially, since the items of the EM scale are reflective validity and reliability of the scale is assessed through factor analysis and Cronbach alpha whilst these assessments are not feasible for networking characteristics scale because the items are formative.

Comparison of Reflective and Formative Measures

Table 4

	arison of Reflective and	Reflective	Formative
	Theoretically		
1.	Nature of construct	Exists independent of measures used	Combination of its indicators
2.	Direction of causality	From construct to items	From items to construct
3.	Characteristics of items Empirically	Manifested by the construct	Define the construct
1.	Item intercorrelation	High positive intercorrelation	Any pattern of intercorrelation
2.	Item relationship w/ construct	Correspondence between items and construct	Correspondence between items and construct may not exist
3.	Measurement error and collinearity	Error term in items can be identified	Error term in items cannot be identified

Adapted from Coltman et al. 2008, Table 1. A framework for assessing reflective and formative models: theoretical and empirical considerations, p.1252

3.4.2. Formative Scale of Networking Characteristics

Unlike the EM scale, the validity and reliability of networking characteristics scale cannot be assessed by factor analysis and Cronbach alpha because the scale is formative. Formative indicators are not necessarily strongly correlated like the reflective ones. The correlation between indicators of formative scales might be zero as well. So, internal consistency of variables does not make sense (Diamantopoulos et al, 2008). Similarly, validity assessment of formative measures is claimed to be useless because the correspondence between a construct and its measures does not necessarily exist. Although alternative ways of testing validity of formative measures are suggested, each of them has some drawbacks in terms of interpretation.

Therefore, assessing validity of formative measures is not justified (Edwards, 2011; Coltman et al, 2008). Consequently, deciding the set of distinct components based on expert judgement is enough for formative measures (Rossiter, 2002, as cited in Diamantopoulos et al., 2008).

Based on the points mentioned, validity and reliability assessment of network characteristics scale is not carried out. The dimensions of this construct are network structure (constituted by propensity to network, network density and network intensity), network activity, and network exchanges (benefits). Propensity to network has items measuring number of memberships in social and professional associations. These two variables need not to be strongly correlated as some actors may choose to be socially connected while others are more professionally oriented. Nevertheless, a composite of both items can be considered as a measure of propensity to network. Likewise, network density comprises items regarding network closure and extend to which network partners fulfill a bridging role. Finally, network intensity captures duration of acquaintance and frequency of contact with network partners which once again need not to be correlated. Network activity and exchanges are also made up of heterogeneous items such as contacts with customers or suppliers regarding the former and collecting market and customer information regarding the latter.

CHAPTER 4

RESULTS

4.1. Sample Characteristics

This section describes sample characteristics. Table 5 shows general profile of the respondent firms. The results indicate that more than 75% of the firms are between 1 and 10 years old while less than 5% of the firms are older than 30 which means most firms are relatively young. Maximum number of employees in the sample firms can be 250 based on the definition of SMEs. It is found that more than 65% of the respondent firms have less than 10 workers which are labeled as micro, almost 28% of them are small (number of workers between 10 and 49) and only 5% of them are medium-sized (number of workers between 50 and 259). Only six firms have foreign shareholders. On the other hand, almost 30% of the firms engage in exporting. The results also show that R&D and innovation have an essential role for the firms. More than 95% of them conduct R&D activities while almost 90% of them declare that they engage in innovation activities.

4.2. Validity and Reliability of the EM Scale

Because the items of the EM scale which is used in this study are compiled from various sources (see Table 2), validity of the scale has not been tested before. On the other hand, in Turkey, a similar scale was used by Bulut et al. (2013). However, that scale is not as comprehensive as the one used in this study and has some problematic items as well. Although in the beginning of the study proactive orientation, risk orientation, customer orientation, innovation orientation, resource orientation, value orientation, and opportunity orientation are defined as the seven dimensions for measuring EM, as a result of the factor analysis it is found that customer orientation

Profile of the Respondent Firms

Table 5

· · · · ·	Frequency	Percentage
Firm Age		
1-10 years	106	75,71%
11-30 years	29	20,71%
Older than 30 years	5	3,57%
Firm Size (number of		
employees)		
1-9 (micro)	93	66,43%
10-49 (small)	40	28,57%
50-249 (medium)	7	5,00%
Foreign Investment		
Yes	6	4,29%
No	134	95,71%
Export		
Yes	38	27,14%
No	102	72,86%
R&D		
Yes	134	95,71%
No	6	4,29%
Innovation		
Yes	124	88,57%
No	16	11,43%

and innovation orientation items converge on a common factor, which was named as "customer-oriented innovativeness". Consequently, all of the points mentioned in this chapter make it necessary to assess validity and reliability of the EM scale.

Initially, Exploratory Factor Analysis (EFA) was conducted on the EM scale requesting a seven-factor solution (see Table 6). It was found that items of opportunity orientation, proactiveness, and innovation orientation did not load on their respective factors. Therefore, these items were subjected to 3-factor and 2-factor exploratory analyses and these models were not supported as well. Finally, as a result of 1-factor exploratory analysis it was found that these three dimensions of EM converged on a single factor (Table 7). Therefore, a new dimension labeled as

"future orientation" as a combination of opportunity orientation, proactiveness, and innovation orientation was generated. It was labeled "future orientation" because items reflect how the enterprise manages the changes likely to happen in the business environment. In the literature, opportunity orientation, proactiveness, and innovation orientation are presented as various ways of coping with highly volatile and uncertain business context to be able to gain and maintain competitive advantage in the future (Morris et al. 2002, Kilenthong et al. 2015, Ahmadi and O'Cass 2016). Therefore, they are combined and defined as "future orientation" of SMEs. Furthermore, the items that have factor loadings greater than .60 were used for "future orientation" in order to ensure strong representation. So, the new dimension of EM was represented by 11 items (See Table 7). In addition, it is seen that some of the items are not good enough for explaining the intended dimension. Factor loadings show the correlation between the item and the underlying factor. In other words, the loadings indicate how good the item is in representing the factor. Generally, it is accepted that the items which have factor loadings higher than .50 are acceptable (Ellis, 2017; Samuels, 2017; Matsunaga, 2009). So, the ones that have factor loadings greater than .50 were retained and others were omitted. Table 8 shows the remaining items for each dimension of EM. As a result, 5 dimensions (27 items) of EM were retained, which are future orientation (11 items), customer orientation (4 items), risk management (4 items), resource orientation (3 items), and value orientation (5 items).

Table 6

EFA on EM Scale (Initial 7-factor exploratory analysis with 46 items) Factor2 Variable Factor1 Factor3 Factor4 Factor5 Factor6 Factor7 0.3292 opportunity1 opportunity2 0.4250 0.3574 opportunity3 opportunity4 0.6661 opportunity5 0.5126 0.5291 pro1 0.6936 pro2 0.6987 pro3 0.3339 pro4 pro5 0.5038 pro6 0.6309 pro7 0.3875 0.4937 innovation1 0.4041 0.3182 0.4904 innovation2 0.6740 innovation3 0.7590 0.4505 0.5080 innovation4 0.5183 innovation5 0.3588 innovation6 0.4446 0.3724 customer1 0.6196 customer2 0.7157 customer3 0.4723* customer4 0.3525 0.3383 customer5 customer6 0.5666 customer7 0.5345 risk1 0.4733 0.3247 risk2 0.6515 risk3 0.8046 0.8256 risk4 0.4176 risk5 risk6 0.7394 0.5982 resource1 resource2 0.6771 0.3116 resource3 0.7315 resource4 0.4150 0.4666 0.3359 0.3340 resource5 0.5521 resource6 resource7 0.6331 value1 0.7434 0.6316 value2 0.8403 value3 value4 0.6351 value5 0.7536 0.5194 value6 0.4602 value7 0.6559 value8 0.3081

^{*} Retained because there is no cross-loading and close to .50

The ones that are marked in gray are retained

Table 7

EFA with Proactiveness, Opportunity and Innovation Orientation Items (1-factor solution)

Variable	Factor
opportunity1	0.6541
opportunity2	0.6142
opportunity3	0.6060
opportunity4	0.5289
opportunity5	0.5622
pro1	0.6885
pro2	0.4467
pro3	0.4180
pro4	0.4942
pro5	0.6441
pro6	0.6789
pro7	0.6216
innovation1	0.6680
innovation2	0.6772
innovation3	0.6204
innovation4	0.6508
innovation5	0.5494
innovation6	0.5777

The ones that are marked in gray are retained

After this, in order to test reliability, Cronbach's alpha score of each dimension was calculated (see Table 8).

Table 8

Cronbach Alphas of EM Dimensions

	Future orientation	Customer orientation	Risk management	Resource orientation	Value orientation
Scale reliability coefficient	.869	.695	.781	.609	.853

According to literature acceptable values of Cronbach alpha are between .70 and .95 (Vale et al., 1997; Tavakol and Dennick, 2001; George and Mallery, 2003).

Therefore, in this study, the factors with Cronbach alpha that is equal to and greater than .70 are retained. As the results imply, the scale of resource orientation does not display satisfactory reliability. Therefore, resource orientation dimension was omitted from further analyses and the remaining ones which are future orientation, customer orientation, risk management, and value orientation were used as dimensions of EM in this thesis.

4.3. Descriptive Statistics

To begin with, Table 9 shows how variables in the structural model are measured. In addition, Table 10 reports the descriptive statistics of independent, dependent, and control variables. First four independent variables indicate the latent variable of network structure in the model. Network structure shows how favorable the network of SMEs is. Findings reveal that SMEs in the sample have almost 66 social and professional network links on average. The reason why the maximum number of network links is so high (e.g., 1153) might be that social media platforms are taken in to account by the respondents and a similar explanation may hold for the high value of the standard deviation. On the other hand, network density indicates that partners in the network generally know each other and so partners take on a bridging role in the network because on average less than two of the closest partners do not know each other in SMEs' network. In addition, the duration of acquaintance in the network seems to be between 3-5 years on average and it is seen that SMEs in the study contact with network partners once a week on average. In addition, SMEs in the sample engage in networking actively and get benefit via the networks.

In EM (dependent variable), all variables' means are greater than 3 and the standard deviations are not high. So, it can be concluded that the SMEs in the sample seem to adopt EM practices consciously or unconsciously as argued based on the literature in Chapter 2. Besides, they are future, customer, and value oriented whilst they consider risk management as important as well. On the other hand, risk management seems like having a different trend than other three dimensions of EM. Future, customer and value orientations of a firm may be more directly related to EM while risk

management can alter easily based on some other external factors such as existence of foreign shareholders, macroeconomic conditions and rapid technological change.

In this study, there are five control variables as stated before. Findings reveal that average firm age is 8 whilst average number of employees in the firms is 13. Both age and size seem to be highly skewed. On the other hand, more than 95% of the firms engage in R&D. Although some believe that SMEs are reluctant to do R&D because of resource constraints, the findings reveal that most of the SMEs in the sample do R&D actively (Okamura, 2019). Actually, being at one of the TDZs might be a reason for high R&D activity, because TDZs are expected to enable effective networking and access to various resources, information, and opportunities which provide network exchanges (Ostgaard and Birley, 1994). Moreover, according to law of TDZs, firms are expected to be involved in R&D and innovation activities which explain high averages of involvement in such activities. Even though exporting is stated as one of the most effective ways of business growth especially for SMEs (Anil et al., 2016), only 27% of the firms in the sample seem to be engaged with exporting. On the other hand, less than 5% of the firms have foreign shareholders. Since foreign shareholders can have voice on the decisions of firms, it is important to include this information. For example, future, customer, and value orientations of a firm might be affected by foreign shareholders as well as the risk management attitude.

Table 9

Measurement of the Variables in Structural Model

Theusurement of the va	Measurement of the Variable	Reference to Survey Questionnaire
Independent Variables		
Propensity to network	As total number of the network partners of the entrepreneurs	Question 3.1
Network density	As the average of the values	Question 3.3
Network intensity1	As the average of the values	Question 3.4.1
Network intensity2	As the average of the values	Question 3.4.2
Network activity	As sum of the values	Question 3.2
Network exchanges	As sum of the values	Question 3.5
Dependent Variables		
Future orientation	Defined as a combination of opportunity orientation, proactiveness and innovation orientation as a result of EFA (see section 4.2)	Questions 2.1, 2.2, 2.3
Customer orientation	By 5-point Likert scale (average value of 7 items)	Question 2.4
Risk management	By 5-point Likert scale (average value of 6 items)	Question 2.5
Value orientation	By 5-point Likert scale (average value of 8 items)	Question 2.7
Control Variables		
Firm age	the time between the establishment of a firm and present time	Question 1.4
Firm size	as the number of employees in the firm	Question 1.6
Export	1-Yes/0-No	Question 1.10
Foreign investment	1-Yes/0-No	Question 1.5
R&D	1-Yes/0-No	Question 4.1

Table 10

Descriptive Statistics of Variables

	Mean	Std. Dev.	Min	Max
Independent Variables				
Propensity to network	65.621	177.421	0	1153
Network density	1.843	1.456	0	5
Network intensity1	2.848	1.144	1	5
Network intensity2	2.306	1.080	1	5
Network activity	16.536	4.367	5	25
Network exchanges	26.193	5.359	7	35
Dependent Variables				
Future orientation	4.298	.535	1.4	5
Customer orientation	4.037	.650	1.5	5
Risk management	3.391	.804	1	5
Value orientation	4.163	.658	1.6	5
Control Variables				
Firm age	8.328	9.399	1	75
Firm size	13.464	23.771	1	150
Export	.271	.446	0	1
Foreign investment	.043	.203	0	1
R&D	.957	.203	0	1

Table 11

\mathcal{C}^{0}	Correlation Matrix for	for the Variables	riable	S												
		1	2	3	4	5	9	7	∞	6	10	11	12	13	14	15
П	Propensity to network	1,00														
7	Network density	-0,10	1,00													
3	Network intensity1	90,0	-0,22	1,00												
4	Network intensity2	0,14	-0,13	0,40	1,00											
5	Network activity	0,05	0,00	90,0	0,42	1,00										
9	Network exchanges	-0,01	0,15	-0,02	0,30	0,38	1,00									
7	Future orientation	0,09	0,08	-0,11	0,13	0,39	0,37	1,00								
∞	Customer orientation	0,10	0,01	0,02	0,14	0,42	0,33	0,55	1,00							
6	9 Risk management	0,14	0,16	-0,04	0,18	0,18	0,12	0,17	0,16	1,00						
10	10 Value orientation	0,09	0,00	0,02	0,22	0,35	0,32	0,62	0,49	0,09	1,00					
11	11 Firm age	0,07	-0,13	0,31	90,0	0,07	-0,01	0,07	0,04	-0,02	0,17	1,00				
12	12 Firm size	-0,04	90,0	0,14	0,05	0,15	0,08	0,17	0,12	90,0	0,22	0,50	1,00			
13	13 Export	0,05	-0,11	0,10	0,00	0,00	-0,05	-0,08	-0,09	-0,07	90,0	0,25	0,13	1,00		
14	14 Foreign investment	-0,06	-0,05	-0,05	-0,07	0,08	-0,03	0,01	90,0	-0,29	0,01	0,00	0,08	0,19	1,00	
15	15 R&D	0,07	0,03	-0,08	-0,03	-0,01	-0,03	0,05	-0,07	-0,01	0,03	90,0	0,08	0,13	0,04	1,00

Correlations between variables in the structural model are depicted in Table 11. Inspection of this table reveals that correlation coefficients are mostly small and only some of the correlations are moderately strong. Therefore, collinearity problem in estimations regarding the structural model are considered unlikely.

4.4. Structural Model

As a result of validity and reliability tests, the dimensions to measure dependent and independent variables are identified. Figure 2 presents the structural model of the study where the bold lines indicate significant effects which are displayed in Table 13. Because the literature assumes that network characteristics impact EM, the model has been structured accordingly. However, one should keep in mind that EM dimensions might affect network characteristics as well. In other words, the causality may also run from EM to network characteristics.

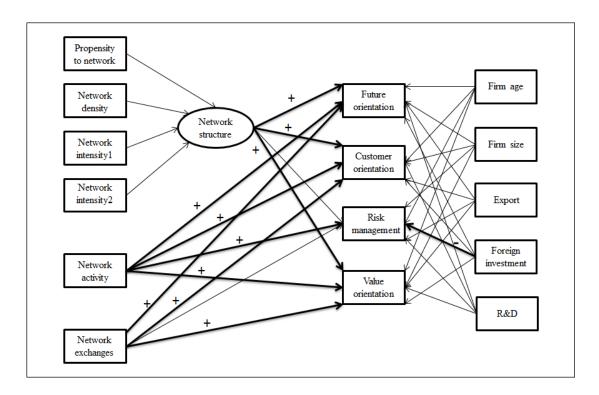


Figure 2. Structural Model

In order to achieve model identification (successful execution of estimations), the variance of the error term for the latent variable "structure" was constrained to "1". An alternative would be to constrain one of the regression coefficients regarding the relationship between structure and dependent variables however that would make testing one of the relationships impossible. This is why the former strategy was implemented.

Goodness of fit statistics regarding the structural model are presented in Table 12. The table shows that the model fits the data exceptionally well. Most importantly, CFI and TLI are above the suggested thresholds of .95 and RMSEA is below .05 (see Schreiber et al, 2006).

Table 12

Goodness of Fit Statistics for Structural Model

Model	χ^2	Degrees of freedom	CFI	TLI	RMSEA
Structural	16.224	14	.987	.955	.034
Model	10.224	14	.907	.933	.034

Note: CFI=Comparative Fit Index, TLI=Tucker-Lewis Index, RMSEA=Root Mean Squared Error of Approximation

Coefficient estimates from the structural model are presented in Table 13. As the model has four dependent variables, the coefficients describing the strength of the relationship between dependent and independent or control variables are presented in separate columns with dependent variable names as column labels.

Findings presented in Table 13 reveal that network structure relates positively and statistically significantly to future, customer, and value orientation (β =.367, p<.001; β =.311, p<.001; β =.377, p<.001, respectively).

The findings show that network activity also has a statistically significant positive relationship with future, customer, and value orientation (β =.035, p<.001; β =.049, p<.001; β =.037, p<.01, respectively). In addition, network activity relates positively

and statistically significantly to risk management as well (β =.033, p<.05). So, it is seen that network activity has an impact on all of the dimensions of EM which are defined in this study.

Besides, the findings reveal that the variable network exchanges (benefits) relates positively and statistically significantly to future, customer, and value orientation (β =.026, p<.01; β =.024, p<.05; β =.027, p<.05, respectively).

Table 13

Coefficient Estimates from the Structural Model **Dependent Variables Independent** Risk Future Customer Value Variables Orientation Orientation Management Orientation .367*** .377*** .311*** .083 Network Structure Independent Variables (.046)(.053)(.071)(.056).035*** .049*** .037** .033* Network Activity (.010)(.012)(.016)(.013)**Network Exchanges** .026** .024* .027** .005 (Benefits) (800.)(.010)(.013)(.010).003 .002 -.007 .007 Firm Age (.005)(.006)(.008)(.006)**Control Variables** .002 .002 .003 .003 Firm Size (.002)(.002)(.003)(.002)-.000 -.113 -.139 .051 Export (.093)(.115)(.150)(.117).012 .159 -1.235*** -.064 Foreign Investment (.199)(.245)(.320)(.251).218 .018 .024 .126 R&D (.240)(.315)(.246)(.196)

Note: Numbers in parentheses are standard errors

The results also show that control variables have no impact on the dimensions of EM except the relationship between foreign shareholder and risk management. The findings reveal that foreign shareholder relates negatively and statistically significantly to the risk management dimension of EM (β =-1.235, p<.001).

^{*}p<.05, **p<.01, ***p<.001

The findings support the expectations regarding relationships between networking characteristics and EM. Based on the literature review in chapter 2, it is expected that networking characteristics have impact on EM. However, to our knowledge there is no study that intends to explore this impact emprically. Thus the main contribution of this thesis is to empirically show that networking characteristics have statistically significant effect on EM.

CHAPTER 5

DISCUSSION

This chapter begins with conceptual implications of the findings. Then, some practical implications for SMEs and entrepreneurs are discussed. Next, policy implications for the government are discussed. Finally, the limitations of this study and recommendations for future research are presented.

5.1. Conceptual Implications of the Findings

Based on the literature, it is stated that EM emerges as a new way of marketing because it is necessary to adjust marketing practices to the changing business context of contemporary economic era. In addition, networking is frequently presented as an essential asset for EM although in which ways it impacts EM are not investigated empirically. Thus, this study examines how network characteristics affect EM in SMEs. To do this, a quantitative research is conducted with data from SMEs in TDZs in Ankara. The data were collected through online survey and analyzed by using Structural Equation Modeling (SEM) in Stata. The results reveal that networking characteristics have a significant impact on EM practices of SMEs. Table 13 shows how networking characteristics specifically affect various dimensions of EM.

In this study, networking characteristics are measured through three dimensions which are network structure, network activity, and network exchanges. In addition, four dimensions that are used for measuring EM are future orientation, customer orientation, risk management, and value orientation.

To begin with, network structure is related positively to three of the EM dimensions. It means, the structure of network of SMEs has an impact on EM practices. Kılıçer (2013) also emphasize that network size, closure, duration, and strength of the relations are some of the factors that are expected to impact how the networks

contribute to EM activities of SMEs and network structure should be considered as a crucial aspect while investigating the impact of networks on EM. The findings of the study support this argument. Based on the findings, as the network structure becomes more favorable in terms of size, closure, duration of acquaintance and strength of ties; future, customer and value orientation are expected to be affected positively. On the other hand, the relationship between network structure and risk management is not statistically significant, so network structure has no impact on risk management dimension of EM based on the data analyzed in this study.

Furthermore, network activity is related to EM and as the network interactions among the partners increase, all dimensions of EM increase. Network activity indicates the interactions and contacts with existing or potential network partners. The partners might be suppliers, customers, investors, competitors, friends, or family members. Gilmore (2011) states that although the composition of network partners is expected to vary based on the development stage of SMEs, network activity is an essential tool for EM. It is also emphasized that network activity should be higher at younger firms because they need to expand their customer base and market share by defining opportunities, taking risks, and creating value (Kilenthong et al, 2014). The literature assumes a positive relation between network activity and EM. The findings also support this assumption because it is seen that as the network activity increases all EM dimensions are affected positively (Table 13).

In addition, network exchanges also reveal a positive correlation with future, customer and value orientation dimensions. In this study, network exchanges are defined as gathering information and advice, access to new markets, communicate product and services, product development, and financial support. Stokes (2000) claims that gathering information through networks is one of the constructing tools of EM. Stokes (2000) also emphasizes that networks are the ways of defining new opportunities for SMEs. Collinson and Shaw (2001) indicate that networking is one of the supporting tools of EM because it makes possible to get information, advice, and access to restricted resources. Franco et al. (2014) imply that networking is the way of communicating new products and services, so it is one of the key aspects EM

in SMEs. Validating such claims, it is found that the exchanges through networks have positive effect on future, customer, and value orientation dimensions of EM. However, network exchanges have no significant impact on risk management according to the results of this study.

It is known that there might be some other factors, which are expected to affect EM besides networking. In this study, these factors are defined as firm age, firm size, exporting, foreign investment, and R&D and added into the model as control variables. The findings in Table 13 show that control variables generally have no statistically significant impact on the dimensions of EM except the relationship between foreign shareholders and risk management. This might be because of the reason that there is very little variation in the control variables as Table 5 shows. The results indicate that risk management dimension is negatively affected by foreign investment. In other words, as when foreign investment is present, risktaking attitude is lower in SMEs. Risk management has a different pattern than other dimensions of EM. Whilst the findings reveal that all of the aspects of network characteristics positively relate to other dimensions of EM, only network activity seems to affect risk management. On the other hand, while none of the control variables have impact on other dimensions of EM, foreign investment relates negatively to risk management. Actually, it is not surprising that the SMEs, which have foreign shareholders, exhibit risk-averse behavior. According to Kim (2014), foreign investors force the firms to be more conservative and avoid risk-taking behavior unless there is high potential of growth. In addition, it is widely accepted that investors seek high returns with minimum risk (Rai and Bhanumurthy, 2004).

5.2. Practical Implications for SMEs and Entrepreneurs

The findings of this study reveal that networking characteristics have statistically significant impact on EM practices of SMEs. It is better SMEs identify a networking strategy which is complementary to their marketing strategy to be able to manage their marketing activities more effectively and efficiently. This section aims to make recommendations for SMEs to manage their networking activities.

In this study, network structure, network activity and network exchanges are stated as the dimensions of networking. Thus, the suggestions for SMEs are classified as structure-based, activity-based, and exchange-based.

To begin with, SMEs could have a networking strategy and the strategy should define clearly how their networking characteristics would be in terms of structural features, networking activities, and network exchanges.

Firstly, the networking strategy of SMEs should take in to account structure-based features of networking which are network size, density, and intensity. Since the findings of the study reveal that as networks get more favorable in terms of structure, all dimensions of EM except risk management are affected positively. So, firms could figure out the ways of making their network structure more favorable to be able to leverage marketing activities. In terms of network size; the firms could utilize social media and digital technologies to increase the links they have nationally and internationally because it has been argued that digital technologies foster networking capabilities of SMEs (Cenamor et al., 2019). For example, The European Digital SME Alliance is the largest network of ICT SMEs in Europe and the partners are able to enhance their networks through digital platforms. They could figure out the ways of having memberships in some social and professional organizations to have new linkages. In addition, it is known that participating voluntary associations, attending fairs and exhibitions are other ways of boosting network size (Thrikawala, 2011). The entrepreneur could also keep track of other activities, which are related to business like conferences, seminars, meetups etc. In terms of density; the entrepreneur could be able to leverage bridging role of their existing network partners by asking them to introduce himself/herself to others. In addition, the entrepreneur could be a connector and facilitate the meeting of others in his/her network as it is generally mentioned that network density is crucial to define the structure of a network as favorable (Carson et al., 2004). In terms of intensity; the entrepreneur could have an agenda for being in touch with network partners on a regular base because studies reveal that network intensity is an essential aspect of networking in terms of firm performance (Seck and Mazzarol, 2006). Also, it is important to maintain the relationship for a long time so the entrepreneur could invest in the relationship with existing network partners through communicating with them on a regular basis. Some activities might be arranged like coffee breaks or dinners.

Secondly, network activities with the existing and potential partners could be planned carefully by SMEs because the findings show that network activity positively and significantly relates to all dimensions of EM. In other words, as SMEs engage in networking actively, future orientation, customer orientation, value orientation, and risk management are affected positively. So, SMEs could consider being active in networking with existing and potential partners as suggested by several studies (Carson et al., 2004; Johnson and Scholes 2005; Thrikawala, 2011). To begin with, customers are critical for each and every business because they are the means of gaining profit. Creating value for customers and communicating it successfully can be achieved through networking actively with customers (Carson et al., 2004). The firms could ask the opinions of their customers on a regular basis and consider these opinions when making decisions. Furthermore, customer relationship management (CRM) and after sale services might be seen as some tools of networking (Zain et al., 2006). Although separate departments cannot be constituted for CRM or after sales services at SMEs, social media can be actively used for these purposes. On the other hand, for potential customers it is essential to be transparent and communicate frequently about production and quality standards of the firm. Secondly, other important network partners of SMEs are suppliers. SMEs could be connected with the suppliers effectively (Holm et al, 1999). So, having a digital portal through which suppliers and SMEs share information and follow transactions in real time might be an effective way of connecting. Supplier relationship management (SRM) might be a tool of networking with suppliers. Through SRM, SMEs can have trust-based and long-lasting relations with the suppliers besides reducing costs and having access to new resources (Österle et al., 2001). Thirdly, investors are also essential network partners for SMEs. To have an active networking with investors some organizations can be used such as chambers of commerce, accelerator and angel investors' networks. In addition, crowdfunding platforms might be used to have relations with investors (Peris-Ortiz and Ferreira, 2017). At last but not least, competitors could not be neglected in networking because access to information and some resources might be gained through networking with competitors. As believed by many SMEs, being together makes them stronger, so the firms in the same sector could have a platform and come together on a regular basis (Gilmore at al., 2001). This might facilitate information flow and support innovation and business growth as whole. On the other hand, the firms might engage in joint purchasing or marketing activities to gain cost advantage or minimize expenses (Chetty and Wilson, 2003).

Thirdly, network exchanges should be defined and managed carefully by SMEs to be able to utilize the impact of networking on EM. The findings of this study present that network exchanges also positively relates to future, customer and value orientation dimensions of EM. So, improving network exchanges would impact EM of the firm positively. Initially, since networking enables SMEs to get information and advice it is a way of business development (Collinson and Shaw, 2001). SMEs could have networks, which support the exchange of useful information. To be able to gather information from network partners, SMEs could be willing to give as well and remember that it is a transaction not a favor. Also, networking might facilitate access to new markets (Zain et al., 2006). Having international network partners is a way to reach new markets. For this purpose, SMEs could follow international events such as fairs and exhibitions and take advantage of them for enhancing their networks internationally. Learning new methods and technologies might be another benefit of networking through which product and service development can be provided. SMEs could be eager to learn from their partners and not hesitate to ask for it directly. Again, joining fairs and exhibitions might give the opportunity to learn new methods and technologies. In addition, one of the most crucial benefits of networking for SMEs is access to financial capital (Martinez and Aldrich, 2011). For financial exchanges, networking with government agencies like KOSGEB and TÜBİTAK is essential for SMEs. SMEs could attend the events organized by these entities to be informed about the funds and other supports they offer. Finally, the firms could look for ways developing networks with universities because information flow from universities might give new opportunities for development (Ortiz and Ferreira, 2017)

5.3. Policy Implications for Government

Networking of SMEs can also be facilitated by the government to foster innovative and entrepreneurial practices. Government can use various types of policy instruments for networking. According to Edquist (2013), there are three main categories of policy instruments, which are regulatory, financial, and soft instruments.

Regulatory instruments aim to put all interactions in order by using legal tools. Financial ones consist of any kind of economic support and soft instruments are associated with being a coordinator and facilitator rather than being a provider and regulator as a government (Edquist, 2013).

To begin with, some regulatory and financial policy instruments should be used by the government to foster networking of SMEs. For example, TDZs should be designed physically to enable networking of the tenant firms. The policy makers may think of obligatory university-industry partnership (i.e., strategically forced networking) to be able apply for some programs that gives financial support. Interfirm partnerships might be fostered through some financial incentives in specific sectors such as tax reductions and easy access to bank loans as a result of having a partnership. Physical and intellectual capabilities of universities should be enhanced financially and legally to make them strong partners of SMEs, for instance. To foster foreign linkages, government might define some regulations for specific sectors. For example, it might be obligatory for foreign firms to have a Turkish SME as partner to be able to operate in Turkey in some specific sectors, so technology transfer and spillover effects might occur as well as networking behavior is enhanced.

Although regulatory and financial instruments are expected to make difference, especially soft instruments for facilitating networking of SMEs are discussed in this chapter because it is believed that these kinds of instruments can make greater difference if they are used properly (Altenburg and Meyer-Stamer, 1999; Edquist,

2013). In addition, it is believed that the government should have a coordinator and facilitator role for fostering networking activities of the firms in Turkey. Initially, universities should be trained for being effective partners of SMEs in Turkey. Clustering of firms in the same sector and geographical area should also be encouraged through some non-financial incentives such as training programs. Besides, training programs should aim to increase capabilities of firms and foster business growth. Project fairs and exhibitions should be arranged regularly and sector-specifically. In addition, having network brokers as catalysts and moderators might be a good way of enhancing networking. Network brokers help firms for information flow and link them to supporting institutions (Altenburg and Meyer-Stamer, 1999). Also, special contracts between a specific number of SMEs might be encouraged. The contracts should be facilitated by a network broker at the beginning and some subsidies should be offered for encouraging them to act jointly in business activities. A mechanism for information flow and consultation between SMEs and government agencies should be facilitated by decreasing bureaucracy and regulations. Some local strategies for networking should be initiated through the involvement of local business community and local government agencies and regular meetings should be arranged locally by government to get the firms together and help them exchange experiences.

5.4. Limitations and Future Research

As mentioned before, two different scales are used in this study for measuring EM and networking characteristics. To begin with, the dimensions of EM scale were adopted from Morris et al. (2002) and the items used to measure each dimension were derived from various sources, which are stated in Table 2. On the other hand, the scale of networking characteristics was adopted from Ostgaard and Birley (1994). Therefore, the validity and reliability of both scales should be examined through a variety of samples. In addition, as stated above that there is no variation in the control variables which may explain statistically insignificant findings. However, in some other samples the effect of control variables might be important as well.

Additionally, the research model was structured based on the sample used in this study. So, generalizing the findings of the structural model need further research such as assessment on various sets of samples in similar as well as different contexts. For example, the model can be tested on other TDZs and on SMEs that are not located in TDZs in Turkey or in a different country to enhance the generalizability of it.

Furthermore, the model assumes that the causality between networking characteristics and EM is unidirectional. However, it can be claimed that EM dimensions also have impact on networking characteristics. Therefore, future research could also delve in to this reverse causality problem.

Finally, this is the first study to test empirically whether networking characteristics impact EM. A quantitative research strategy and a cross-sectional design were used. Future research could use qualitative design to generate a deeper understanding of underlying motivations and trends. Also, a longitudinal design could be used to make better judgment regarding causal relationships.

REFERENCES

- Ahmadi, H., & O'Cass, A. (2016). The role of entrepreneurial marketing in new technology ventures first product commercialisation. *Journal of Strategic Marketing*, 24(1), 47-60.
- Altenburg, T., & Meyer-Stamer, J. (1999). How to promote clusters: policy experiences from Latin America. *World development*, 27(9), 1693-1713.
- Anil, N. K., Shoham, A., & Pfajfar, G. (2016). How export barriers, motives, and advantages impact export performance in developing countries. *International Journal of Export Marketing*, 1(2), 117-141.
- Bettiol, M., Di Maria, E., & Finotto, V. (2012). Marketing in SMEs: the role of entrepreneurial sensemaking. *International Entrepreneurship and Management Journal*, 8(2), 223-248.
- Bjerke, B., & Hultman, C. (2004). *Entrepreneurial marketing: The growth of small firms in the new economic era*. Edward Elgar Publishing.
- Bocconcelli, R., Cioppi, M., Fortezza, F., Francioni, B., Pagano, A., Savelli, E., & Splendiani, S. (2018). SMEs and marketing: a systematic literature review. *International Journal of Management Reviews*, 20(2), 227-254.
- Borrás, S., & Edquist, C. (2013). The choice of innovation policy instruments. *Technological forecasting and social change*, 80(8), 1513-1522.
- Brand, M. J., Croonen, E. P., & Leenders, R. T. (2018). Entrepreneurial networking: a blessing or a curse? Differential effects for low, medium and high performing franchisees. *Small Business Economics*, 50(4), 783-805.
- Bryman, A. (2016). Social research methods. Oxford university press.
- Bulut, Ç., PIRNAR, İ., HALAÇ, S. D., & Öztürk, A. D. (2013). Girişimsel pazarlamanın firma performansına etkisi. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 15(2), 209-232.

- Carson, D. J. (1985). The evolution of marketing in small firms. *European journal of marketing*, 19(5), 7-16.
- Carson, D. and Gilmore, A. (2000). SME marketing management competencies. *International Business Review*, 9(3), 363-382.
- Carson, D. and Gilmore, A. (2000). SME marketing management competencies. *International Business Review*, 9(3), 363-382.
- Carson, D., Gilmore, A., & Rocks, S. (2004). SME marketing networking: a strategic approach. *Strategic Change*, *13*(7), 369-382.
- Cenamor, J., Parida, V., & Wincent, J. (2019). How entrepreneurial SMEs compete through digital platforms: The roles of digital platform capability, network capability and ambidexterity. *Journal of Business Research*, 100, 196-206.
- Chetty, S. K., & Wilson, H. I. (2003). Collaborating with competitors to acquire resources. *International Business Review*, *12*(1), 61-81.
- Collinson, E., & Quinn, L. (2000). The Profit By Placement Scheme & Its Impact on Growth in SMEs. In *Research at the Marketing/Entrepreneurship Interface* (pp. 175-178). University of Illinois at Chicago.
- Collinson, E. and Shaw, E. (2001). Entrepreneurial marketing—a historical perspective on development and practice. *Management decision*, *39*(9), 761-766.
- Coltman, T., Devinney, T. M., Midgley, D. F., & Venaik, S. (2008). Formative versus reflective measurement models: Two applications of formative measurement. *Journal of Business Research*, 61(12), 1250-1262.
- Dang, C., Li, Z. F., & Yang, C. (2018). Measuring firm size in empirical corporate finance. *Journal of Banking & Finance*, 86, 159-176.
- Davern, M. (1997). Social networks and economic sociology: a proposed research agenda for a more complete social science. *American journal of Economics and Sociology*, 56(3), 287-302.

- Diamantopoulos, A., Riefler, P., & Roth, K. P. (2008). Advancing formative measurement models. *Journal of business research*, 61(12), 1203-1218.
- Dodd, S. D., & Patra, E. (2002). National differences in entrepreneurial networking. *Entrepreneurship & Regional Development*, 14(2), 117-134.
- Edwards, J. R. (2011). The fallacy of formative measurement. *Organizational Research Methods*, 14(2), 370-388.
- Ellis, J. L. Factor analysis and item analysis.
- Filatotchev, I., Liu, X., Buck, T., & Wright, M. (2009). The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies*, 40(6), 1005-1021.
- Franco, M., de Fátima Santos, M., Ramalho, I., & Nunes, C. (2014). An exploratory study of entrepreneurial marketing in SMEs: The role of the founder-entrepreneur. *Journal of Small Business and Enterprise Development*, 21(2), 265-283.
- Gilmore, A., & Carson, D. (1999). Entrepreneurial marketing by networking. *New England Journal of Entrepreneurship*, 2(2), 31.
- Gilmore, A., Carson, D., & Grant, K. (2001). SME marketing in practice. *Marketing intelligence & planning*, 19(1), 6-11.
- Gilmore, A., Carson, D., & Rocks, S. (2006). Networking in SMEs: Evaluating its contribution to marketing activity. *International Business Review*, 15(3), 278-293.
- Gilmore, A., Carson, D., Grant, K., O Donnell, A., Laney, R., & Pickett, B. (2006). Networking in SMEs: findings from Australia and Ireland. *Irish Marketing Review*, 18(1/2), 21.
- Gilmore, A. (2011). Entrepreneurial and SME marketing. *Journal of Research in Marketing and Entrepreneurship*, Vol. 13 Issue: 2, pp.137-145

- Hacioglu, G., Eren, S. S., Eren, M. S., & Celikkan, H. (2012). The effect of entrepreneurial marketing on firms' innovative performance in Turkish SMEs. *Procedia-Social and Behavioral Sciences*, 58, 871-878.
- Hall, G. (1995). Surviving and prospering in the small firm sector. Thomson Learning Emea.
- Hallback, J., & Gabrielsson, P. (2013). Entrepreneurial marketing strategies during the growth of international new ventures originating in small and open economies. *International Business Review*, 22(6), 1008-1020.
- Hills, G. E., Hultman, C. M., & Miles, M. P. (2008). The evolution and development of entrepreneurial marketing. *Journal of Small Business Management*, 46(1), 99-112.
- Hilmersson, M. (2014). Small and medium-sized enterprise internationalisation strategy and performance in times of market turbulence. *International Small Business Journal*, 32(4), 386-400.
- Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship: A critical review. *Journal of business venturing*, 18(2), 165-187.
- Holm, D. B., Eriksson, K., & Johanson, J. (1999). Creating value through mutual commitment to business network relationships. *Strategic management journal*, 20(5), 467-486.
- Johnson, G., Scholes, K., & Whittington, R. (2005). Exploring corporate strategy: text & cases 2008. *Porto Alegre: ARTMED*.
- Jones, R., & Rowley, J. (2011). Entrepreneurial marketing in small businesses: A conceptual exploration. *International Small Business Journal*, 29(1), 25-36.
- Jones, R., Suoranta, M., & Rowley, J. (2013). Entrepreneurial marketing: a comparative study. *The Service Industries Journal*, *33*(7-8), 705-719.
- Khan, M. T. (2014). The concept of marketing mix and its elements (a conceptual review paper). *International journal of information, business and management*, 6(2), 95.

- Kılıçer, T. (2013). KOBİ'LER İÇİN GİRİŞİMCİ PAZARLAMANIN ANAHTARI: PAZARLAMA İLİŞKİ AĞLARI. Journal of Entrepreneurship & Development/Girisimcilik ve Kalkınma Dergisi, 8(2).
- Kieschnick, R., & Moussawi, R. (2018). Firm age, corporate governance, and capital structure choices. *Journal of Corporate Finance*, 48, 597-614.
- Kilenthong, P., Hultman, C. M., & Hills, G. E. (2015). Entrepreneurial marketing behaviours: impact of firm age, firm size and firm's founder. *Journal of Research in Marketing and Entrepreneurship*, 18(1), 127-145.
- Kline, R. B. (2016). Mean structures and latent growth models. *Principles and practice of structural equation modeling, 4th edn. The Guildford Press, New York*, 369-393.
- Kumar, R. (2019). Research methodology: A step-by-step guide for beginners. Sage Publications Limited.
- Lomax, R. G., & Schumacker, R. E. (2004). A beginner's guide to structural equation modeling. psychology press.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
- Mallery, P., & George, D. (2003). SPSS for Windows step by step: a simple guide and reference. *Allyn, Bacon, Boston*,.
- Man, T. W., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of business venturing*, 17(2), 123-142.
- Marangoz, M., & Erboy, N. (2013). Pazarlamada Paradigma Değişimi: Girişimci Pazarlama. *MUĞLA SITKI KOÇMAN ÜNİVERSİTESİ İKTİSADİ ve İDARİ BİLİMLER FAKÜLTESİ EKONOMİ VE YÖNETİM ARAŞTIRMALARI DERGİSİ*, 2(1).

- Martinez, M. A., & Aldrich, H. E. (2011). Networking strategies for entrepreneurs: balancing cohesion and diversity. *International Journal of Entrepreneurial Behavior & Research*, 17(1), 7-38.
- Matsunaga, M. (2010). How to Factor-Analyze Your Data Right: Do's, Don'ts, and How-To's. *International journal of psychological research*, *3*(1), 97-110.
- Miles, M. P., & Darroch, J. (2006). Large firms, entrepreneurial marketing processes, and the cycle of competitive advantage. *European journal of marketing*, 40(5/6), 485-501.
- Miles, M., Gilmore, A., Harrigan, P., Lewis, G., & Sethna, Z. (2015). Exploring entrepreneurial marketing. *Journal of Strategic Marketing*, 23(2), 94-111.
- Morris, M. H., Schindehutte, M., & LaForge, R. W. (2002). Entrepreneurial marketing: a construct for integrating emerging entrepreneurship and marketing perspectives. *Journal of marketing theory and practice*, 10(4), 1-19.
- Mort, G. S., Weerawardena, J., & Liesch, P. (2012). Advancing entrepreneurial marketing: Evidence from born global firms. *European Journal of Marketing*, 46(3-4), 542-561.
- Neuman, W. L., & Robson, K. (2007). Basics of social research: Qualitative and quantitative approaches. *Power*, 48, 48.
- O'Dwyer, M., Gilmore, A., & Carson, D. (2009). Innovative marketing in SMEs. *European Journal of Marketing*, 43(1/2), 46-61.
- Okamura, H., Nishimura, J., Colombo, M. and Stam E. (2019). Promoting SME R&D and Innovation. Japan: Think20 Japan 2019
- Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd Edition (2005). Paris.
- Ostgaard, T. A., & Birley, S. (1994). Personal networks and firm competitive strategy—a strategic or coincidental match? *Journal of Business venturing*, 9(4), 281-305.

- Österle, H., Fleisch, E., & Alt, R. (2001). Business Networking: Shaping Collaboration Between Enterprises; with 40 Tables. Springer Science & Business Media. Peris-Ortiz, M., & Ferreira, J. J. (2017). Cooperation and networks in small business strategy: An Overview. In Cooperative and Networking Strategies in Small Business (pp. 1-9). Springer, Cham.
- Rafiq, M., & Ahmed, P. K. (1995). Using the 7Ps as a generic marketing mix: an exploratory survey of UK and European marketing academics. *marketing intelligence & planning*, 13(9), 4-15.
- Rai, K., & Bhanumurthy, N. R. (2004). Determinants of foreign institutional investment in India: The role of return, risk, and inflation. *The Developing Economies*, 42(4), 479-493.
- Rogers, M., & Rogers, M. (1998). The definition and measurement of innovation.
- Salkind, N. J. (Ed.). (2010). Encyclopedia of research design (Vol. 1). Sage.
- Samuels, P. (2016). Advice on exploratory factor analysis. *Birmingham City University: In Progress. doi*, 10.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of educational research*, 99(6), 323-338.
- Seck, F. K., & Mazzarol, T. (2006). Strategic Networking and Growth of Technology-Oriented SMEs: Evidence from Singapore (Doctoral dissertation, School of Management UWA Business School, University of Western Australia, Perth).
- Shaw, E. (1999). Networks and their relevance to the entrepreneurial/marketing interface: a review of the evidence. *Journal of Research in Marketing and Entrepreneurship*, 1(1), 24-40.
- Stokes, D. (1997). A lesson in entrepreneurial marketing from the public sector. *Marketing Education Review*, 7(3), 47-54.
- Stokes, D. (2000). Entrepreneurial marketing: a conceptualisation from qualitative research. *Qualitative market research: an international journal*, *3*(1), 47-54.

- Stokes, D. (2000). Putting entrepreneurship into marketing: the processes of entrepreneurial marketing. *Journal of research in marketing and entrepreneurship*, 2(1), 1-16.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.
- Thrikawala, S. (2011). Impact of strategic networks for the success of SMEs in Sri Lanka. *World Journal of Social Sciences*, 1(2), 108-119.
- Tomarken, A. J., & Waller, N. G. (2005). Structural equation modeling: Strengths, limitations, and misconceptions. *Annu. Rev. Clin. Psychol.*, *1*, 31-65.
- Vale, L., Silcock, J., & Rawles, J. (1997). An economic evaluation of thrombolysis in a remote rural community. *BMJ*, *314*(7080), 570.
- Whalen, P. S., & Akaka, M. A. (2016). A dynamic market conceptualization for entrepreneurial marketing: the co-creation of opportunities. *Journal of Strategic Marketing*, 24(1), 61-75.
- Whalen, P., Uslay, C., Pascal, V. J., Omura, G., McAuley, A., Kasouf, C. J., ... & Gilmore, A. (2016). Anatomy of competitive advantage: towards a contingency theory of entrepreneurial marketing. *Journal of Strategic Marketing*, 24(1), 5-19.
- Witt, P. (2004). Entrepreneurs' networks and the success of start-ups. *Entrepreneurship & Regional Development*, 16(5), 391-412.
- Yang, M., & Gabrielsson, P. (2017). Entrepreneurial marketing of international high-tech business-to-business new ventures: A decision-making process perspective. *Industrial Marketing Management*, 64, 147-160.
- Zain, M., & Ng, S. I. (2006). The impacts of network relationships on SMEs' internationalization process. *Thunderbird international business review*, 48(2), 183-205.

APPENDICES

A. QUESTIONNAIRE FORM

1. Firma Bilgileri

Firmaı [] []	nız bir Teknoloji G Evet Hayır	eliştirme Bölgesiı	nde mi yer alıyor?
[] Ol [] Bi [] Ha [] Ga	ise aşağıdakilerde DTÜ Teknokent Ikent Cyberpark acettepe Teknokent azi Teknopark iğer		u seçiniz.
1.1 1.2 1.3	Firmanın adı/ünva Firma web sitesi: Anketi cevaplayar Adı: Telefon: E-posta: Firmadaki görevi:	n yetkilinin,	
1.4	Firmanın kuruluş	yılı:	
1.5 [] []	Firmada yabancı s Evet Hayır Toplam personel s		nevcut mu?
		Personel sayısı	
Yöne	tim		
Üreti	m		
Ar-G	e/Yenilik		

Diğer	•				
1.7	Eğitimine	göre toplam	personel sayısı		
	Eğ	itim dereces	i		
Tekni /Mesl		Üniversite	Yüksek Lisans /Doktora		
1.8	Son üç yıld	daki çalışan Arttı	sayınızın bir ön	Azaldı	ore değişimi
			kaldı		
2016					
2017					
2018					
1.9	Son iie vale	la cironuzun	bir önceki yıla	göre değiş	imi
1.7	Son uç yırı	Arttı	Sabit kaldı	Azaldı	
2016					
2017					_
2018					_
1.10 []	Evet	a ihracat yap			
1.11 [] []			e ya da yenilik eti ihraç ettiniz		neticesinde ortaya çıkan l

2. Girişimci Pazarlama

(1-Oldukça Önemsiz 2-Önemsiz 3-Ne Önemli Ne Önemsiz 4-Önemli 5-Çok Önemli)

2.1. Firsat Odaklılık	1	2	3	4	5
Şirketimizde					
Fırsatları ortaya çıkarmak için gerçek zamanlı ve proaktif akıl yürütmek					
İhtiyaçları keşfetmek için alternatif yöntemler geliştirmek					
Fırsatları yeniden tanımlamak için piyasa deneyimlerinden hızlı ders çıkarmak					
Yeni firsatlar yaratabilmek için diğer şirketleri, kurumsal müşterileri ve ticari fuarları ziyaret etmek					
Sürekli yeni iş fırsatları yaratmak					
2.2. Proaktiflik	1	2	3	4	5
Şirketimizde					
Yeni ürünlerin ve pazarlama yaklaşımlarının hızlı					
gelişimini takip etmek ve bu gelişime ayak uydurmak					
Denenmemiş gerilla ve viral pazarlama taktikleri ile piyasayı devamlı test etmek					
Rakiplerin cevap vermesini sağlayacak hamleler yapmak					
Pazar lideri olmak, yeni ürünler, teknolojiler veya varsa hizmetler sunmakta ilk sırada yer almak					
Müşteri ihtiyaç ve memnuniyetindeki değişiklikleri hızlı tespit etmek					
Sektördeki önemli değişimleri hızlı tespit etmek (Örn: Rekabet, teknoloji, yasal düzenlemeler)					

Bir pazarlama planını zamanında ve etkili bir şekilde					
uygulayabilecek yetkinlikte olmak					
2.3. Yenilik Odaklılık	1	2	3	4	5
Şirketimizde					
Önemli yenilikleri geliştiren ekiplere pazarlamanın aktif katılımını sağlamak					
Yeni ürün/hizmet geliştirmeye yönelik yaratıcı yaklaşımlar geliştirmek					
Portföyümüze yenilikçi ürünler veya hizmetler eklemek					
Pazarlama kararlarını yaratıcılıkla tetiklemek					
Özellikle Ar-Ge, teknolojik liderlik ve yenilik üzerinde durmak					
İşletmede sürekli iyileştirmeler ve yenilikler yapmak					
2.4. Müşteri Odaklılık	1	2	3	4	5
Şirketimizde					
Şirketimizde Yaratıcı müşteri ilişkileri yönetimi taktikleri geliştirmek					
Yaratıcı müşteri ilişkileri yönetimi taktikleri geliştirmek Büyük ölçüde pazar araştırmasına dayanan pazarlama					
Yaratıcı müşteri ilişkileri yönetimi taktikleri geliştirmek Büyük ölçüde pazar araştırmasına dayanan pazarlama kararları almak Düzenli pazar araştırmasından ziyade enformel müşteri					
Yaratıcı müşteri ilişkileri yönetimi taktikleri geliştirmek Büyük ölçüde pazar araştırmasına dayanan pazarlama kararları almak Düzenli pazar araştırmasından ziyade enformel müşteri geri bildirimlerine dayanan pazarlama kararları almak Müşteri memnuniyetini sürekli ve sistematik olarak					

tüm düzeylerde düzenli olarak paylaşmak					
		_	_		
2.5. Risk Yönetimi	1	2	3	4	5
Şirketimizde					
Riskleri azaltmaya yönelik girişimleri kullanmak (Örn: şirket ittifakları, piyasa testleri vb.)					
Fırsatları kaçırmak yerine başarısız olmayı göze almak					
Belirsizlik yüksek olsa da yeni fırsatlardan faydalanmak için risk almaktan kaçınmamak					
Yeni fırsatlardan maksimum düzeyde yararlanabilmek için makul düzeyde kayıp yaşamayı göze almak					
Riskli fırsatlardan tam olarak yararlanabilmek için belirsizliği en aza indirmek					
"Risk alan" teriminin, çalışanlarımız arasında olumlu bir özellik olarak kabul görmesini sağlamak					
2.6. Kaynak Odaklılık	1	2	3	4	5
Şirketimizde					
Rakiplerimizden öğrenmek					
Sektördeki bağlantılarımızdan, ürün ve hizmetlerimizi geliştirmemize ve pazarlamamıza yardımcı olacak şekilde faydalanmak					
Pazarlama kararlarını kişisel ve profesyonel ağlarımızdaki bilgi alışverişine dayalı almak					
Mevcut inovasyon faaliyetlerinin verimliliğini artıran projeler için bilgi ve becerilerimizi güçlendirmeye çalışmak					

Firmanın zaten önemli deneyime sahip olduğu ürün					
geliştirme süreçlerinde becerilerini yükseltmeye çalışmak					
Sektörde yeni olan ürün geliştirme becerilerini ve					
süreçlerini öğrenmek (örn. Ürün tasarımı, prototip					
oluşturma, yeni ürün tanıtımı ve yerel pazarlar için ürün					
özelleştirme).					
ozeneştirile).					
İnovasyon için önemli olan yeni yönetimsel ve					
organizasyonel beceriler edinmeye çalışmak (örneğin,					
teknoloji ve müşteri trendlerini tahmin etmek; gelişmekte					
olan pazarları ve teknolojileri belirlemek; Ar-Ge,					
pazarlama ve diğer işlevleri koordine etmek ve ürün					
geliştirme yönetimi).					
2.7. Değer Odaklılık	1	2	2	1	5
2.7. Değer Odaklılık	1	2	3	4	5
Şirketimizde					
Müşteri ilişkileri yönetimi ile değer yaratmak					
, , ,					
Müşteri ilişkileri yönetimi ile değer yaratmak Mevcut müşterilerimiz için yeni ürün ve hizmetler					
, , ,					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak Yeni müşteriler kazanmak için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak Yeni müşteriler kazanmak için alternatif hizmetler					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak Yeni müşteriler kazanmak için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak Yeni müşteriler kazanmak için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Şirketimize değer katacağına inanılan yenilikçi pazarlama yöntemlerini hemen uygulamaya koymak.					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak Yeni müşteriler kazanmak için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Şirketimize değer katacağına inanılan yenilikçi					
Mevcut müşterilerimiz için yeni ürün ve hizmetler geliştirerek değer yaratmaya çalışmak Mevcut müşterilerimiz için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Yeni müşteriler kazanmak için yeni ürün ve hizmetleri geliştirerek değer yaratmaya çalışmak Yeni müşteriler kazanmak için alternatif hizmetler aracılığıyla değer yaratmaya çalışmak Şirketimize değer katacağına inanılan yenilikçi pazarlama yöntemlerini hemen uygulamaya koymak.					

3. Ağ Özellikleri

3.1. Propensity to Network (Ağ Kurma Eğilimi)					
Sosyal organizasyonlardaki üyelik sayısı					
Profesyonel ve ticari kuruluşlardaki üyelik sayısı					
Ağınızdaki toplam iş ortağı sayısı (girişimcinin iş fikri hakkında konuştuğu kişiler)					
3.2. Network Activity (Ağ-içi Aktivite) (1-hiç, 2-çok nadiren (ayda 1-2 kez), 3-bazen (ayda 3-4 kez), 4- sık sık (haftada 1-2 kez) to 5- çok sık (haftada 3-4 kez))	1	2	3	4	5
Eski/yeni müşterilerle iletişim kurmak					
Eski/yeni tedarikçilerle iletişim kurmak					
Esk/yeni yatırımcılarla iletişim kurmak					
Diğer bağlantılarla (arkadaş, aile vb.) iletişim kurmak					
Mevcut ve potansiyel iş ortaklarıyla iletişimin sıklığı					
3.3. Network Density (Ağın İlişki Yoğunluğu)					
En yakınınızdaki 5 ağ ortağından kaç tanesi diğer dördünde hiç birini tanımıyor?	en	(s	seçin	iz)	
0					
1					
2					
3					
4					
5					

En yakınınızdaki 5 ağ ortağının yakın çevresinden kaç kişiyi	
daha tanıyorsunuz?	

3.4. Network Intensity (Ağın İletişim Yoğunluğu) (Sizin için en önemli 5 ağ ortağı dikkate alınarak doldurulmalıdır.) 1. Sizin için en önemli 5 ağ ortağının her biriyle tanışalı kaç yıl oldu?	1 yıldan daha az	1-3 yıl arası	3-5 yıl arası	5-7 yıl arası	7 yıldan çok
1. Ağ Ortağı (network partner)					
2. Ağ Ortağı (network partner)					
3. Ağ Ortağı (network partner)					
4. Ağ Ortağı (network partner)					
5. Ağ Ortağı (network partner)					

2. Sizin için en önemli 5 ağ ortağının her biriyle haftada kaç defa iletişim kuruyorsunuz?	Ayda bir kaç defa	Haftada 0-1 defa	Haftada 1-3 defa	Haftada 3-5 defa	Haftada 5 defadan fazla
1. Ağ Ortağı (network partner)					
2. Ağ Ortağı					
3. Ağ Ortağı					
4. Ağ Ortağı					
5. Ağ Ortağı					

3.5. Content of Network Exchanges (Ağ Etkilişimleri) (1-Oldukça Önemsiz,2-Önemsiz 3-Ne Önemli Ne Önemsiz 4-Önemli 5-Çok Önemli) (Ağ etkileşimleri aşağıdaki konularda şirketiniz için ne kadar önemli?)	1	2	3	4	5
Pazar bilgisi edinme					
Rakip bilgisi edinme					
Dağıtım kanallarına erişim					
Sözlü (kulaktan kulağa) reklam imkanı					
Genel tavsiye/danışma					
Ürün ve servis geliştirme					
Finansal yatırım ve kredi yaratma					

4. Ar-Ge ve Tasarım Faaliyetlerinin Mevcut Durumu

ANKETÖRE NOT: Ar-Ge'nin tanımı anketi cevaplayan kişiye okunmalıdır:

Araştırma ve deneysel geliştirme (Ar-Ge), insan, kültür ve toplumun bilgisinden oluşan bilgi dağarcığının artırılması ve bu dağarcığın <u>yeni uygulamalar tasarlamak üzere</u> kullanılması için sistematik bir temelde yürütülen yaratıcı çalışmalardır.

4.1	Ar-Ge ve tasarım faaliyetlerinde bulunuyor musunuz?
[]	Evet
[]	Hayır (soru 5.1'e geçiniz)
4.2	Cironuzdan Ar-Ge ve tasarım faaliyetleri için ayrılan pay yaklaşık ne
	kadardır? (% olarak ifade ediniz)

5. Yenilik Faaliyetleri Mevcut Durumu

ANKETÖRE NOT: Yenilik tanımı anketi cevaplayan kişiye okunmalıdır.

Bir yenilik, işletme içi uygulamalarda, işyeri organizasyonunda veya dış ilişkilerde **yeni veya önemli derecede iyileştirilmiş** bir ürün (mal veya hizmet), veya süreç, yeni bir pazarlama yöntemi ya da yeni bir organizasyonel yöntemin gerçekleştirilmesidir.

Yenilik faaliyetlerinde bulunuyor musunuz?

[]	Evet Hayır <i>(soru 9.1'e geçiniz)</i>
6. Ü	rün Yeniliği
ANKI	ETÖRE NOT: Ürün Yeniliği tanımını anketi cevaplayan kişiye okunmalıdır.
ya de konu yazıl	irün yeniliği, mevcut özellikleri veya öngörülen kullanımlarına göre yeni a önemli derecede iyileştirilmiş bir mal veya hizmetin ortaya almasıdır. Bu teknik özelliklerde, bileşenler ve malzemelerde, birleştirilmiş almda, kullanıcıya kolaylığında ve diğer işlevsel özelliklerinde önemli cede iyileştirmeleri içermektedir.
6.1 [] []	Firmanız son üç yılda yeni ürün ya da hizmet geliştirme faaliyetlerinde bulundu mu? Evet Hayır (soru 7.1'e geçiniz)
6.2 [] []	Geliştirdiğiniz yeni ürünler/hizmetler için fikri ve sınai mülkiyet başvurusunda bulundunuz mu? Evet Hayır
6.3 [] []	Ürün yenilikleriniz başkaları için de yenilik niteliği taşıyor mu? Bölge için yenilik Türkiye için yenilik Dünya için yenilik

7. Süreç Yeniliği

5.1

ANKETÖRE NOT: Bu bölümde firmanın yaptığı teknoloji transferleri ve edindiği yeni imalat süreçleri sorulmaktadır. Aşağıdaki tanım anketi cevaplayan kişiye okunmalıdır.

Süreç Yeniliği: Bir süreç yeniliği yeni veya önemli derecede iyileştirilmiş bir üretim veya teslimat yönteminin gerçekleştirilmesidir. Bu yenilik, teknikler, teçhizat ve/veya yazılımlarda önemli değişiklikleri içermektedir.

L		
7.1 [] []	Son üç yılda firmanıza üretim süreçlerini büyük transferleri yaptınız mı? Evet Hayır <i>(soru 8.1'e geçiniz)</i>	ölçüde geliştiren teknoloji
7.2 []	Son üç yılda firmada mevcut imalat yöntemlerin düzeyde iyileştirme yaptınız mı? Evet Hayır	de (süreçlerinde) önemli
7.3 [] []	Son üç yılda firmada tamamen yeni imalat yönte mi? Evet Hayır	emleri (süreçleri) geliştirdin
7.4 [] []	Yaptığınız süreç yenilikleri başkaları için de yen Bölge için yenilik Türkiye için yenilik Dünya için yenilik	ıilik niteliği taşıyor mu?
8. Ü	İrün/hizmet ve süreç yeniliği faaliyetlerinde fina	nsman
edinm sorulr	ETÖRE NOT: Bu bölümde yeni ürün geliştirme, tel ne vb. yenilik kapsamına giren faaliyetler için kulla lmaktadır. Firma ürün ve süreç yeniliği yapmadıysa <u>ine birden</u> <u>HAYIR yanıtı verildiyse</u>) bu soru atland	anılan mali kaynaklar a (<mark>SORU 4.1, 5.1, 6.1, 7.1'ı</mark>
8.1	Firmanız yenilik faaliyetlerinin finansmanı için hangilerini kullandı?	aşağıdaki kaynaklardan
Özka	aynaklar]
Tica	ari krediler	
Aile	e veya tanıdık çevre içinden borçlanma	-
Orta	akların kaynakları	-
Kam	nu proje teşvikleri	-

Yurtdışı kaynaklar		
Meslek birlikleri		
Diğer: Açıklayınız		
8.2 Firmanız, Ar-Ge, yenilik ve girişimcilik konul	arı	nda devlet desteklerin

den yararlanıyor mu?

Evet

Hayır

9. Organizasyonel yenilik ve pazarlama yeniliği

ANKETÖRE NOT: Aşağıdaki tanım anket yapılan kişiye okunacaktır.

Girişimin bilgi kullanımını, mal ve hizmet kalitesini ya da iş akış verimliliğini artırmak amacıyla firma yapısında ya da yönetim biçiminde yenilik ya da belirgin değişiklik yapılmasıdır. Diğer girişimlerle birleşmeler, diğer girişimleri satın almalar, yeni bir organizasyonel yöntem eşlik etmediği sürece yönetim stratejisindeki değişiklikler organizasyon yeniliği sayılmaz

9.1 Girişiminiz son üç yıllık dönemde herhangi bir organizasyon yeniliği uyguladı mı?

	Evet	Hayır
Organizasyon süreci için yeni iş yöntemleri ortaya koymak		
((Tedarik zinciri yönetimi, bağımsız çalışan iş danışmanlığı,		
bilgi yönetimi, yalın üretim, kalite yönetimi vb.)		
İş sorumlulukları ve karar alma organizasyonunda yeni		
yöntemlerin kullanılması (Çalışanın sorumlulukları, takım		
çalışması, sorumluluğun dağıtılması, yeni birim oluşturulması,		
eğitim/staj vb.konusunda yeni bir sistemin ilk defa		
kullanılması)		
Diğer girişimler veya kamu kuruluşları ile ilişkilerde işbirliği,		
ortaklık, taşeronluk vb. yeni yöntemler uygulanması		

ANKETÖRE NOT: Aşağıdaki tanım anket yapılan kişiye okunacaktır.

Girişiminizin mevcut pazarlama yönteminden belirgin olarak farklılaşan ve daha önce kullanılmayan yeni bir pazarlama anlayışı ve stratejisinin uygulanmasıdır. Ürün tasarımı, ambalajlaması, tanıtımı veya fiyatlandırmasında önemli değişiklikleri gerektirir. Pazarlama yöntemindeki mevsimsel, düzenli ve diğer

rutin değişiklikler dahil değildir.	

9.2 Girişiminiz son üç yıllık dönemde herhangi bir pazarlama yeniliği uyguladı mı?

	Evet	Hayır
Ürün tasarımı ve ambalajın estetiğinde önemli değişikler		
yapmak		
Ürünün tanıtımı için yeni ortam veya reklam teknikleri		
kullanmak		
Yeni bir satış ve dağıtım yöntemi uygulamak (örneğin		
franchising ve dağıtım yetkisi vermek)		
Ürün ve hizmetin fiyatlandırmasında yeni metodlar uygulamak		
(talebe göre fiyatlandırma, indirim sistemi vb.)		

B. APPROVAL OF METU HUMAN SUBJECTS ETHICS COMMITTEE

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ APPLIED ETHICS RESEARCH CENTER



DUMLUPINAR BULVARI 05800 ÇANKAYA ANKARA/TURKEY T: +90 312 210 22 91 F: +90 312 210 79 59 ueam®metu edu,tr

Sayı: 28620816 / 607

11 ARALIK 2018

Konu:

Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

ligi:

İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Doç.Dr. İbrahim Semih AKÇOMAK

Danışmanlığını yaptığınız Başak DURUKAN'ın "Ağ Özelliklerinin Girişimci Pazarlama Üzerindeki Etkisi" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay 2018-SOS-204 protokol numarası ile araştırma yapması onaylanmıştır.

Saygılarımla bilgilerinize sunarım.

Başkan

prof. Dr. Avhan SOL

Üye

Prof. Dr. Ayhan Gürbüz DEMİR

Üye

Prof.Dr. Yasar KONDAKÇI (4.)

Chra

Dr. Sgrowen Ali Emre TURGUT

Üye

Doç. Dr. Emre SELÇUK

Üye

Doç.Dr. Üyesi Pınar KAYGAN

Üye

C. TURKISH SUMMARY / TÜRKÇE ÖZET

Son yıllarda, geleneksel pazarlama yöntemlerine alternatif yeni pazarlama yöntemleri ortaya çıkmıştır, çünkü geleneksel yöntemler mevcut gereksinimleri karşılamakta yetersiz kalmaktadır. Günümüzde "yenilikçi" ve "girişimci" olmak iş dünyasının önemli gereklerinden olduğu için, pazarlama uygulamalarının da bu ihtiyaçlara cevap verir nitelikte olması beklenmektedir (Bjerke ve Hultman, 2002). Girişimci Pazarlama (GP), bu yeni yöntemlerden birisidir ve adından da anlaşılacağı gibi, pazarlama uygulamalarında girişimci yönelimi benimsemektedir. Son zamanlarda pazarlamada girişimci yönelimin önem kazanmasının çeşitli nedenleri vardır.

Öncelikle, teknolojide yaşanan gelişmeler firmaların faaliyetlerini de etkilemektedir. Bu faaliyetlerin belirsizliklere ve hızlı değişimlere uyum sağlaması oldukça önemlidir. Bunun için proaktif, yenilikçi, fırsat odaklı olmak ve risk almaktan çekinmemek gereklidir. Tüm bunlar girişimci yönelimin önemli unsurları olarak kabul edildiğinden, GP pazarlama faaliyetlerinin bu şartlara uyum sağlaması için bir yol olarak kabul edilmektedir.

Bir diğer husus, günümüzde Küçük ve Orta Büyüklükteki İşletmeler (KOBİ) ekonomik büyümenin önemli unsurlarından birisi olarak kabul edildiği ve dünya genelinde işletmelerin büyük çoğunluğu KOBİ'lerden oluştuğu için, bunların iş yapış şekilleri ve organizasyon yapılarının anlaşılması önem arz etmektedir. KOBİ'ler, organizasyon ve yönetim yapıları gereği daha esnek ve proaktif olabilmektedirler. Bu durum da onların pazarlama faaliyetlerinde girişimci bir yönelim benimsemelerine sebep olmaktadır (Hills vd., 2008; Mort vd., 2010, Gilmore, 2011, Miles vd., 2015). Ayrıca, KOBİ'lerin kısıtlı kaynaklara sahip olmaları da GP'yi benimsemeleri için ayrı bir gerekçe olarak ortaya konmaktadır (Gilmore, 2011; Bettiol vd., 2012; Miles vd., 2015).

Görüldüğü gibi günümüzde çeşitli nedenlerle yeni pazarlama yöntemlerine ihtiyaç duyulmakta ve GP bir alternatif olarak ortaya çıkmaktadır. Bu nedenle GP'nin daha derinlemesine incelenmesi gerektiği düşünülmektedir. Literatür incelendiğinde daha

çok GP'yi tanımlamaya yönelik kavramsal çalışmalar yapıldığı ya da GP'nin farklı performans değişkenleri üzerindeki etkilerinin incelendiği görülmektedir. Ancak, GP'yi etkileyebilecek faktörler üzerine yeterli çalışma yapılmadığı dikkat çekmektedir.

İlişki ağları GP için oldukça önemli kabul edilmekte ve birçok çalışma ilişki ağlarını GP için en önemli faktör olarak tanımlamaktadır (Shaw, 1999; Gilmore, 1999; Carson ve Gilmore, 2000, Kılıçer, 2013). İlişki ağları, bilgiye, kısıtlı kaynaklara, yeni firsatlara ve müşterilere erişim sağlayabileceği, ayrıca yenilik faaliyetlerine destek olabileceğinden GP için önemli görülmektedir. Ancak literatürde, ilişki ağlarının gerçekten GP'yi etkileyip etkilemediğini gösteren uygulamalı bir çalışmaya rastlanmamıştır. Bu nedenle, bu çalışma KOBİ'lerin ağ özelliklerinin GP üzerinde etkili olup olmadığını deneysel olarak araştırmayı amaçlamaktadır.

Bu çalışma kapsamında yapılan literatür taramasında, GP'nin neden ve hangi ihtiyaçlara cevaben ortaya çıktığı, yeni bir pazarlama yöntemi olarak önemi, nasıl kullanılabileceği, kavramsal tanımı ve ilişki ağlarıyla bağlantısı üzerinde durulmaktadır. Öncelikle, geleneksel pazarlama yöntemleri günümüz ihtiyaçlarını tam olarak karşılayamadığından yeni pazarlama uygulamalarının gerekliliği birçok çalışmada vurgulanmakta ve GP bu ihtiyaçlara cevap verebilecek nitelikte bir alternatif olarak gösterilmektedir. GP'nin geleneksel pazarlamaya güçlü bir alternatif olduğu savı literatürde iki ana çerçevede desteklenmektedir. İlk olarak, günümüz şartları firmaların "yenilikçi" ve "girişimci" olmalarını gerektirmektedir ve GP tanımı gereği hem yenilikçi hem de girişimci bir pazarlama yöntemi olarak karşımıza çıkmaktadır (Morris vd., 2002). Mevcut işletmelerin çok büyük bir kısmının KOBİ'lerden oluşması ve bunların pazarlama faaliyetlerinin de diğer firmalardan farklı olarak daha girişimci bir yönelime sahip olması gerekliliğidir bir diğer temel görüş olarak karşımıza çıkmaktadır (Bjerke ve Hultman, 2002).

GP 2000'li yılların başında önem kazanmış ve nasıl tanımlanması gerektiğine ilişkin üç ana görüş benimsenmiştir. Bunlardan ilki GP'yi pazarlama faaliyetlerinin girişimci bir yönelimle uygulanması olarak (Miles ve Daroch, 2004), ikincisi girişimciler tarafından uygulanan pazarlama faaliyetleri olarak (Stokes, 2000; Mort

vd., 2010; Gilmore, 2011) ve sonuncusu da pazarlama ve girişimcilik kavramlarından bağımsız fakat ikisinin birleşiminden oluşan yeni bir kavram olarak ele almaktadır. Üçüncü bakış açısı daha kapsamlı bir yaklaşım olduğu için genelde bu kabul görmüştür. Literatürde GP'yi kavramsal bir çerçeveye oturtmaya çalışan çalışmalar da bulunmaktadır. Bunlar incelendiğinde, en kapsamlı kavramsallaştırmanın Morris vd. (2002) tarafından ortaya konulduğu görülmektedir. Buna göre, GP'nin yedi ana boyutu vardır: fırsat odaklılık, proaktiflik, yenilik odaklılık, müşteri odaklılık, risk yönetimi, kaynak odaklılık ve değer odaklılık.

Kavramsal çerçeve oluşturmayı hedefleyen çalışmalara ek olarak, GP'nin farklı değişkenler ile ilişkilerini inceleyen ampirik çalışmalar da bulunmaktadır. Örneğin, GP uygulamalarında girişimcinin rolünü ortaya koymayı hedefleyen çalışmalar (Franco vd., 2014; Yang ve Gabrielsson, 2017) ya da firmanın yaşı, büyüklüğü ya da kurucusu gibi özelliklerinin GP ile ilişkisi olup olmadığını anlamayı hedefleyen çalışmalar görülmektedir (Kilenthong, 2015). Bunlara ek olarak, GP'nin farklı performans değişkenleri üzerindeki etkisini açıklamayı hedefleyen çalışmalar da vardır. Örneğin GP'nin, firmaların uluslararasılaşma süreçleri üzerindeki etkisi (Mort vd., 2010), yenilikçilik performansına etkisi (Hacıoğlu vd., 2012; Bulut vd., 2013), firma büyümesine etkisi (Hallback vd., 2013; Jones vd.,2013), firmanın rekabetçiliği üzerindeki etkisi (Daroch 2004) incelenmiştir.

Literatür incelendiğinde, GP üzerine yapılan gerek kavramsal gerekse ampirik çalışmaların pek çoğunda ilişki ağlarının öneminden bahsedildiği dikkat çekmektedir. İlişki ağları, girişimciler için oldukça önemli kabul edilmekte ve "bir girişimcinin içinde bulunduğu ve ona iş faaliyetleri için önemli kaynaklara erişim sağlayan ilişkilerin toplamı" olarak tanımlanmaktadır (Dodd ve Patra, 2002, sf.117). İlişki ağlarının özellikleri de farklı çalışmalarda ortaya konmuştur (Ostgard ve Birley, 1994; Witt 2004; Brand vd., 2018). Bunlara göre ilişki ağlarının özellikleri üç ana başlık altında toplanmaktadır: ilişki ağlarının yapısı, ilişki ağının etkinliği ve ilişki ağı etkileşimleri.

Literatürdeki çalışmalar, ilişki ağlarının GP için önemini vurgularken özellikle KOBİ'ler üzerinde durmakta ve bunların kaynaklara, bilgiye, uzmanlığa ve yeni

pazarlara erişimde ilişki ağlarından faydalanabileceklerini vurgulamaktadır (Shaw, 1999; Stokes 2000; Collinson ve Shaw, 2001; Gilmore vd., 2006; Kılıçer, 2013; Franco vd., 2014, Kilenthong vd., 2015). Fakat, literatürdeki çalışmaların hiçbirinde ilişki ağları ve GP arasındaki ilişki ampirik olarak incelenmemektedir. Bu nedenle, bu çalışmada ilişki ağlarının özelliklerinin GP üzerinde etkisinin olup olmadığı ampirik olarak incelenecektir.

Bu çalışmada nicel araştırma yöntemi benimsenmiş ve anket yoluyla veri toplanmıştır. Çalışmadaki örneklem, Ankara'da yer alan Teknoloji Geliştirme Bölgeleri'ndeki (TGB) KOBİ'ler arasından seçilmiştir. TGB'lerdeki firmaların seçilmesinin nedenleri; bu bölgelerdeki şirketlerin çoğunun girişimci ve yenilikçi bir geçmişe sahip olmaları, GP gibi pazarlama yeniliklerini benimseme olasılıklarının yüksek olması ve TGB'lerin ilişki ağlarını destekleyici etkisi olduğunun düşünülmesidir. Ayrıca, Ankara'daki TGB'lerin araştırma alanı olarak seçilmesinin de başlıca nedenleri vardır. Öncelikle, Türkiye'de TGB tarihi Ankara'da başlamış, ODTÜ Teknokent Türkiye'deki ilk TGB olarak kurulmuştur. Ayrıca, KOBİ'lere destek sağlayan TÜBİTAK ve KOSGEB gibi kurumlar Ankara'da yer aldığı için teknoloji tabanlı girişimcilik ekosisteminin diğer illere göre burada daha canlı olduğu düşünülmektedir. Son olarak, en yüksek TGB sayısı 2019 itibariyle Ankara'da yer almaktadır. Ankara'da yer alan yedi TGB'den dördü bu çalışma için seçilmiştir: ODTÜ Tekonokent, Bilkent Cyberpark, Hacettepe Teknokent ve Gazi Teknopark. Öncelikle, 2001 yılında TGB Kanunu'nun yürürlüğe girmesini takiben, ODTÜ Teknokent (2001'de), Bilkent Cyberpark (2002'de) ve Hacettepe Teknokent (2003'te) ilk kurulan TGB'ler arasında yer almaktadır. Bu sebeple, onların yapılarının ve operasyonlarının daha oturmuş olduğu düşünülmektedir (Sanayi ve Teknoloji Bakanlığı, 2019). Ayrıca, 2008 yılında Türkiye'de sadece 18 TGB varken, bunların altı tanesi Ankara'daydı ve ODTÜ, Bilkent, Hacettepe ve Gazi (2007'de kuruldu) bu altı TGB arasındaydı. Ek olarak, 2017 yılında TGB'lerin sıralamasına göre, ODTÜ Teknokent (2.), Bilkent Cyberpark (3.), Gazi Teknopark (14.) ve Hacettepe Teknokent (18.) Türkiye'deki en büyük 20 TGB arasındaydı.

Tablo 1'de, seçilen TGB'lerde yer alan toplam KOBİ sayısı ve bunların ankete yanıt oranı verilmektedir.

Tablo 1

Dört TGB'deki KOBİ ve Katılımcı Savısı

TGB	KOBİ sayısı*	Tamamlanan anket	Yanıt oranı	
100	KODI sayisi	sayısı		
ODTÜ	186	44	%23,66	
BİLKENT	191	34	%17,80	
HACETTEPE	187	45	%24,06	
GAZİ	69	22	%31,88	
TOPLAM	633	145	%22,91	

^{*} KOBİ sayısı Mayıs 2019 itibariyle aktif olduğu bilinenleri göstermektedir.

Bu çalışmada, firma bilgileri, GP, ilişki ağı özellikleri, Ar-Ge ve tasarım faaliyetlerinin mevcut durumu, yenilik faaliyetlerinin mevcut durumu, ürün yeniliği, süreç yeniliği, ürün / süreç yeniliği faaliyetlerinin finansmanı ve son olarak örgütsel ve pazarlama yeniliği bölümlerinden oluşan bir anket formu kullanılmıştır (bkz. Ek 1). Yanıtların toplanmasını kolaylaştırmak için Google Formlar aracılığıyla çevrimiçi bir anket formu hazırlanmış ve anket e-posta yoluyla katılımcılara gönderilmiştir. Online anketler için cevap oranının çok düşük olduğu bilindiğinden, tüm firmalar telefonla bilgilendirilmiş ve anketin tamamlanacağına dair onay alındıktan sonra, çevrimiçi anket bağlantısı katılımcıya gönderilmiştir.

Bu çalışmada GP bağımlı değişken, ilişki ağı özellikleriyse bağımsız değişken olarak tanımlanmıştır. Bağımlı ve bağımsız değişkenlerin ölçümü için iki farklı ölçek kullanılmıştır. İlk olarak, GP için Morris vd. (2002), Kilenthong vd. (2015), Ahmadi ve O'Cass (2016) ve Bulut vd. (2013) tarafından kullanılan ölçekler karşılaştırılarak daha kapsamlı bir ölçek oluşturulmuştur. Sonuç olarak, fırsat odaklılık (5 madde), proaktiflik (7 madde), yenilik odaklılık (6 madde), müşteri odaklılık (7 madde), risk yönetimi (6 madde), kaynak odaklılık (7 madde) ve değer odaklılık (8 madde),

GP'nin alt boyutları olarak tanımlanmış ve bunlar 5'li Likert ölçekle (1-hiç önemli değil, 5- çok önemli) ölçülmüştür (bkz. Ek 1).

İlişki ağları özellikleri, Ostgaard ve Birley (1994) tarafından kullanılan ölçeğin uyarlanması ile ölçülmüştür. Buna göre ilişki ağlarının özelliklerinin ölçümünde, ağ kurma eğilimi (3 madde), ağ etkinliği (5 madde), ağ sıkılığı (2 madde), ağ yoğunluğu (2 madde) ve ağ etkileşimleri (7 madde) alt boyutları kullanılmıştır (bkz. Ek 1).

Ayrıca bazı kontrol değişkenlerinin de bağımlı değişken üzerindeki etkisi incelenmiştir. Bu değişkenler firma yaşı, firma büyüklüğü, ihracat, yabancı yatırım ve Ar-Ge olarak modele eklenmiştir.

GP ölçeği farklı kaynaklardan faydalanılarak oluşturulduğundan Keşfedici Faktör Analizi kullanılarak bu ölçeğin geçerlik ve güvenirlik analizleri yapılmıştır. Bu analizler neticesinde fırsat odaklılık, proaktiflik ve yenilik odaklılık boyutlarının tek bir faktörde birleştiği görülmüştür. Bu nedenle, "gelecek odaklılık" adı verilen yeni bir alt boyut tanımlanmış ve yapısal modelde bu boyuta yer verilmiştir. Ayrıca, GP'nin alt boyutlarından "kaynak odaklılık" güvenirlik testini geçemediğinden (Cronbach's alpha < .70) daha sonraki analizlere ve modele dâhil edilmemiştir. Sonuç olarak, gelecek odaklılık, müşteri odaklılık, risk yönetimi ve değer odaklılık GP'nin boyutları olarak yapısal modele dâhil edilmiştir (bkz. Şekil 1). Öte yandan, ilişki ağı özellikleri ölçeği formatif bir ölçek olduğu için bu ölçeğe ilişkin geçerlik ve güvenirlik testine ihtiyaç duyulmamıştır.

Bu çalışmada, ilişki ağı özelliklerinin GP boyutlarına etkisi test edileceğinden, bu gibi ilişkisel hipotezleri test etmek için uygun olan Yapısal Eşitlik Modellemesi (YEM) kullanılmıştır.

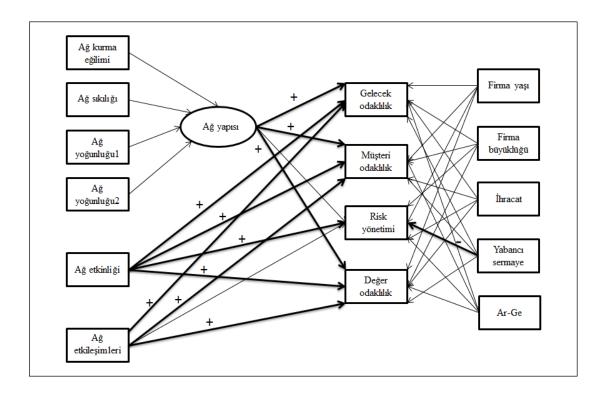
Yapısal modelin uyum iyiliğine ilişkin istatistikler aşağıdaki tabloda sunulmaktadır. CFI ve TLI, önerilen. 95 eşik değerin üstünde ve RMSEA, 0,05'in altındadır. Uyum iyiliği istatistiklerine göre modelin verilere son derece uygun olduğu görülmektedir.

Tablo 2

Yapısal Model Uyum İyiliği İstatistikleri

Model	χ^2	Serbestlik derecesi	CFI	TLI	RMSEA
Yapısal	16.224	14	.987	.955	.034
Model	10.224	14	.901	.933	.034

Not: CFI=Comparative Fit Index, TLI=Tucker-Lewis Index, RMSEA=Root Mean Squared Error of Approximation



Şekil 1. Yapısal Model

Modele ilişkin bulgular aşağıdaki tabloda sunulmaktadır (bkz. Tablo 3). Buna göre ağ yapısının, gelecek, müşteri ve değer odaklılık boyutlarıyla pozitif ve istatistiksel olarak anlamlı şekilde ilişkili olduğu görülmektedir (sırasıyla β = .367, p <.001; β = .311, p <.001; β = .377, p <.001).

Bulgular, ağ etkinliğinin de gelecek, müşteri ve değer odaklılıkla istatistiksel olarak anlamlı bir pozitif ilişkisi olduğunu göstermektedir (β = .035, p <.001; β = .049, p <.001; β = .037, p <.01, sırasıyla). Ek olarak, ağ etkinliği, risk yönetimi ile de pozitif

ve istatistiksel olarak anlamlı şekilde ilişkilidir (β = .033, p <.05). Bu nedenle, ağ etkinliğinin, bu çalışmada tanımlanan GP'nin tüm boyutlarını etkilediği görülmektedir.

Tablo 3

Yapısal Model Katsayı Bulguları

	D -	Bağımlı Değişkenler			
	Bağımsız Değişkenler	Gelecek Odaklılık	Müşteri Odaklılık	Risk Yönetimi	Değer Odaklılık
ıe	Ağ Yapısı	.367*** (.046)	.311*** (.053)	.083 (.071)	.377*** (.056)
Bağımsız Değişkenler	Ağ Etkinliği	.035*** (.010)	.049*** (.012)	.033* (.016)	.037** (.013)
Ba Değ	Ağ Etkileşimleri	.026** (.008)	.024* (.010)	.005 (.013)	.027** (.010)
·c	Firma Yaşı	.003 (.005)	.002 (.006)	007 (.008)	.007 (.006)
kenler	Firma Büyüklüğü	.002 (.002)	.002 (.002)	.003 (.003)	.003 (.002)
Değiş	İhracat	113 (.093)	139 (.115)	000 (.150)	.051 (.117)
Kontrol Değişkenleri	Yabancı Sermaye	.012 (.199)	.159 (.245)	-1.235*** (.320)	064 (.251)
Я	Ar-Ge	.126 (.196)	.218 (.240)	.018 (.315)	.024 (.246)

^{*}p<.05, **p<.01, ***p<.001

Not: Parantez içindeki değerler standart sapmadır.

Ayrıca, ağ etkileşimlerinin (faydalarının) gelecek, müşteri ve değer odaklılık ile pozitif ilişkili ve bu ilişkinin istatistiksel olarak anlamlı olduğu da görülmektedir (β = .026, p <.01; β = .024, p <.05; β =.). 027, sırasıyla p <.05).

Ek olarak, yabancı hissedar ile risk yönetimi arasındaki ilişki dışında, kontrol değişkenlerinin GP'nin boyutlarını etkilemediği görülmektedir. Bulgular, yabancı hissedar varlığıyla GP'nin risk yönetimi boyutu arasında negatif ve istatistiksel olarak anlamlı bir ilişki olduğunu ortaya koymaktadır ($\beta = -1.235$, p <.001).

Özetle, bu çalışmanın bulguları, ilişki ağı özellikleri ve GP arasındaki ilişkilere dair literatürdeki beklentileri desteklemektedir. Literatürde, ilişki ağı özelliklerinin GP'yi etkilediği iddia edilse de bu etkiyi uygulamalı olarak ortaya koyan bir çalışma bulunmadığı tespit edilmiştir. Bu nedenle, bu tezin ana katkısı, deneysel olarak ilişki ağı özelliklerinin GP üzerinde istatistiksel olarak anlamlı bir etkisi olduğunu göstermesidir.

Bu çalışma hem kavramsal hem de pratik olarak KOBİ'ler ve politika yapıcılar için önemli bulgulara erişmiştir. Kavramsal olarak, öncelikle literatürde birçok çalışmada olduğu varsayılan etki firma verisi kullanılarak uygulamalı olarak da kanıtlanmış ve ilişki ağı özelliklerinin GP boyutlarını etkilediği seçilen örneklem özelinde ortaya konmuştur.

Pratikteyse bulgular, öncelikle KOBİ'ler ve girişimciler için ilişki ağlarının önemini ortaya koymaktadır. Başka bir deyişle, yenilikçi ve girişimci pazarlama yöntemlerinin etkin bir biçimde kullanılmasının, ilişki ağı özelliklerinin geliştirilmesiyle sağlanabileceği ortaya konmuştur. Bu nedenle, KOBİ'ler ilişki ağlarını yapısal odaklı, etkinlik odaklı ve etkileşim odaklı geliştirmeyi hedeflemelidir. Bunun için öncelikli şart, bu üç boyutu kapsayacak ve iyi planlanmış bir ilişki ağı yönetimi stratejisi oluşturmak ve bu stratejiye sadık kalmaktır.

Yapısal anlamda KOBİ'ler ağlarını genişletmeyi, ağlarındaki ilişkilerin yoğunluğunu ve sıkılığını arttırmayı hedeflemeleri gerekmektedir. İlişki ağını genişletmek için sosyal medya ve yeni dijital teknolojilerden yararlanmak, yeni organizasyonlara üye olmak, gönüllülük faaliyetlerine, sergi ve fuarlara, kongre, konferans ve seminerlere katılmak faydalı olabilir. İlişki ağının sıkılığını artırmak içinse bağlantıda olunan farklı kişilerin birbirini tanımasını sağlamak, bu kişilerin bir araya gelebileceği etkinliklere ön ayak olmak önemlidir. İlişki ağlarının yoğunluğunu artırmak için paydaşlarla düzenli olarak iletişim halinde olmak ve çeşitli etkinliklerle bu ilişkileri uzun soluklu kılabilmek önem arz etmektedir.

Bunun yanında, ağın etkinliği planlı ve dikkatli bir şekilde yönetilmelidir. Mevcut ve potansiyel paydaşlarla her daim aktif ilişkilere sahip olmak gereklidir. Bu paydaşlar

müşteriler, tedarikçiler, yatırımcılar ya da rakipler olabilir. Bu grupların her biri için ayrı ayrı stratejiler belirlenmeli ve ilişki ağının etkinliği aktif bir şekilde yönetilmelidir.

Ayrıca, ağ etkileşimlerini artırmak ve bunlardan faydalanmayı başarabilmek önemlidir. Ağ etkileşimleri, ilişki ağlarından nasıl ve ne ölçüde fayda sağlanabildiğiyle ilgilidir. Bu fayda, bilgiye erişim, kaynaklara erişim, yeni pazarlara/müşterilere erişim ya da teknolojiye erişim yoluyla sağlanabilir. Bu nedenle, ilişki ağının etkileşimini bu gibi faydalara erişecek düzeyde kılmak her KOBİ için önemlidir.

Bulgulardan faydalanılması muhtemel diğer bir alan ise kamu politikalarıdır. KOBİ'lerin yenilikçi ve girişimci uygulamalarını teşvik etmek için ilişki ağlarının kamu politikalarıyla desteklenmesi elzemdir. Bu kamu politikaları, TGB bölgelerinin fiziki yapısını ilişki ağlarını geliştirecek şekilde planlamak, finansal destek için üniversite-sanayi ortaklıklarını zorunlu kılmak, belli sektörlerde firmalar arası işbirliklerine vergi indirimi vb. finansal ayrıcalıklar tanımak gibi düzenleyici ya da finansal politika araçlarıyla uygulanabilir. Ancak, özelikle finansal ya da düzenleyici olmayan (soft) politika araçlarının ilişki ağlarını geliştirmekte daha etkili olacağı düşünülmektedir. Örneğin, üniversitelerin KOBİ'lerin etkin iş ortakları olabilecek şekilde eğitilmeleri sağlanmalı, eğitim programları ve benzeri etkinliklerle belli sektörlerde kümelenme faaliyetleri desteklenmeli, belli aralıklarla sektör spesifik proje fuarları düzenlenmeli, ilişki ağlarının kurulmasından ve etkin yürütülmesinden görevli aracı kurum ya da kişiler görevlendirilmeli, KOBİ'ler ve devlet kurumları arasında bürokrasi azaltılarak bilgi akışı ve istişare mekanizması kolaylaştırılmalı, yerel işletmeler ve kurumların katılımıyla ağ oluşturma konusunda bazı yerel stratejiler başlatılmalı, firmaların deneyimlerini paylaşmalarına yardımcı olmak için yerel toplantılar düzenlenmelidir.

Proje bulguları faydalı olmakla birlikte bu çalışmanın birtakım kısıtları bulunmaktadır. Öncelikle GP ve ilişki ağı özellikleri için kullanılan ölçekler uyarlama olduğu için geçerlik ve güvenirliklerinin farklı örneklemlerle de sınanması gerekmektedir.

Ayrıca araştırma modeli bu çalışmadaki örneklem temel alınarak kurulduğundan, bulguların genellenebilir kabul edilmesi için modelin farklı örneklemlerle benzer ya da farklı şartlar altında test edilmesi elzemdir. Örneğin bu model, Türkiye'deki diğer TGB'lerle, TGB'ler dışındaki KOBİ'lerle veya farklı ülkelerde test edilebilir.

Bu çalışma, ilişki ağı özelliklerinin GP'yi etkileyip etkilemediğini uygulamalı olarak test eden ilk çalışmadır. Nicel bir araştırma stratejisi ve kesitsel bir tasarım kullanılmıştır. Gelecekteki araştırmalarda, temel motivasyonları ve eğilimleri daha derinlemesine anlayabilmek için nitel tasarım kullanılabilir. Ayrıca, nedensel ilişkiler konusunda daha iyi fikir edinmek için boylamsal bir tasarım da kullanılabilir.

D. TEZ İZİN FORMU / THESIS PERMISSION FORM

ENSTİTÜ / INSTITUTE

Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences				
Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences				
Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics				
Enformatik Enstitüsü / Graduate School of Informatics				
Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences				
YAZARIN / AUTHOR Soyadı / Surname : Durukan				
Adı / Name : Başak Bölümü / Department : Bilim ve Teknoloji Politikası Çalışmaları				
TEZİN ADI / TITLE OF THE THESIS (İngilizce / English): The Impact of Networking Characteristics Entrepreneurial Marketing: The Case of Technology-Based Firms in Ankara TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master X Doktora / PhD	on			
 Tezin tamamı dünya çapında erişime açılacaktır. / Release the entire work immediately for access worldwide. 	Х			
 Tez <u>iki yıl</u> süreyle erişime kapalı olacaktır. / Secure the entire work for patent and/or proprietary purposes for a period of <u>two years</u>. * 				
 Tez <u>altı ay</u> süreyle erişime kapalı olacaktır. / Secure the entire work for period of <u>six months</u>. * 				
* Enstitü Yönetim Kurulu kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecekti A copy of the decision of the Institute Administrative Committee will be delivered to the lib together with the printed thesis.				
Yazarın imzası / Signature Tarih / Date				