

A taxonomy of nascent entrepreneurs' marketing decisions in high-tech small businesses

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ABSTRACT

Entrepreneurial marketing is a useful entrepreneurial strategy to achieve certain goals. This is mostly true for nascent entrepreneurs running small businesses for two main reasons. On the one hand, these entrepreneurs encounter various kinds of resource scarcity. On the other hand, nascent entrepreneurs, especially the ones without having any previous start-up experience, face decision complexity and decision uncertainty in their decisions, including marketing decisions. Given the fact that entrepreneurial marketing emanates from entrepreneurial thinking and decision-making, there should be a direct link between entrepreneurial marketing and entrepreneurial decision-making. Coming to the conclusion that there are few, if any, studies regarding entrepreneurial decisions in entrepreneurial marketing, we conducted a qualitative content analysis to present a taxonomy of main entrepreneurial marketing decisions. According to our findings based on the data gathered by conducting semi-structured interviews with nascent Iranian high-tech entrepreneurs active in biotechnology and nanotechnology industries and analyzed by open coding, marketing mix decisions, core marketing decisions, market entry decisions, opportunity-related decisions, innovation decisions as well as growth decisions are the main decisions made by nascent entrepreneurs, respectively.

Introduction

This paper advances previous research on entrepreneurial marketing (EM) by empirically exploring various EM-related decisions made by nascent entrepreneurs in high-tech, small businesses. Entrepreneurial marketing is an entrepreneurial characteristic shaped and generated by entrepreneurial mind and thought (Hills & Hultman, 2005). On the other hand, decision-making is an important part of entrepreneurship process by influencing the fate of entrepreneurial ventures. Because of their specific cognitive characteristics as well as the unique characteristics of their business environment, entrepreneurial decisions are distinctive (Baron, 1998). Furthermore, various scholars have studied EM and summarized key EM characteristics like entrepreneurial orientation (Hill & Wright, 2000), proactiveness and risk-taking (Kraus, Harms, & Fink, 2009), op-

portunity-orientation (Morrish, Miles, & Deacon, 2010) as well as innovativeness, creativity, networking and flexibility (Hills, Hultman, Kraus, & Schulte, 2010). But, though EM comes from entrepreneurial thinking and decision-making (Hills & Hultman, 2005), there are few studies exploring various aspects of decision-making in entrepreneurial marketing (Nouri, Imanipour, Talebi, & Zali, 2018). The role of entrepreneurial personality in decision-making is more emphasized in the context of nascent entrepreneurship as well as small businesses. In small businesses, decisions are made under the influence of resource scarcity. Also, entrepreneurs running small businesses face decision complexity as well as decision uncertainty because of not having either needed expertise or necessary resources to gather information and evaluate it so as to make business-related decisions (Busenitz & Barney, 1997). Moreover, nascent entrepreneurs' decisions are informal (Carson, Cromie, McGowan, & Hill, 1995) and made under the influence of intuition and emotions (Baron & Shane, 2007). Because of not having experience, information processing of nascent

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entrepreneurs is fundamentally different from experienced entrepreneurs (Ucbasaran, 2004). Thus, one would surmise that the decision-making context for nascent entrepreneurs is probably more tumultuous. We argue that there is a serious gap in literature regarding EM decisions made by nascent entrepreneurs.

Therefore, based on a qualitative content analysis we offer a taxonomy of entrepreneurial marketing decisions. So our study adds two important contributions to the studies of entrepreneurship. First, we contribute to the EM literature by being a pioneer in connecting two important fields of EM and decision-making. Second, we study nascent entrepreneurs, whose decision-making has rarely been studied. This paper proceeds as follows: We review the related literature and then we elaborate our research method, findings, discussion and implications, respectively.

Literature Review

Entrepreneurial Marketing

Marketing has been defined as the process of creating value for customers as well as building strong customer relationship so as to capture value in return (Kotler & Armstrong, 2010). Marketing and entrepreneurship are two fundamental elements of success in market creation (Darroch & Miles, 2011). Entrepreneurial marketing is a decisive instrument of entrepreneurial firms to achieve success by doing marketing in unconventional ways (Stokes, 2000). There are numerous definitions of entrepreneurial marketing in the literature. EM is the process of passionately pursuing opportunities and creating customer value by taking an innovative approach by emphasizing networking, market immersion as well as flexibility (Bjerke & Hultman, 2004). EM is also a strategy to address dynamic business environment (Morrish, 2011), and a different way of doing marketing by emphasizing a proactive orientation to identify and create opportunities and exploiting them before competitors in order to gain the upper hand in the market (Miles, Gilmore, Harrigan, Lewis, & Sethna, 2015). Although EM firms engage in all the core marketing activities of traditional marketing like selling and value propositions (Morrish, Miles, & Deacon, 2010), contrary to the traditional marketing that regards customers as the focal point of marketing activities, EM acknowledges the equally important function of the entrepreneur in the firm's marketing activities (Morrish, 2011). Various factors influence the genesis of EM. According to Carson (1993), EM is mostly under the influence of experience, knowledge, behavior and judgment

of the owner-manager. Also, entrepreneurial mind and decision-making are distinguished components of EM (Hills & Hultman, 2005). Table 1 shows a summary of key findings on entrepreneurial marketing. Reviewing these findings divulges the lack of studies on the role of entrepreneurial decision-making in EM.

Table 1
Summary of key findings on entrepreneurial marketing

Researchers	Key findings
Carson (1993)	Experience, knowledge and judgment of entrepreneur are emphasized in EM.
Carson et al. (1995)	EM in SMEs is an informal and haphazard approach to marketing activities.
Stokes (2000)	EM is doing marketing in unconventional ways.
Bjerke & Hultman (2004)	EM is marketing of small firms growing through entrepreneurship.
Gruber (2004)	Newness, uncertainty and turbulence affect EM in small firms.
Hills & Hultman (2005)	EM behavior comes from entrepreneurial mind and thought.
Kraus et al. (2009)	Innovativeness, proactiveness, an entrepreneurial mindset as well as risk-taking are necessary components of EM.
Morrish et al. (2010)	EM is an opportunity-driven way of marketing.
Hills et al. (2010)	Innovativeness, creativity, networking and flexibility are emphasized in EM.
Gilmore (2011)	Entrepreneur/owner/manager is the focal point of EM.
Morris (2011)	EM is a strategy to address dynamic business environment.
Morrish (2011)	Entrepreneur and customers play equally important roles in EM.
Uslay & Erdogan (2014)	Entrepreneurial mindfulness is emphasized in EM.
Miles et al. (2015)	Proactive orientation as well as innovative behavior define EM.
Kilenthong Hultman, & Hills, (2016)	Firm's age influences EM behavior.

Entrepreneurial Decision-Making

That entrepreneurial decision-making has the potential of becoming a scientific paradigm (Schade & Burmeister-Lamp, 2009), indicates its importance in the field of entrepreneurship. Decision-making is so important in the field of entrepreneurship that entrepreneurs have been defined as decision makers who identify opportunities through approaches emphasizing innovations, profitable venture identification as well as effectiveness (Sarasvathy & Berglund, 2010). Decision-making in an entrepreneurial context is more emphasized, given that entrepreneurs encounter situations such as information overload, high time pressure, and uncertainty profusely (Baron, 1998; Shepherd, 2010; Van Auken, 1999). Compared to non-entrepreneurs, entrepreneurs possess more versatile decision-making styles, including linear as well as non-linear thinking and decision-making capabilities (Groves, Vance, & Choi, 2011; Shepherd, Williams & Patzelt, 2015).

Entrepreneurial decisions vary from non-entrepreneurs (Shepherd et al., 2015). Entrepreneurs tend to assess business situation more optimistically, overestimate one’s ability to make sound business predictions, focus more on their own competencies while neglecting their competitors, overgeneralize from available information, and expand their firms despite negative market feedbacks (Shepherd & Patzelt, 2017). Though prior studies have created a strong body of knowledge on entrepreneurial decision-making, these studies have only paved the ground for more work on the

subject and the existing body of knowledge is far from fully capturing the complexity and dynamics of entrepreneurial decisions (Shepherd & Patzelt, 2017). Table 2 summarizes key findings of entrepreneurial decision-making. This table clearly shows the lack of research on EM decision-making.

Nascent Entrepreneurs’ Marketing Decisions in Small Businesses

Nascent entrepreneurs are individuals in the process of establishing a business venture (Reynolds & White, 1997). Being important components of today’s business environments (Delmar & Davidsson, 2000), nascent entrepreneurs possess unique decision-making styles and evaluation methods (Dimov, 2010). Furthermore, nascent entrepreneurs in new ventures lack established marketing relationships as well as adequate experience in marketing issues resulting in errors in their marketing planning and execution (Gruber, 2004). This is indeed emphasized for nascent entrepreneurs running small businesses. Marketing in smaller firms appears to be different from that practiced by larger organizations (Coviello, Brodie, & Munro, 2000). Also, decision-making in small firms has distinctive characteristics, which makes it different from decision-making in large organizations, including the level of decision uncertainty and decision complexity entrepreneurs in small businesses encounter (Busenitz & Barney, 1997).

Given that small businesses deal with various shortages of necessary resources and lack of specialized knowl-

Table 2
Key research on entrepreneurial decision-making

Researchers	Key findings
Palich & Bagby (1995)	Entrepreneurs view some situations as “opportunities,” even though others perceive them to have little potential.
Baron (1998)	Entrepreneurs face situations that tend to overload their information-processing capacity and are characterized by high levels of uncertainty, novelty, emotion, and time pressure.
Busenitz (1999)	Entrepreneurs use biases and heuristics more, which is likely to lead them to perceive less risk in a given decision situation.
Shepherd (2010)	Entrepreneurial tasks are often extreme—rife with high levels of uncertainty, time pressure, stress, and emotions. This severely impacts entrepreneurial decisions.
Sarasvathy & Berglund (2010)	Entrepreneurs are decision makers who identify and capitalize on opportunities through approaches that emphasize innovation, profitable venture identification, effectiveness.
Shepherd et al. (2015)	For entrepreneurs, the entrepreneurial environment is characterized by high levels of uncertainty about the markets they enter or create, the outcomes of the technological developments they pursue, and their competencies to successfully run a venture.

edge (Franco, de Fátima Santos, Ramalho, & Nunes, 2014), marketing activities in these firms tend to be informal and decision-making is intuitive rather than theoretical (Coviello et al., 2000). Moreover, in small businesses, a sole entrepreneur makes major decisions. By contrast, in larger enterprises, main decisions, including marketing ones, are formally made and formalized into marketing plans and marketing strategies (Bjerke & Hultman, 2004). Given their lack of resources, small firms face great levels of uncertainty in their decisions (Cacciolatti & Lee, 2015). In short, one could easily conclude the exceptional importance of entrepreneurial marketing decision-making in small businesses run by nascent entrepreneurs.

Method

The current research is descriptive in purpose with an anti-positivist stance by focusing on generating subjective knowledge based on entrepreneurial narratives about entrepreneurial marketing decisions, instead of commencing the study from a given theory and applying quantitative measures. Thus, in order to gain a detailed understanding of nascent entrepreneurs' main marketing decisions, we conducted a qualitative content analysis study by interviewing nascent Iranian high-tech entrepreneurs active in different sectors of biotechnology and nanotechnology, who have introduced at least one product to the market in the last 42 months. Out of high-tech industries, we selected nanotechnology as well as biotechnology. We concentrated on nanotechnology because of its importance as a sector of high-tech industry (Woolley & Rottner, 2008) as well as its importance in Iran's economy. As of late 2016, more than 150 Iranian firms were active in nanotechnology (based on the latest statistics published by the Iranian council of nanotechnology development), indicating its importance in the Iranian economy as a whole. Moreover, we chose biotechnology for two main reasons. In general, biotechnology environment is rife with uncertainty as well as rapid change (Carsrud, Brännback, & Renko, 2008), thus, the importance of entrepreneurial judgmental decisions could be more emphasized. In particular, biotechnology is a very thriving and important high-tech sector in Iran. According to the latest statistics published by the Iranian Center of Biotechnology Development, as of late 2016 more than a quarter of all domestic Iranian high-tech firms were active in the biotechnology sector (Biotechnology Council, 2016), indicating the vitality of this industry for the Iranian economy. We adopted a purposive sample approach by selecting the initial list of prospective entrepreneurs from the updated list made

available by the Council of Iranian Nanotechnology as well as the Iranian Institution of Biotechnology Development. We followed the Kvale (1996) rule regarding the number in our sample which regards a number of (10 ± 15) interviews in qualitative studies as adequate.

In the process of selecting the interviewees, we made sure that the selected entrepreneurs were either the sole or main decision maker in their firms. Also, the interviewees were considered relatively educated (with at least a bachelor's degree). On the other hand, all firms were considered small businesses regarding their resources and the number of staff personnel.

In the process of data analysis, our early involvement with the interview data helped us move back and forth between the developed concepts and the collected data, thus enabling us to direct subsequent data collection toward sources that were considered more useful for addressing the main research question (Miles & Huberman, 1994). Furthermore, we strived for a balance between description and interpretation of the gathered data, given that description gives the readers background and context and thus needs to be rich and thick (Denzin, 1989). However because qualitative research is fundamentally interpretive, and interpretation represents the researcher's personal and theoretical understanding of the phenomenon under study (Patton, 2002), we tried to provide sufficient description to allow the reader to understand the basis for our interpretations in this study.

This study's saturation point was achieved after analyzing the gathered data of 22 interviews. Nevertheless, in order to make sure of our results, we conducted three more interviews which corroborated our initial results. In general, we interviewed 13 nanotechnology entrepreneurs and 12 biotechnology ones. All the interviews were recorded after getting the consent of the interviewees. Each interview lasted at least 40 minutes. In each interview, we asked the interviewee to recount and elaborate their most important marketing-related decisions, up to five decisions, in order of precedence. Table 3 elaborates the demographic characteristics of this sample.

Findings

In the process of interviewing, our main effort was to identify nascent entrepreneurs' main marketing decisions in order of precedence. We extracted these decisions from entrepreneurs' own experiences and narratives instead of resorting to the literature. We tried to grasp a better understanding of marketing decisions. In order to analyze the interviews, we used open coding. This was done by three coders, including

Table 3
Demographic characteristics of the entrepreneurs

		No.	Percentage
Gender	Male	19	76.0
	Female	6	24.0
Age	<=30	4	16.0
	30-40	13	52.0
	40-60	8	32.0
Level of Education	Bachelor's degree	8	32.0
	Master's degree	9	36.0
	PhD	8	32.0
Industry	Nano-biotechnology	4	16.0
	Semiconductors	4	16.0
	DNA nanotechnology	3	12.0
	Molecular engineering	2	8.0
	Gene therapy	3	12.0
	Genetic engineering	2	8.0
	Agriculture	4	16.0
	Food production	3	12.0
Firm Age (years)	<=2	9	36.0
	2-3.5	16	64.0
Number of Employees	1-10	7	28.0
	11-20	12	48.0
	21<=	6	24.0

a marketing expert. Some of the identified decisions were routine and some of them were non-routine. Also, some of the decisions were in form of choosing among various alternatives. After analyzing and reviewing the gathered data, we concluded that entrepreneurial marketing decisions could be categorized into six distinctive categories, in order of precedence, as follows:

- Marketing mix decisions (decisions regarding product, place, promotion, price).
- Core marketing decisions (decisions about marketing strategy, targeting, market segmentation)

- Market entry decisions (decisions about resources, barriers, competition, exporting)
- Opportunity-related decisions (decisions about opportunity identification, evaluation, exploitation)
- Innovation decisions.
- Growth decisions (market penetration, market development, product expansion, diversification, segmentation).

Table 4 shows the frequency of each of these categories based on the interviewed data.

Table 4
Identified categories of EM decisions

Categories of Decisions	Frequency of Related Statements
Marketing mix decisions	37
Core marketing decisions	32
Market entry decisions	25
Opportunity-related decisions	16
Innovation decisions	9
Growth decisions	6

Category One: Marketing Mix Decisions

Marketing mix decisions, from product to place, pricing as well as promotion were the main decision-making category identified in our study. Though these decisions were similar to traditional marketing decisions, the lack of resources and also inexperience in nascent entrepreneurs running small businesses made these decisions more crucial for the interviewees. Most of the interviewees mentioned their difficulties in making marketing mix decisions. In retrospect, a lot of the interviewees recounted their decisions on marketing mix issues under the influence of their scarce resources.

Other interviewee's comments indicated the importance of marketing mix decisions and the burden of various shortages, including inexperience, the entrepreneurs felt while making these decisions. Table 5 shows two related comments made by entrepreneurs regarding their marketing mix decisions.

Category Two: Core Marketing Decisions

Many of the interviewees listed core marketing decisions as part of their marketing decisions. These decisions

Table 5
Entrepreneurs' comments regarding marketing mix decisions

Industry	Entrepreneur's Code	Entrepreneur's Statement
Nanotechnology	(C)	"I had designed an anti-pollutant to alleviate the fatal effects of air pollution in Tehran's winter. This could be used at homes as well as in offices. Pilot test were satisfactory, even beyond my expectations. I noticed that it could be used in Tehran in at least one season of winter, or, alternatively, it could be sent to Ahvaz, considering its pollution for at least three full seasons of the year. So I needed to make the vital decision of the place I want to offer my product."
Biotechnology	(S)	"I had to make some important decisions about promotional strategies according to financial resources we had at our disposal. Our area of expertise was a kind of pesticide for farmers. We concentrated on Iran's north, but we were novice regarding promotions at the time."

especially consisted of marketing strategy, segmentations, targeting as well as positioning. Though these decisions are typical marketing decisions similar to traditional marketing decisions in various firms and organizations, given the nascent nature of our sample, some of these decisions proved to be vital for their survival. For example, some entrepreneurs recounted their difficulty in defining the most relevant target market, as is obvious in the comments made by an entrepreneurs shown in Table 6. Some knew practically nothing regarding marketing concepts like segmentation or strategy. They had to trust their own intuition to make decisions in the short span of time. Table 6 shows two related comments made by entrepreneurs regarding their core marketing decisions.

Category Three: Market Entry Decisions

Various aspects of entry decisions, including barriers, competitors, resources, and for some entrepreneurs even exporting included another category of entrepreneurial marketing decisions in our study. Some entrepreneurs faced severe monopoly in their industry, which made competition all but impossible. Some others had to make the crucial decision of gathering and preparing vital resources. For others, the decision regarding the time of entry, was a crucial decision. Some faced the dilemma of when to enter. If entered immediately, they would possibly face severe hurdles and impediments. If they postponed their entry, they would lose time and possible opportunities.

Also, some entrepreneurs had entered the domestic market successfully and were about to expand their markets to neighboring countries like Iraq and Turkey. On the other hand, some interviewees were even uncertain regarding their positions in domestic markets, given the severity of entry barriers and competition. Table 7 shows two related comments made by entrepreneurs regarding their marketing entry decisions.

Category Four: Opportunity-Related Decisions

Decisions regarding different aspects of identifying, evaluating, as well as exploiting marketing opportunities, were other important categories of entrepreneurial marketing decisions. A few interviewees even mentioned their exploitation decisions, the time of exploitation, and its various aspects, as their most important marketing decisions by far. Given their scarce resources as well as market turbulence at the time, these entrepreneurs needed to decide whether or not to exploit a given opportunity. Also, the bulk of resources they needed to allocate for this exploitation was another important decision. Table 8 shows two related comments made by entrepreneurs regarding their opportunity-related decisions.

Category Five: Innovation Decisions

Innovation-related decisions were another identified category of decisions emphasized by our interviewees. Some had built their venture on the concept of an innovative idea. Some were pursuing innovation after launching their businesses in order to achieve competitive advantages. Some even mentioned innovation as their resort to achieve profit and gain considerable market shares. For some interviewees, innovative ideas came from their own mind, because they did not possess necessary financial resources to invest in research and development. Also, some important decisions were made regarding intellectual property issues, given the lax regulation that exists in Iran's business environment. But more specifically, these entrepreneurs feared that, given their lack of resources on the one hand and complex intellectual property rights in business environment, their innovative ideas may have been exposed to their more powerful rivals in the market. Table 9 shows two related comments made by entrepreneurs regarding their innova-

Table 6
 Entrepreneurs' comments regarding core marketing decisions

Industry	Entrepreneur's Code	Entrepreneur's Statement
Nanotechnology	(D)	<p>"I had an engineering background and based my venture on an engineering-related idea. I did not have reliable marketing expertise, I had just attended some courses of marketing. One of my main decisions at the inception of my venture was made regarding our best target market. On the one hand we could have concentrated on governmental firms, quite the contrary, we could select totally private sector to deliver our product. The differences were substantial. I had to make this decision in the first couple of months of my activities."</p>
Biotechnology	(A)	<p>"I entered the market without any sophisticated preparations or planning. Thus, the first couple of months were tumultuous, because I had difficulty about choosing target markets or segmenting. Concepts like strategy or segmentation were unfamiliar to me and I learnt(sic) them mostly by doing trial and error in the market."</p>

Table 7
 Entrepreneurs' comments regarding marketing entry decisions

Industry	Entrepreneur's Code	Entrepreneur's Statement
Nanotechnology	(H)	<p>"I had conducted some pilot tests and based on their results was about to make the decision of when to enter. I was facing a dilemma. If I entered the market immediately, I would face severe competition not only by governmental spin-offs but also by seasoned entrepreneurs already in the semi-conductor market. On the other hand, if I postponed my entry, I would probably lose the available windows of opportunities. Anyway, I chose to enter the market limitedly."</p>
Biotechnology	(P)	<p>"Genetic engineering is a young industry in Iran. I had invested in this industry dearly and I was hesitant to enter the market or postpone my entry till conducting satisfactory market tests and analyzing the situation. Though postponement would cost me pioneering advantages."</p>

Table 8
 Entrepreneurs' comments regarding opportunity-related decisions

Industry	Entrepreneur's Code	Entrepreneur's Statement
Nanotechnology	(B)	<p>"I entered nano-biotechnology market two years ago. I was a consultant in a bio-related firm and based on my experiences as well as education, I founded my own firm. My main product is a kind of plastic bag. In the meantime, I identified a lucrative opportunity, the exploitation of which needed my firm to make some changes in its priorities. Because I was experiencing serious shortages at the time, I either had to let go of the new opportunity and focus on my ongoing project, or sidestep the ongoing project by prioritizing the new identified opportunity. It was a very difficult decision needed to be made in a couple of weeks."</p>
Biotechnology	(O)	<p>"Bio food is a burgeoning industry in Iran. Because of the various governmental as well as nongovernmental advertisements, people are getting familiar with bio products. I identified a lucrative opportunity to produce bio-yoghurt designed for sensitive people and built my venture upon it. It has been my most important business decision to this day."</p>

Table 9
 Entrepreneurs' comments regarding innovation decisions

Industry	Entrepreneur's Code	Entrepreneur's Statement
Nanotechnology	(F)	<p>“Semiconductor market, in which I am active, is a turbulent market. This means a high rate of change. If I want to survive and compete in this market, especially with my limited resources, I need to be innovative. This has been my business doctrine in the last couple of years. Coming to the conclusion that in order to not only gain a good market share but also to survive, innovation is a necessity, I have been nurturing and developing innovative ideas. For example, I have produced some kind of semiconductors with the same capabilities as the current products in the market, but with half the price.”</p> <p>“Unfortunately, especially in recent years, immoral marketing behavior in food industry has led to lots of maladies for domestic consumers. For example, lots of artificial foods and even fruits have been produced and fed to Iranian people, without their knowledge. I decided to produce a natural bio product whose function is to reveal artificial ingredients in fruits.”</p>
Biotechnology	(L)	

tion-related decisions.

Category Six: Growth Decisions

Growth Decisions included all the decisions regarding market penetration, market development, product expansion, diversification and segmentation. Despite their nascent nature and even some of them being considered novice entrepreneurs, some interviewees mentioned growth decisions as their main decisions after stabilizing their situations. Table 10 shows two related comments made by entrepreneurs regarding their growth decisions.

Discussion

Entrepreneurial marketing is an important characteristic of entrepreneurs, especially entrepreneurs founding and managing small businesses, given the resource scarcity these entrepreneurs encounter. Also, entrepreneurial decision-making is an inseparable part of entrepreneurship. Na-

scent entrepreneurs' decision-making is of substantial importance because nascent entrepreneurs may lack necessary decision-making experience and expertise and make their business decisions mostly based on their emotions and intuition. Thus, one could conclude that nascent entrepreneurs' marketing decisions are of exceptional importance. Though emphasized in the literature, there are very few studies regarding entrepreneurial decisions in EM. The current study focused on gaining a better understanding of both EM and entrepreneurial decision-making. The main objective of this paper was to offer a taxonomy of entrepreneurial marketing decisions. This goal was pursued by conducting semi-structured interviews with nascent Iranian high-tech entrepreneurs active in biotechnology and nanotechnology industries. According to our findings, all EM decisions could be categorized into six categories of marketing mix decisions (decisions regarding product, place, promotion, price), core marketing decisions (decisions about marketing strategy, targeting, market segmentation), market entry decisions (decisions about resources, barriers, competition,

Table 10
 Entrepreneurs' comments regarding growth decisions

Industry	Entrepreneur's Code	Entrepreneur's Statement
Nanotechnology	(K)	<p>“After concluding that my current situation is reliable, I turned my attention to growth. I prepared some plans to expand my market. Firstly, I entered domestic market in vicinity. After that, I decided to export to Iraq.”</p> <p>“As soon as I stabilized my market in Qazvin province, I decided to develop my market to Iran's north, which proved to be a very lucrative market for our product (manure). That was in the second year of my activity in this firm. So I fully concentrated on market expansion.”</p>
Biotechnology	(N)	

exporting), opportunity-related decisions (decisions about opportunity identification, evaluation, exploitation), innovation decisions and growth decisions (market penetration, market development, product expansion, diversification, segmentation). Most of our results corroborate the main principles set forth by the literature regarding important aspects of EM. Opportunity orientation (Morrish et al., 2010), growth (Bjerke & Hultman, 2004), innovation (Miles et al., 2015) and innovativeness (Kraus et al., 2009) that have been emphasized in the literature as the main components of EM were corroborated in our study as we found out main EM decisions regarding these issues. Also, given that according to our findings, some important EM decisions are made regarding core marketing activities and marketing mix decisions, we conclude that EM decisions are rooted in traditional marketing decisions, but with the influence of the entrepreneur, as we made sure that in our sample the decision-making is mostly the task of a sole, novice entrepreneur. This is in line with the proposition set forth by Morrish et al. (2010) that EM is actually traditional marketing with an entrepreneurial spirit. Also, according to Morrish et al. (2010), decision-making in high growth SMEs is often focused on exploiting opportunities to create radical innovations that disrupt markets and competitive relationships. This statement was partly and implicitly corroborated as our interviewees emphasized the importance of opportunity exploitations decisions.

That new ventures face lots of uncertainty in their business environment because of various resource scarcities (Gruber, 2004) was also corroborated in our study as a lot of interviewees mentioned the burden of resource scarcity on their marketing decisions. On the other hand, we found evidence of some entrepreneurs' hesitations in their marketing decisions, which were apparent in their recounts of their marketing decisions, especially initial decisions. This could be due to the fact that they were nascent and novice in their decision-making. Also, that growth-related decisions were the least frequent category of decisions identified here could be due to the fact that our sample consisted of nascent entrepreneurs. Indicating that their main goal in the initial months and even years of their ventures were mere survival, not growth. Also, Gilmore, Carson, and Grant (2001) argue that networking is an inherent aspect of entrepreneurs' decisions in small businesses. This was not corroborated in our study as none of the interviewees mentioned networking decisions as one of their main EM-related decisions.

Implications

Our results are of grave importance for high-tech entrepreneurs as well as the entrepreneurs running small businesses. Given that resource scarcity in small businesses in

their marketing activities encounter has been emphasized in the literature and reiterated in our study, and this impacts EM decisions, policy makers should consider finding ways to reduce the negative effects of resource scarcity on EM decisions in small firms.

We have also four important implications for future prospective researchers. We emphasize the fact that this study was conducted in Iran, a country in which government plays substantial roles in economy as a whole. Also, at the time of this study, Iran's economy was still plagued by various sanctions. Thus, we call on future researchers to pay attention to contextual matters and conduct a similar study in other countries with different contexts. On the other hand, according to the literature, entrepreneurs in small businesses are prone to heuristics and biases (Busenitz & Barney, 1997). These heuristics and biases influence lots of entrepreneurial decisions and have important outcomes for entrepreneurs (Shepherd et al., 2015). Do heuristics and biases influence EM decisions, too? This is a very important research topic, given the important practical implications of heuristics and biases for entrepreneurs. Also, we targeted two important high-tech industries as our sample. For our findings to be applicable for high-tech industries as a whole, future studies should better select and study other parts of high-tech industries. Last, but not least, our sample consisted of nascent entrepreneurs. Because nascent entrepreneurs' decisions are different from those decisions made by experienced entrepreneurs, we call on prospective researchers to study the differences between EM decisions made by nascent and experienced entrepreneurs.

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Appendix 1
Interview Protocol

Section	Approximate Duration	Description
Introduction	5 minutes	<ul style="list-style-type: none"> Introducing ourselves Elaborating the purpose of the interview Ensuring confidential aspects and interviewee's consent Gathering the interviewee's demographic information
Part 1	10 minutes	Questioning about marketing process decisions
Part 2	10 minutes	Questioning about marketing strategy decisions
Part 3	10 minutes	Questioning about marketing mix decisions
Conclusion	5 minutes	<ul style="list-style-type: none"> Appreciating the interviewee Member checks