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Proactive marketing response to population aging: The roles of capabilities and commitment of firms

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ABSTRACT

Strategic flexibility, and explorative and exploitative capabilities have been argued as critical capabilities and as fundamental ingredients of entrepreneurial marketing. Most past studies have tested the efficacy of these capabilities for firms' proactive marketing responses in the context of immediate task environments over which a firm has considerable direct influence. Unfortunately, few empirical studies have researched general environments that are not only essentially uncontrollable but also those for which it is difficult to discern their opportunity–threat implications.

Utilizing a sample from Japan, we test a model that explains the proactive marketing responses to population aging. We found that: 1) a company's strategic flexibility not only serves as a direct driver to both explorative and exploitative capabilities and proactive marketing response, but also imparts a far-reaching indirect effect on the marketing response; and 2) organizational commitment to the population aging issue is a mediator between exploitative capability and marketing responses.

1. Population aging: An opportunity and/or threat

Whalen et al. (2016, p. 7) explicated the entrepreneurial marketing (EM) phenomenon as "a combination of innovative, proactive, and risk-taking activities that create, communicate, and deliver value to and by customers, entrepreneurs, marketers, their partners, and society at large." Both small and large firms and start-ups as well as established firms practice EM processes where the emphasis is on opportunity creation and/or discovery, evaluation, and exploitation (Miles & Darroch, 2006; Shane & Venkataraman, 2000). In this paper, we investigate the roles of a firm's EM processes in the form of three capabilities (i.e., strategic flexibility, and explorative and exploitative capabilities) and organizational commitment in addressing an external environment with uncertain opportunity–threat implications (Phan, Wright, Ucbasaran, & Tan, 2009; Plambeck, 2012). Specifically, we focus on population aging as the critical phenomenon in the most aged society in the world—Japan—as our empirical research context.

Recently, population aging as a "grand challenge" has attracted attention in management studies (e.g., Kulik, Ryan, Harper, & George, 2014). The growing proportion of older people represents a threat to sustainability of pension systems and labor pools, as well as the firms' existing product and service offerings in both industrialized and some emerging economies (Harper, 2014; Kohlbacher & Herstatt, 2011). Yet, the same phenomenon also gives rise to new business opportunities (Kohlbacher, Herstatt, & Levsen, 2015; Matsuno & Kohlbacher, 2018). Peter Drucker has pointed to the business implications of demographic change as early as 1951 (Drucker, 1951) and argued that demographic change is an important source of innovation opportunities (Drucker, 1985).

Although business executives in general acknowledge the importance of population aging when asked, relatively few companies seem to take concrete and proactive measures to cultivate the older market segment or develop products/services for them (Economist Intelligence Unit, 2011; Kohlbacher & Herstatt, 2011; Stroud & Walker, 2013). This discrepant responsiveness by businesses is mystifying, because the lack of response does not seem to be due to the lack of awareness or knowledge of the phenomenon itself. With time-series actuary data from the government this demographic development has been quite predictable for some time and it is well reported in Japan.[1] It seems that population aging is well known and its existence is certain, but it is perceived to be much less certain and predictable for its opportunity–threat implications to businesses. As the recognition of

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[1] A Google keyword search of "高齢化 ('koreika' or 'population aging')" produces 14,800,000 hits as of May 26, 2017.

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opportunities is the fundamental driver of entrepreneurial behaviors, the distinction between 'certain phenomenon' and 'uncertain implications' is important. As EM is about entrepreneurial behaviors in marketing, the recognition of opportunities is a critical aspect of EM. We believe that it is the inherent uncertainty of *the implications* that debilitates many companies in responding to this phenomenon.

The profound transformation of the market caused by a major structural change such as population aging would elevate competitive pressures. The differences between those who can adapt and lead and others who cannot could lead to a broad, industry-wide upheaval as a result (Zhou & Li, 2010). The apparent lack of proactive responses by many firms in this most aged industrialized society, therefore, has significant industry and social implications. Imagine a country in which the population of 18-year-olds shrunk by 43% in 22 years (i.e., from 2.05 million in 1992 to 1.18 million in 2014 (Ministry of Education, 2017)). In this country, by 2024, about one-sixth of the entire population will be 75+ years old and one-third will be 65+ years old (Kawai, 2017). Dynamic capabilities (e.g., Day, 2011; Teece, Pisano, & Shuen, 1997), or lack thereof, may explain what separates those who can merely recognize a phenomenon and those who can act on it (Matsuno & Kohlbacher, 2018). Dynamic capabilities are "the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (Teece et al., 1997, p. 516). Teece (2009) sees dynamic capabilities as a theory of entrepreneurial management as these capabilities allow a firm to take advantage of the exploration of new opportunities as well as the exploitation of existing ones. In this paper, we contribute to EM research by analyzing the recognition and exploration and exploitation of opportunities arising from changes in the environment of the firm.

In the remainder of the paper, we first review the most relevant literature. As the EM domain has a unique and broad multidisciplinary heritage of marketing, entrepreneurship, and management science (Kraus, Filser, Eggers, Hills, & Hultman, 2012), the most directly relevant research that deals with significant external environmental uncertainties is reviewed, followed by hypotheses development.

2. Conceptual model and hypotheses

Building on the dynamic capability perspective (Makadok, 2001; Teece et al., 1997), we developed our conceptual model (Fig. 1). In this model, firms' capabilities are posited as the fundamental requirement and antecedent to the marketing-strategy response that addresses uncertain consequences implicated by the change in external environment (i.e., population aging). The marketing-strategy response, however, cannot take place without an organization's strategic choice and commitment to deploy such capabilities (Day, 1994). Day (2011) suggests that information overload and cognitive indigestion, organizational rigidities, and lagging reactions make response impossible or too late, and dynamic capabilities that are guided by vigilant leadership are necessary for firms to be adaptive. We propose that organizational commitment at two separate but related levels—top management and organization-wide—mediates the link between the capabilities and marketing-strategy response. In the following sections, we articulate the conceptual model and develop our empirical hypotheses for both direct and indirect links in the conceptual model.

2.1. Firm capabilities for marketing responses under uncertainty

Researchers distinguish EM from traditional marketing by the activities that explicitly confront and address risks, opportunities, and uncertainty (Whalen et al., 2016). Extant research in marketing, entrepreneurship, and innovation suggests that the firm's dynamic capabilities and organizational factors play an important role in the firm's entrepreneurial actions (e.g., Garrett & Covin, 2007; Gatignon & Xuereb, 1997; Phan et al., 2009). In their definition of EM, Morris, Schindehutte, and LaForge (2002) point out the importance of proactive identification and exploitation of opportunities. Specifically among firms' *dynamic* capabilities, strategic flexibility, and explorative and exploitative capabilities (and ambidexterity collectively) are identified as critical in order to thrive in changing external environments that have uncertain opportunity and threat implications (e.g., Kyriakopoulos & Moorman, 2004; Vorhies, Orr, & Bush, 2011). These capabilities are important for EM, which typically has to deal with a significant degree of uncertainty of opportunity–threat implications (Miles, Gilmore, Harrigan, Lewis, & Sethna, 2015; Morris et al., 2002; Morrish, Miles, & Deacon, 2010). Population aging is a case in point: it is an external environmental factor with significant uncertainty in opportunity–threat implications for businesses. Nonetheless, there is a dearth of research about opportunity recognition in the context of population aging (Kohlbacher et al., 2015) in the entrepreneurship literature. The dynamic capability-building perspective suggests that competitive advantage and ultimate survival of firms is contingent upon the resources but, more importantly, the capability to structure, bundle, and leverage those resources (Connelly, Ketchen, & Slater, 2011; Makadok, 2001) under significant uncertainty.

Strategic flexibility refers to the "degree to which an organization has a variety of managerial capabilities and the speed at which they can be activated, to increase the control capacity of management and improve the controllability of the organization" (Volberda, 1996, p. 361). Strategic flexibility at the organization level is, therefore, the firm's capacity to be prepared to face uncertain developments in the marketplace, the "uncertainties about which there can be little or no prior knowledge" (Evans, 1991, pp. 69–70). Strategic flexibility argues that, instead of investing in and building predetermined assets for predictable and environmental needs, firms that operate under significant uncertainty should invest in assets and capabilities that allow them to flexibly deploy them at a moment's notice to where opportunities arise or threats close in (Evans, 1991; Grewal & Tansuhaj, 2001; Sanchez, 1995).

Ambidexterity, meanwhile, is argued to address the tension that exists at product/service-level opportunities that can be captured by simultaneously exploiting existing competencies and exploring new ones (Danneels, 2002; Lubatkin, Simsek, Ling, & Veiga, 2006; March, 1991). With ambidexterity, an organization addresses the "known" uncertainties with its known, exploitative capability and the "unknown but knowable" uncertainties through acquiring a knowable, explorative capability (Ahmadi & O'Cass, 2016). Hence, Jansen, Tempelaar, Van Den Bosch, and Volberda (2009, p. 797) refer to organizational

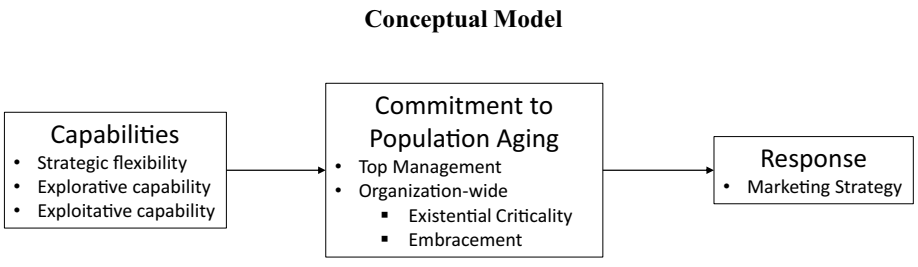

Fig. 1. Conceptual Model.

ambidexterity as a dynamic capability because it represents "the routines and processes by which ambidextrous organizations mobilize, coordinate, and integrate dispersed contradictory efforts, and allocate, reallocate, combine, and recombine resources and assets across differentiated exploratory and exploitative units." Several researchers have argued that surviving and prospering over the long run takes such a dynamic capability, because it allows firms to meet current market needs with retrospective rationality, while concurrently preparing for future developments with prospectively rational efforts (Burgelman, 1991; Gibson & Birkinshaw, 2004; Hill & Birkinshaw, 2014; Jansen et al., 2009).

Thus, surviving and prospering organizations in dynamic environments *over time* are said to be ambidextrous, and consciously managing and reconciling the inherent tensions between them well is supposedly a rare feat (Duncan, 1976; Tushman & O'Reilly, 1996). It goes without saying, however, that these explorative and exploitative capabilities may not be present to an equal extent (or if at all), or at an equilibrium state in many organizations (Cao, Gedajlovic, & Zhang, 2009). In fact, although possessing both capabilities simultaneously at a high level and being able to deploy either or both at will may explain organizational survival in the long run, there may be times and situations at which only one capability may be sufficient or even appropriate in order to address a specific external environmental phenomenon. Therefore, following an approach that is more dominant in ambidexterity literature, we conceptualize exploration and exploitation as distinct and separable modes of activity (e.g., Ahmadi & O'Cass, 2016; He & Wong, 2004; Koza & Lewin, 1998; Rothaermel & Deeds, 2004; Vasilchenko & Morrish, 2011). Doing so allows us to separately evaluate the extent to which a firm possesses each of the two differentiated capabilities (Hill & Birkinshaw, 2014) and empirically test how each might ultimately impact a firm's proactive responses to population aging specifically.

Sarasvathy and Dew (2005) argue that a business environment presents volatility, risk, resources, and rewards, and businesses must assess their chances of success by uniquely exploiting their own resources and capabilities to deal with known, unknown, and unknowable factors in the environment. The strategic flexibility becomes critical for firms that recognize the environments that are characterized by diverse uncertainties and possibilities of future outcomes, especially in the cases where no "correct" answers are knowable *ex ante* (Amit & Schoemaker, 1993; Weber & Tarba, 2014). Strategic flexibility allows firms to engage in developing both explorative and exploitative capabilities and engaging in both activities. Thus, we expect that a firm's strategic flexibility is an antecedent to both explorative and exploitative capabilities:

H1a. A firm's strategic flexibility is positively related to its explorative capability.

H1b. A firm's strategic flexibility is positively related to its exploitative capability.

2.2. Capabilities and top management commitment

With strategic flexibility, and explorative and exploitative capabilities, firms are better positioned to act on and deal with environmental changes and uncertainties. However, capabilities alone cannot make a firm act on either opportunities or threats, because it takes an organization's strategic choice to address the environmental uncertainties it recognizes as significant.

According to the organizational cognition perspective (Daft & Weick, 1984; Weick, 1995), organizations are perception and interpretation systems. When senior executives observe a phenomenon and event in the external environment (e.g., population aging) that they consider nonroutine, confusing, ambiguous, equivocal, or surprising relative to an existing frame of reference, they engage in a dynamic process of "sensemaking" (e.g., Brown, Colville, & Pye, 2015; Thomas, Clark, & Gioia, 1993; Weick, 1995). Sensemaking is interpreting and evaluating the potential implication (positive or negative), meaning, and relevance of an external event or phenomenon for the firm (Cowan, 1986). When the organization finds a particular phenomenon sufficiently important for its well-being, the phenomenon and its implied challenges become a strategically relevant issue to be addressed and resolved (Thomas & McDaniel, 1990; White, Varadarajan, & Dacin, 2003).

The literature identifies a variety of factors that affect the extent to which an organization pays attention to an issue. These include the required amount of cognitive and interpretive effort (Thomas & McDaniel, 1990), opportunity/gain and threat/loss implications (Dutton & Jackson, 1987), perceived controllability (Dutton & Jackson, 1987; White et al., 2003), resource dependence (Connelly et al., 2011; Pfeffer & Salancik, 1978), vested interest (Crano & Prislin, 1995), and strategic orientation (Zhou & Li, 2010). In addition to these factors, we believe that an organization's capabilities for dealing with environmental uncertainties would instill a greater sense of perceived agency, self-efficacy, and controllability (Plambeck & Weber, 2010; White et al., 2003) over the consequences of an external phenomenon. A higher level of the three capabilities (i.e., strategic flexibility, and explorative and exploitative capabilities) and the perceived agency should allow and facilitate top management to commit to and resolve the issues of significant opportunity–threat implications as a matter of strategic choice (Child, 1972; Zhu & Matsuno, 2016). Therefore:

H2. A firm's strategic flexibility is positively related to top management commitment to deal with population aging.

H3a. A firm's explorative capability is positively related to top management commitment to deal with population aging.

H3b. A firm's exploitative capability is positively related to top management commitment to deal with population aging.

2.3. Top management and organization-wide commitment

Without clear communication from top management about its belief about population aging as an important strategic issue, resistance to taking action prevails within the rest of the organization. The rest of the organization may find a variety of reasons for maintaining the status quo by either underestimating opportunities or denying threats. We draw from the insights by Colwell and Joshi (2013) on the important role of top management in facilitating intraorganizational dynamics to foster sensemaking of critical issues. Top management commitment serves as a strong political impetus that promotes organization-wide commitment and orientation to a strategic issue that poses a significant opportunity or threat to the organization (Banerjee, Iyer, & Kashyap, 2003). An early study in EM suggests the importance of top management's commitment to risk-taking and encouragement of proactive initiatives across organization to promote organizational responsiveness to the market (Matsuno, Mentzer, & Özsomer, 2002). To the extent that a stronger top management commitment is predicated upon firm capabilities (H2, H3a, H3b), top management commitment plays a critical role in bridging the firm capabilities, and organization-wide commitment, and eventual responsiveness to the external environmental phenomenon.

In general terms, organization-wide commitment involves engagement with a specific issue of strategic importance by a broader range of organizational members beyond upper-echelon personnel. Specifically in our research context, the organization-wide commitment to the issue of population aging is manifested in perceived existential criticality to the organization and the embracing of the issue by the entire organization. Without true organizational commitment fostered by the top management, an exogenous macroenvironmental issue like population aging, despite its significant degree of uncertainty for either opportunity/gain or threat/loss, would not even be acknowledged as relevant,

receive steadfast attention, and invoke actions from the members.

First, the vested interest literature (e.g., Crano & Prislin, 1995) supports the importance of perceived existential criticality for organization-wide commitment. It argues that, for organization members to commit to act on a strategic issue, they need to perceive that a particular issue is so important that the organization's existence and survival depends on its successfully dealing with it. The salience of the issue, certainty and immediacy of the potential consequences emanating from the issue, and perceived self-efficacy of the actor when addressing the issue are suggested to enhance the perceived vested interest and existential criticality (De Dominicis et al., 2014).

Furthermore, organization-wide commitment manifests itself in active embracing of the issue throughout different levels (e.g., individual, function, location), forming an organizational orientation for continuous engagement. In the marketing literature, the most closely aligned construct to the organization-wide commitment can be found in the environmental orientation construct proposed by Banerjee et al. (2003). In their study of corporate environmental strategies, Banerjee et al.'s external environmental orientation (EEO) scale refers to managerial perceptions of the importance and criticality of the environmental issues to the firm's financial well-being and survival, while the internal environmental orientation (IEO) scale measures organizational acceptance of the values that address important environmental issues. Their study shows that top management commitment is an antecedent to both EEO and IEO. This is consistent with our position as stated earlier: top management plays a critical role in facilitating organizational commitment to an external environmental factor that has a significant relevance to the organization. We hypothesize that top management commitment is positively related to organization-wide commitment.

We also expect that organization-wide commitment to the population aging issue is an antecedent to the firm's marketing-strategy responses. Thus:

H4. A firm's top management commitment to the issue of population aging is positively related to the organization-wide commitment to population aging issues.

H5. A firm's organizational commitment to the issue of population aging is positively related to the magnitude of marketing-strategy responses to population aging issues.

2.4. Mediation hypotheses

We believe that a firm's three capabilities (i.e., strategic flexibility, explorative capability, exploitative capability), mediated by the two levels of organizational commitment (i.e., top management, organization-wide) to a specific issue—population aging in our study—should promote a firm's marketing response to the issue. To advance our mediation hypotheses, we recapitulate the preceding discussion here.

It is important to note that an organization's cognition and perception (i.e., top management commitment, organization-wide commitment, embracement) regarding the population-aging phenomenon may or may not take place without regard to the availability of dynamic capability (i.e., strategic flexibility, explorative capability, exploitative capability). However, dynamic capabilities are a necessary condition and means for an organization to address and respond to the phenomenon of importance, because without possessing (i.e., developing and maintaining) dynamic capabilities, no attention and cognition could be acted upon. For organizations to respond to the population-aging phenomenon at a marketing-strategy level, however, it takes a strategic choice by top management and subsequent organizational commitment to deal with the phenomenon. Thus, we predict that the effects from the three capabilities to the magnitude of marketing-strategy response are mediated through both top management and organizational commitment (see Fig. 3). Note that the mediated effects are hypothesized for each unique path as explicated below:

H6a–c. A firm's strategic flexibility is positively related to its magnitude of marketing-strategy responses to population aging issues, which is mediated by: a) explorative capability, top management commitment, and organizational commitment to the issue; b) exploitative capability, top management commitment, and organizational commitment to the issue; and c) top management commitment and organizational commitment to the issue.

H7. A firm's explorative capability is positively related to its magnitude of marketing-strategy response to population aging issues, which is mediated by top management commitment and organizational commitment to the issue.

H8. A firm's exploitative capability is positively related to its magnitude of marketing-strategy response to population aging issues, which is mediated by top management commitment and organizational commitment to the issue.

3. Method

3.1. Population aging: research and data-collection context

Several important factors made Japan a propitious data-collection site. First, Japan has the oldest population in the world (Kohlbacher & Herstatt, 2011; Muramatsu & Akiyama, 2011). More than one-quarter (26.0%) of the population (127 million people) is age 65 or older (Ministry of Internal Affairs and Communication, 2014) and, by 2030, the proportion is predicted to reach 32% (Muramatsu & Akiyama, 2011). The extent of Japan's population aging becomes evident when compared to the same statistics for the state of Florida (18.1%) and the United States overall (14.1%) (The U.S. Census Bureau, 2013). More importantly, not only the general public but also corporate managers are cognizant of the issue of population aging, a highly conspicuous national media issue and part of daily discourse. The fundamental level of issue awareness (Plambeck & Weber, 2009) among the general public and managers is required in order to investigate our research questions: 1) do firm capabilities directly or indirectly explain a variation in organizations' marketing (non)responses to an opportunity/threat posed by population aging?, and 2) does the firm's commitment to deal with population aging at both top management and organization-wide levels mediate the effect of firm capabilities on marketing responses to population aging?

3.2. Field interviews and pretest

We conducted exploratory in-depth field interviews with senior corporate-level marketing executives at six Japanese manufacturing and service companies. At the end of the interviews, we asked the executives to complete a pretest version of the survey questionnaire. In terms of the focal phenomenon, we learned from the interviews that, although most companies are aware of a wide range of external environments, a majority of them are preoccupied with their immediate task environments and consider general environments, such as population aging, as less or only indirectly relevant to their day-to-day operations.

We contracted Central Research Services, Inc., a well-established market and public-opinion survey firm in Tokyo to support our data collection. This included a pretest of our survey instrument with an additional 66 senior executives of manufacturing and service companies in Japan. The questionnaire items were originally developed in English, then back-translated and refined into a Japanese version by experienced research firm personnel, two trained bilingual graduate students, and the bilingual authors. The pretest responses from a total of 72 executives helped us ensure item comprehensibility, length, reliability of scales, and adequate distribution of the responses to the questionnaire items.

3.3. Data collection

We developed the study's sample by utilizing the Teikoku Data Bank database,[2] the most comprehensive, corporate-level business database available in Japan. It includes approximately 120,000 companies with 20 or more employees, encompassing both manufacturing (approximately 48,000) and service (approximately 72,000) companies. We generated a quota sample of 10,000 Japanese manufacturing and service companies from the database based on the employee size and industry classification provided by the Japanese government's national economic census. We chose the corporate level as our unit of analysis for two reasons: 1) We are interested in a broad range of businesses in Japan and it is not possible to obtain such a list at strategic business unit (SBU) level and 2) the Teikoku Data Bank database is well recognized for its accuracy and is updated annually in important dimensions (e.g., annual sales revenue, employee size, locations), but reports only corporate-level data. We made a pragmatic "trade-off" for the reasons above, although SBU is the smallest unit with autonomous strategy formulation and execution responsibilities, and many companies have multiple SBUs in different industry and market environments within the same corporate structure. Therefore, we ensured that the informants were knowledgeable about corporate-wide marketing strategies and operations.

We contacted the CEO's office or the office of general administrative affairs of each company and requested participation by a senior corporate marketing executive (i.e., vice president or managing director level). We ascertained the informants' status, authority, and knowledge about both internal corporate-level strategy formulation and external execution in the marketplace. Importantly, in the Japanese organizational context, the title of "vice president" or "managing director" carries a significantly greater hierarchical authority than those in other countries (e.g., the United States) where those titles often refer to upper-middle or even middle management ranks. Our efforts resulted in 3404 companies (i.e., senior marketing executives) agreeing to receive the survey. The aggregate profile of the 3404 companies in relation to industry classification code, employee size, and annual sales revenue was found to be proportionately consistent with those of the original list of 10,000 companies.[3] In total, we received 545 usable responses (an effective response rate of 16.0%), which represent the sample for our hypotheses testing.

3.4. Measures

Except for a few measures, all measures for the constructs were sourced from extant literature. For multi-item scales, we purified the items by evaluating both substantive (e.g., breadth, consistency, clarity, and comprehensiveness of theoretical content coverage) and empirical (e.g., descriptive statistics, fits, and reliability coefficient) criteria. All measurement items after item purification, along with their standardized factor loadings, *p*-values, composite reliability (CR), and average variance extracted (AVE) are provided in Appendix A, and a correlation matrix at the construct level is provided in Appendix B.

3.4.1. Strategic flexibility

For the construct of strategic flexibility (SF), we adopted a 5-item strategic flexibility scale from Grewal and Tansuhaj (2001). The scale is purported to measure an organization's ability to capitalize on uncertainty and diversity inherent in its external environment and flexibly utilize and deploy its assets and resources accordingly. After dropping an item due to lack of reliability and unidimensionality, we retained the other four items. Following the original study all items utilize a 7-point Likert scale (i.e., 1: disagree, 7: agree). The CR for state certainty is 0.85; the AVE is 0.59.

3.4.2. Explorative and exploitative capabilities

We measure these two capabilities with the 7-point Likert type scales developed by Jansen and his colleagues (Jansen et al., 2009; Jansen, Van Den Bosch, & Volberda, 2006). Specifically, we utilized the two scales (four items for each) from Jansen et al. (2009), which were based on Jansen et al. (2006). However, due to the low factor loading and low contribution to the scale reliability, one item from each scale was removed. The CR and AVE were 0.79 and 0.56, respectively, for explorative capability (ERC) and 0.77 and 0.53, respectively, for exploitative capability (EIC).

3.4.3. Top management commitment

We chose to measure top management commitment (TMC) with a single item measure sourced from Colwell and Joshi (2013) in their environmental responsiveness study. We consider top management commitment part of an organization's commitment to population aging at the top management level, which is distinct from the commitment at the organization-wide level.

3.4.4. Organization-wide commitment

Conceived as a second-order latent construct, organization-wide commitment (Commit) refers to the commitment that is observed throughout the organization beyond the senior executive leadership. Two first-order factors, existential criticality (EC) and embracement (EMB) of the strategic issue, are the manifest constructs of the organization-wide commitment. We adapted EC measures from the scale of external environmental orientation found in Banerjee et al. (2003), which captures the centrality of the state of environmental condition to the organization's existence and survival. The four items we used are adapted from the four items Banerjee et al. (2003) retained as their final items. Embracement (EMB) captures the extent to which the importance of the population aging issue is internalized and shared throughout the organization. The CR and AVE for EC and EMB are 0.91 and 0.73 and 0.90 and 0.70, respectively. The second-order factorial structure was validated by a confirmatory factor analysis (CFA), which produced adequate fit statistics ($\chi^2(19) = 62.673$; root mean square error of approximation [RMSEA] = 0.066; comparative fit index [CFI] = 0.975; Tucker-Lewis index [TLI] = 0.963).

3.4.5. Magnitude of marketing strategy response

For the magnitude of marketing-strategy response (MagMark), we took guidance from studies by Banerjee et al. (2003) and White et al. (2003). We adapted four items to the population aging context. Their scales were particularly suited for our study because they explicitly assess the degree to which the concern about the emerging external phenomenon with uncertain opportunity–threat implications was integrated with the firm's marketing strategy and planning processes. These were used as reflective items of the organization's marketing-strategy response. The CR and the AVE are 0.93 and 0.69, respectively.

3.4.6. Control variables

We included several control variables in our empirical model. The first set of control variables may directly influence the firm's commitment at two levels (i.e., top management, organization-wide commitment) and marketing-strategy responses. These are particularly relevant to H3a, H3b, H4, and H5. We included **controllability (Cont)** with a single-item scale adapted from Plambeck and Weber (2010). On a 7-point Likert scale, the item asked informants to indicate the degree to which they agree or disagree that their organizations can manage the

[2] Japan's national economic census in 2009 showed that approximately 164,000 companies with 20 or more employees exist in Japan. According to the data, the manufacturing and service industry split was 1:1.9 for those companies, which is fairly well reflected in the Teikoku Databank database with the ratio of 1:1.5 among approximately 120,000 companies.

[3] Detailed profiles of the companies are available from the authors upon request.

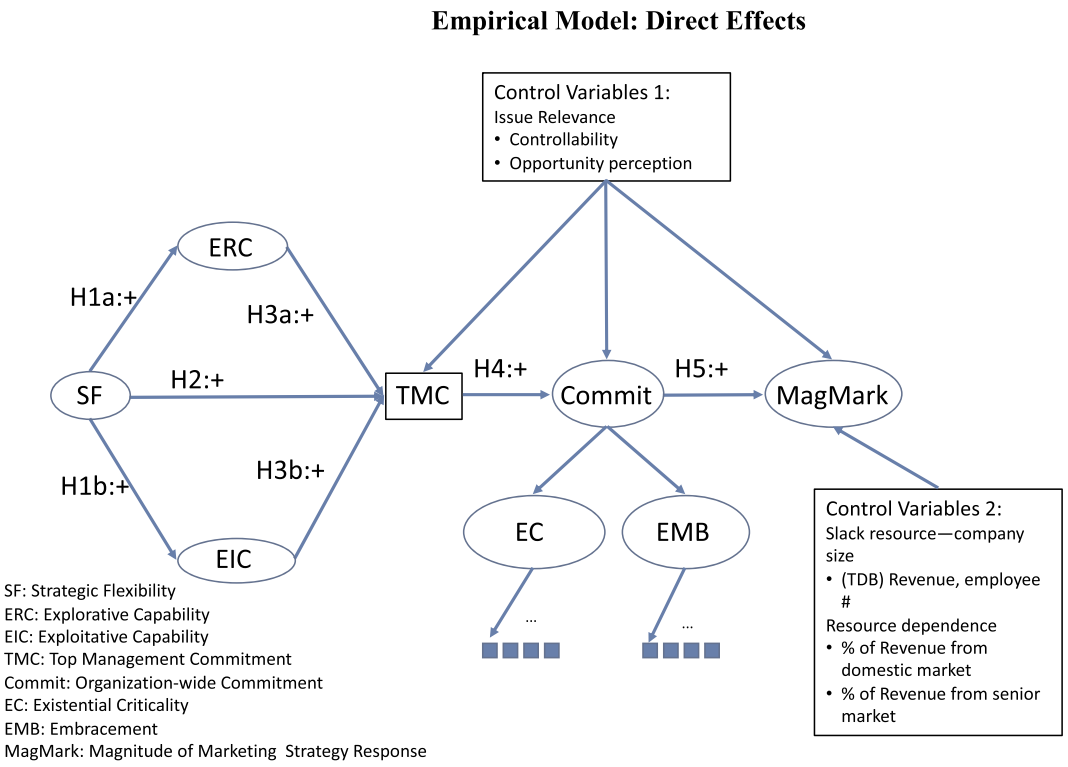

Fig. 2. Empirical Model: Direct Effects.

changes resulting from an aging society. In addition, **opportunity perception (Oppty)** was included to control its direct effect. The single-item 7-point scale was also sourced from Plambeck and Weber (2010), which asked respondents about their judgment regarding the extent to which their company will benefit from the population aging phenomenon.

The second set of control variables relates to the size-associated slack resource of the business. In order to control the slack resource, we obtained verifiable measures of the annual sales revenue and employee headcount from the Teikoku Data Bank's archival database. Both measures were transformed into the form of natural log (**SalLog** and **EmpLog**, respectively, in Appendix A) and included in the model. Furthermore, informed by resource-dependence theory (Pfeffer & Salancik, 1978), we included two measures that refer to the company's dependence on its Japanese domestic market—percentage of total revenue generated from the domestic market (**DomRev**) and senior market—percentage of total revenue directly related to the market segment targeting the users of age 50+ (**SrDir**). We believe that these variables could positively affect the magnitude of marketing response (**MagMar**), and thus need to be accounted for in order to test the hypotheses.

3.5. Nonresponse and common method biases

To assess the extent of nonresponse bias, we compared the responses to our dependent variable (i.e., marketing-strategy responses) and two company profile variables (i.e., company size in revenue and number of employees) based on the response timing of the informants who completed the questionnaire (i.e., 248 early responses vs. 297 late responses) (Armstrong & Overton, 1977). We checked for differences in our dependent variables using *t*-tests and found no significant differences in the two dependent variables based on the survey-response timing. In addition, we did not find differences in the distribution of industry classification between those who responded to the survey and those who did not. Therefore, nonresponse bias does not appear to be a problem in our data.

Although our survey instrument was constructed with procedural recommendations (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), common method bias is still a threat to the validity of cross-sectional studies with single informants. We applied Harman's single-factor test, by first conducting an exploratory factor analysis by using all the measurement items of the latent constructs without rotation. Four factors emerged with eigenvalues > 1, where each factor accounts for 37.9%, 18.7%, 6.0%, and 4.4% of variance extracted. We also fitted the CFA measurement model by first comparing the one-method-factor solution to the six-trait-factor solution. The results demonstrated that the fit with the one-factor solution was worse than the fit with the six-factor solution ($\Delta\chi^2 = 3703.248$ at Δd.f. $= 15$), indicating a six-trait-factor model is by far a more reasonable solution. Second, we performed a procedure described in Podsakoff et al. (2003) by adding a method factor to the CFA measurement model with the items of the six latent factors. Although the fit was improved ($\Delta\chi^2 = 120.032$ at Δd.f. $= 20$), the improvement in comparative fit index (ΔCFI) is at 0.01, equal to the threshold of 0.01 where a null hypothesis of invariance in the nested measurement model fit should not be rejected, according to Cheung and Rensvold's (2002) simulation study. Therefore, we concluded that common method variance is not an issue for the purpose of our study.

3.6. Measurement model and structural equation model

For the six multi-item latent constructs (i.e., SF, ERC, EIC, MagMark, EC, EMB), we assessed reliability and validity through a CFA measurement model with Mplus 8. Each measurement item had a significant loading on its expected latent construct at $p < .001$, and all constructs had a CR of 0.77 or greater, generally meeting reliability requirements (Bagozzi & Yi, 2012). The AVE for all the latent constructs ranged from 0.53 to 0.73, exceeding the threshold of 0.50 suggested by Fornell and Larcker (1981) (see Appendix A). The overall fit statistics of the CFA measurement model demonstrate a good fit ($\chi^2_{(194)} = 420.298$; RMSEA = 0.046; CFI = 0.960; TLI = 0.952), indicating an adequate level of discriminant and convergent validities among the latent

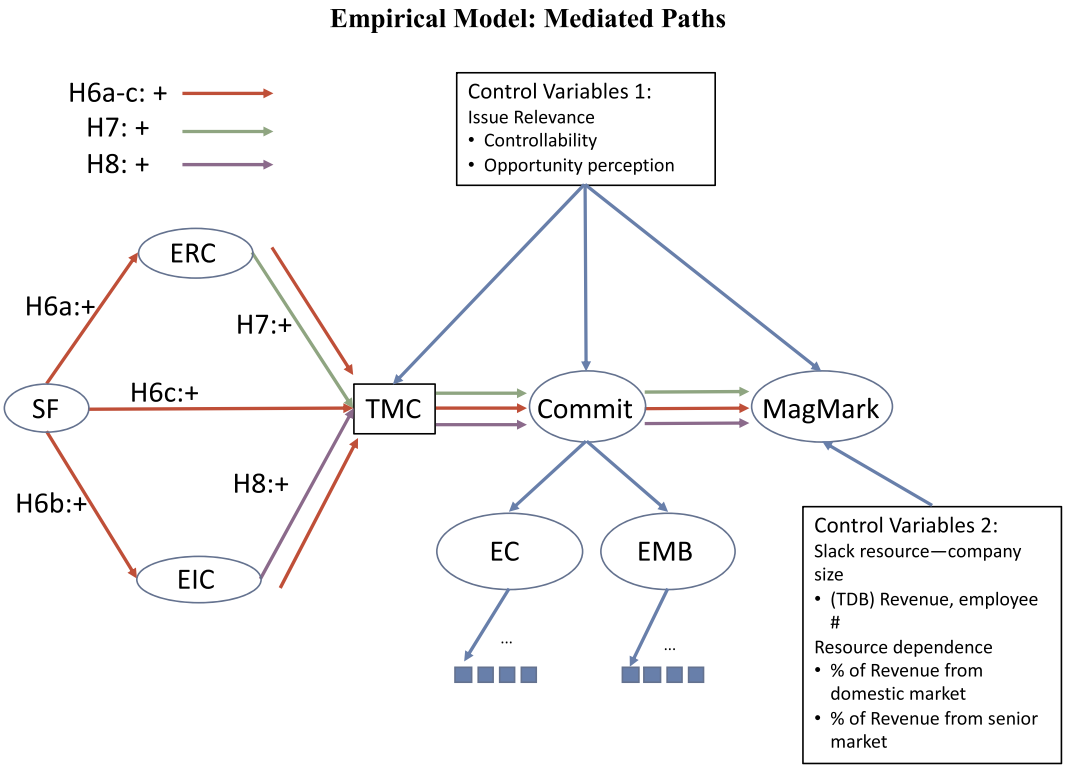

Fig. 3. Empirical Model: Mediated Paths.

constructs to fit the structural equation model (SEM) presented in Figs. 2 and 3. Finally, to verify the significance of the indirect effects (Fig. 3) we conducted a bootstrap with 5000 samples. An inspection of the bias-corrected confidence intervals confirmed the significant results from the previous non–bootstrap estimation, and, therefore, we only report the *p*-values from the latter.

4. Results

We tested our hypotheses by applying SEM using Mplus 8. Selected parameter estimates (completely standardized) are provided in Table 1. The overall model fit is adequate for hypothesis testing ($\chi^2_{(340)}$ = 731.036; RMSEA = 0.046; CFI = 0.942; TLI = 0.933). In H1a and H1b, we predicted that strategic flexibility (SF) is positively related to explorative capability (ERC) and exploitative capability (EIC). Both hypotheses are supported: SF is positively and directly related to both ERC and EIC (0.711 and 0.603, respectively). H2 is also supported. SF is positively related to the top management commitment (TMC). For H3a and H3b, we predicted that ERC and EIC would be positively related to TMC. H3a (ERC➔EMC) is not supported at α = 0.05 level with the standardized estimate of −0.170 with the *p*-value of 0.064. However, H3b is supported; EIC is positively related to TMC (0.218, *p*-value = .005).

For H4, we contended that TMC should promote organization-wide commitment (Commit), arguing that TMC is an important internal political force that fosters the commitment to deal with the population aging issue throughout the organization. The result indicates that TMC is positively related to Commit (0.530, *p*-value = .000). Therefore, H4 is supported. In H5, we hypothesized that Commit is positively related to the magnitude of marketing-strategy response to population aging. With the standardized estimate of 0.712 (*p*-value = .000), H5 is supported.

We tested the mediation paths by examining the specific indirect effects for each hypothesized path sequence (i.e., H6a–c, H7, H8 in Fig. 3). Furthermore, to verify the significance of the indirect effects, we conducted a bootstrap with 5000 samples. Our inspection of the bias-corrected confidence intervals confirmed the significant results from the previous non–bootstrap estimation and thus we only report the parameter estimates and *p*-values from the latter in Table 1.[4] The summary results for the mediated paths are also provided in Fig. 4. H6a–c hypothesized the indirect effect of strategic flexibility (SF) onto the magnitude of marketing-strategy response (MagMark) via three different paths: a) ERC, TMC, and Commit; b) EIC, TMC, and Commit; and c) TMC and Commit. The results indicate that H6b and H6c are supported (0.50, *p*-value = .018, 0.106, *p*-value = .000, respectively), while H6a is not (−0.046, *p*-value = .094). Thus, we found that SF's indirect effect is significant, except through the ERC path (H6a). In H7 we hypothesized an indirect effect of ERC on MagMark. Consistent with the rejection of H3a and H6a, H7 was rejected at α = 0.05 level (−0.064, *p*-value = .086). H8, on the other hand, is supported (0.082, *p*-value = .016), consistent with the support for H1b and H3b.

5. Discussion and implications

The study's results reveal intriguing insights as to how Japanese businesses are (or are not) proactively dealing with population aging. Explicitly accounting for several significant covariates that could otherwise explain firms' commitment to population aging and marketing-strategy response, our study represents one of the early and systematic efforts to gauge the impact of firms' capabilities in proactively dealing with uncertainties surrounding population aging. We thus contribute both to the literature on dynamic capabilities as well as EM.

First, we found that a firm's strategic flexibility has indirect influences through two levels (i.e., top management, organization-wide) of organizational commitment on proactive marketing response to population aging. More specifically, we found evidence that indicates a

[4] The bootstrap confidence interval results are available from the authors upon request.

Table 1
Selected Mplus Estimates (Completely Standardized).

	From	To	Hypotheses	Mplus Estimate (*p*-value)
Direct Paths:	SF	ERC	H1a	0.711 (0.000)
		EIC	H1b	0.603 (0.000)
		TMC	H2	0.282 (0.000)
	ERC	TMC	H3a	−0.170 (0.064)^{ns}
	EIC	TMC	H3b	0.218 (0.005)
	TMC	Commit	H4	0.530 (0.000)
	Commit	MagMark	H5	0.712 (0.000)
	SF	MagMark	–	0.139 (0.031)
	ERC	MagMark	–	0.059 (0.416)^{ns}
	EIC	MagMark	–	0.002 (0.980)^{ns}
	Control variables:			
	Cont	TMC	–	0.240 (0.000)
		Commit	–	0.235 (0.000)
		MagMark	–	−0.112 (0.012)
	Oppty	TMC	–	0.201 (0.000)
		Commit	–	0.118 (0.026)
		MagMark	–	0.165 (0.000)
	SalLog	MagMark	–	0.082 (0.045)
	EmpLog	MagMark	–	−0.063 (0.115)^{ns}
	DomRev	MagMark	–	−0.022 (0.367)^{ns}
	SrDir	MagMark	–	0.064 (0.086)^{ns}
Indirect Paths:	SF	MagMark: through ERC, TMC, Commit	H6a	−0.046 (0.094)^{ns}
		MagMark: through EIC, TMC, Commit	H6b	0.050 (0.018)
		MagMark: through TMC, Commit	H6c	0.106 (0.000)
	ERC	MagMark: through TMC, Commit	H7	−0.064 (0.086)^{ns}
	EIC	MagMark: through TMC, Commit	H8	0.082 (0.016)
	TMC	MagMark: through Commit	–	0.377 (0.000)

Note: ns: not significant at $z < 1.96$ ($\alpha = 0.05$ level). Bias-corrected confidence intervals for indirect effects based on a bootstrap ($N = 5000$) are available on request.
SF = strategic flexibility; ERC = explorative capability; EIC = exploitative capability; TMC = top management commitment; Commit = organization-wide commitment; MagMark = magnitude of marketing-strategy response; Cont = controllability; Oppty = opportunity perception; SalLog = company size (revenue); EmpLog = company size (employee); DomRev = % domestic revenue; SrDir = % revenue senior market.

company's strategic flexibility serves as a direct driver to two facets of ambidexterity (H1a and H1b). Although strategic flexibility's direct influence is significant on both capabilities, its effect is only carried through exploitative capability onto top management commitment (H6b). This finding is interesting when combined with the support for H6c; it seems that the top management commits to addressing population aging issues without regard to their explorative capability. However, it is rather the strategic flexibility and exploitative capability that encourage the top management to commit to addressing population aging in spite of uncertain implications.

Furthermore, although the path was not a formal hypothesis but as a part of estimation procedure for mediation tests, we found a significant and direct influence of strategic flexibility on the magnitude of marketing-strategy responses (0.139, *p*-value = .031; Table 1). Although modest in magnitude and significance level, it attests to the profound effect, both direct and indirect, of a firm's strategic flexibility on marketing responses to an important but uncontrollable change in business environment. Note that there is no uncertainty in the phenomenon itself (i.e., population aging), which is observable; the significant uncertainty lies in its opportunity–threat *implications* for individual businesses. Together with our earlier discussion of the indirect effects (H1a and H1b, H6b and H6c), firms seem to be more inclined to commit and respond to such a phenomenon in business environment when equipped with two types of capabilities. First is strategic flexibility, which allows firms to adaptively address "uncertainties about which there can be little or no prior knowledge" (Evans, 1991, pp. 69–70). Second is exploitative capability, which helps firms address "knowable-and-known" uncertainty with known skills and capabilities (Ahmadi & O'Cass, 2016). As far as the firms included in our data are concerned, their approach to addressing population aging seems to be "cautiously proactive" by *not* counting on their explorative capability, which addresses the uncertainties via unknown capabilities to the firms. Perhaps, firms may (have to) choose to deploy explorative capability when they are confronted by uncertainty in both the phenomenon itself and the implications.

Finally, neither of the two capabilities (i.e., explorative, exploitative) associated with ambidexterity has a direct effect on marketing-strategy responses. Only exploitative capability *indirectly* increases the marketing responses to the population aging issue (H8) through increased organizational commitment at the two levels (i.e., top management, organization-wide). Combined, it shows that, unless it is associated with the organizational commitment at both top management and organization-wide levels, exploitative capability does not positively impact marketing-strategy responses. This is intriguing in contrast to the result in which strategic flexibility does *not* necessarily need top management and organization-wide commitment as demonstrated by the significant direct path. In sum, strategic flexibility is found to be the most potent driver for the firms' responses to population aging through both indirect and direct paths. Because opportunities are often unknown, strategic flexibility allows firms to experiment with EM actions and facilitate their sensemaking process (Sarasvathy & Dew, 2005; Whalen et al., 2016). By shedding light on the process of opportunity recognition in population aging, which is predicated on strategic flexibility and exploration and exploitation capabilities, we contribute new knowledge to EM that can be applied both in new and established firms.

5.1. Managerial implications

For the businesses in the most aged society in the world, population aging as a phenomenon is widely acknowledged and its existence is certain, but its opportunity–threat implications are far from certain. With uncertain pay-off implications, population aging presents businesses with unique EM challenges. If a firm does not proactively address potential consequences of this profound change, it could be risking its survival and relevance in the marketplace (Matsuno & Kohlbacher, 2018). Therefore, for firms to be proactive means to act on the phenomenon without being clear about whether it represents an opportunity or a threat. To confront this unsettling challenge our study shows that firms are well advised to build strategic flexibility as a key dynamic capability. Because it is difficult to get the answer right *ex ante* when there is no knowledge base for the challenge, trying to presciently pick the right resources (Makadok, 2001) would be futile. Instead, the key seems to be to continuously develop flexibility so that a firm can adaptively deploy its assets and resources across different parts of the organization over time. Strategic flexibility as a dynamic capability, therefore, seems to complement the EM's adaptive choice process (Zhu & Matsuno, 2016), in which a firm's entrepreneurial proclivity mediates perceived environmental factors and business performance.

EM is distinguished from traditional marketing not only in terms of risks, opportunities, and uncertainty (Whalen et al., 2016), but also with respect to the entrepreneurial leadership and foresight that fosters

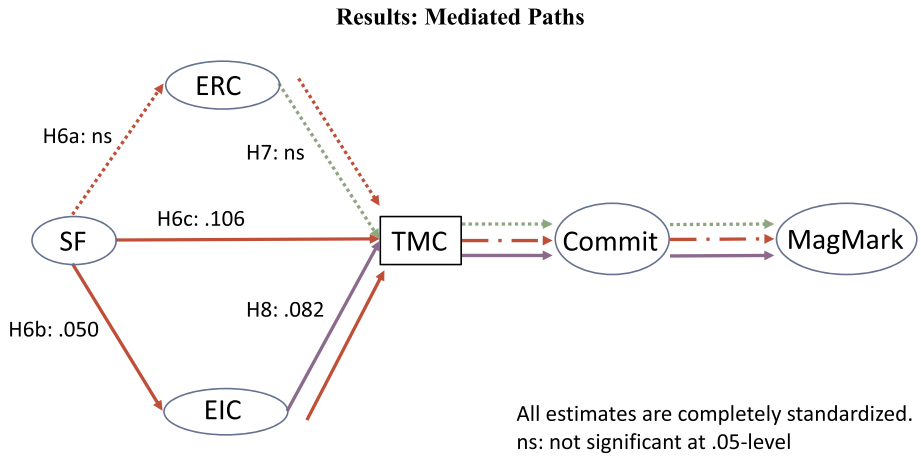

Fig. 4. Results: Mediated Paths.

proactive organizational values and action. Thus, a significant implication for senior executives is the importance of their competence to transform organization capabilities into marketing-strategy responses. In order to unleash the full potential of firm capabilities, top management has to recognize and interpret the significance of external environmental change ("sensemaking") and communicate to the entire firm what it means to the survival of the organization ("sensegiving"). Day (2011) argues vigilant leadership is required for building and updating dynamic marketing capabilities for firms to be adaptive, and our results seems corroborate the importance of top management leadership. This study suggests that the top management's "EM leadership competence," with both sensemaking and sensegiving capacities, is the critical factor that connects the adaptive capability and responses in addressing population aging in Japan.

5.2. Limitations and future research

Although we believe this study is a meaningful exploration of the roles of capabilities and organizational process related to population aging in Japan, the cross-sectional study design has its limitations, and a longitudinal study design in future research is needed in order to further qualify the causal implications in this study. Because population aging will progress, the conspicuousness will loom ever larger over time. Will increasing awareness of the issue affect the uncertainty-related perceptions, such as controllability and opportunity perceptions? Causal inferences in our model are affected by background control variables like these, and they should be tested with longitudinal data.

Another research opportunity is the replication of this study in different national contexts. This study was conducted in Japan, the most aged nation in the world. Although we controlled for the marketing-strategy responses by such variables as firms' slack resources, resource dependence, controllability, and opportunity perception, we still found significant variations in top management and organization-wide commitments and actual responses to population aging in a country where the issue has high visibility. Whether the Japanese companies are particularly variant in their response to population aging is a good empirical question. There are a number of countries at various economic development stages (e.g., Germany, Italy, South Korea, and China) that are following in Japan's footsteps demographically. More research across different countries is needed to qualify the external validity of our findings beyond Japan.

On the other hand, in light of its collectivist institutional contexts, roles of senior leadership *team* in leading organizations seem to be more important in Japan than those of individual leaders in other national and cultural contexts. However, is the team or collectivist approach by senior executives more effective in their institutional context? Therefore, a fruitful research opportunity would be to conduct an in-depth investigation on how senior executives as a team process external environmental factors and exercise leadership for proactive EM responses.

Finally, one additional area for further research would be to look at different marketing approaches taken by different firms. Whether a firm adheres to the paradigm of administrative or traditional marketing or EM may have an impact on strategic responses (Morrish, 2011). An investigation of this question would also shed more light on the role of firm orientation and strategic flexibility.

Appendix A. Measures

Construct (label), CR*, AVE**, # of items	Variable label	Item	Standardized factor loading (*p*-value)	Source
Strategic flexibility (SF)	SF01	We regularly share investments and costs across business activities.	0.61 (0.000)	Grewal and Tansuhaj (2001)
CR: 0.85 AVE: 0.59	SF02	We seek to derive benefits from diversity in environments.	0.75 (0.000)	
	SF03	Our strategy emphasizes exploiting opportunities arising due to variability in the environment.	0.89 (0.000)	
4 items				
7-point scale	SF04	Our strategy reflects high level of flexibility in managing risks, political, economic, and financial.	0.80 (0.000)	
	SF05	Our strategy emphasizes versatility in allocating human capital.	dropped	

Explorative capability (ERC) CR: 0.79 AVE: 0.56 3 items 7-point scale	ERC01	Our organization accepts demands that go beyond existing products and services.	0.60 (34.39	Jansen et al. (2009), which is based on Jansen et al. (2006)
	ERC02	We commercialize products and services that are completely new to our organization.	0.81 (34.39	
	ERC03	We frequently utilize new opportunities in new markets.	0.83 (0.000)	
	ERC04	Our organization regularly uses new distribution channels.	dropped	
Exploitative capability (EIC) CR: 0.77 AVE: 0.53 4 items 7-point scale	EIC01	We frequently make small adjustments to our existing products and services.	dropped	Jansen et al. (2009), which is based on Jansen et al. (2006)
	EIC02	We improve our provision's efficiency of products and services.	0.72 (0.000)	
	EIC03	We increase economies of scales in existing markets.	0.73 (0.000)	
	EIC04	Our organization expands services for existing clients.	0.75 (0.000)	
Magnitude of marketing strategy response (MagMark) CR: 0.93 AVE: 0.69 4 items 7-point scale	MagMark01	Issues concerning population aging are always considered when we develop new products.	0.80 (0.000)	Based on White et al. (2003) and Banerjee et al. (2003)
	MagMark02	We emphasize the relevant aspects of population aging in our products and services advertising.	0.77 (0.000)	
	MagMark03	Our marketing strategies for our products and services have been considerably influenced by concerns about population aging.	0.93 (0.000)	
	MagMark04	In our firm, product-market decisions are always influenced by concerns about population aging.	0.92 (0.000)	
Top management commitment (-TMC) 1 item 7-point scale	TMC	Our firm's efforts in dealing with population aging received full support from our top management.	–	Adapted from Colwell and Joshi (2013)
Organization-wide commitment (commit): existential criticality (EC) CR: 0.91 AVE: 0.73 3 items 7-point scale	EC01	The financial well-being of our firm depends on the state of population aging.	0.82 (0.000)	Adapted from external orientation, based on Banerjee et al. (2003)
	EC02	Our firm's responsibility to its customers, stockholders, and employees is as important as our responsibility toward proactively dealing with population aging.	0.84 (0.000)	
	EC03	Proactively dealing with population aging is vital to our firm's survival.	0.89 (0.000)	
	EC04	Our firm has a responsibility to proactively deal with population aging.	0.86 (0.000)	
Organization-wide commitment (commit): embracement (EMB) CR: 0.90 AVE: 0.70 4 items 7-point scale	EMB01	At our firm, we make a concerted effort to make every employee understand the importance of population aging for our business.	0.79 (0.000)	Adapted from internal orientation, based on Banerjee et al. (2003)
	EMB02	Our firm has a clear policy statement urging awareness of population aging in every area of operations.	0.69 (0.000)	
	EMB03	Proactively dealing with population aging is high priority activity in our firm.	0.92 (0.000)	
	EMB04	Proactively dealing with population aging is a central corporate value in our firm.	0.92 (0.000)	

Control variables	Variable label	Item	Source
Controllability (Cont) 1 item 7-point scale	Cont	Our company can manage the changes resulting from population aging.	Adapted from Plambeck and Weber (2010)
Opportunity perception (Oppty) 1 item 7-point scale	Oppty	To what extent do you agree with the following statements? “Our company will benefit from the ‘population aging’ phenomenon.”	Adapted from Plambeck and Weber (2010)
Slack resource—company size (revenue) 1 item	SalLog	Natural log of annual sales revenue in Japanese Yen	Teikoku Data Bank Database
Slack resource—company size (employee #) 1 item	EmpLog	Natural log of employee headcounts	Teikoku Data Bank Database
% of Revenue from domestic market 1 item	DomRev	Approximately what % of your Japanese operations' revenue is generated in domestic market? Domestic market: __%	Newly developed
% of Revenue from senior market 1 item 10-point scale	SrDir	Approximately what percentage of your business is directly related to the so-called ‘senior market’ (defined as users aged 50+) as end-users? (Note: End-users may be consumers or business users. Business end-users example: machine tools for senior operators.) [1 = 0–10%, 2 = 11–20%, 3 = 21–30%, 4 = 31–40%, 5 = 41–50%, 6 = 51–60%, 7 = 61–70%, 8 = 71–80%, 9 = 81–90%, 10 = 91–100%]	Newly developed

Measurement Model fit: (df = 194, χ^2 = 420.298; CFI = 0.96; TLI = 0.952; RMSEA = 0.046).

* CR: composite reliability.

** AVE: average variance extracted.

Appendix B. Correlation Matrix

Variables	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Strategic flexibility (SF)	15.84	4.14	1.00												
2. Explorative capability (ERC)	11.53	3.00	0.57**	1.00											
3. Exploitative capability (EIC)	12.65	2.72	0.49**	0.59**	1.00										
4. Marketing-strategy response (Mag-Mark)	15.05	5.00	0.38**	0.31**	0.31**	1.00									
5. Top management commitment (T-MC)	4.00	1.29	0.36**	0.24**	0.33**	0.56**	1.00								
6. Existential criticality (EC)	17.46	4.72	0.22**	0.17**	0.25**	0.70**	0.57**	1.00							
7. Embracement (EMB)	16.34	4.58	0.27**	0.17**	0.24**	0.70**	0.68**	0.83**	1.00						
8. Company size (SalLog)	8.41	1.98	0.25**	0.09*	0.17**	0.22**	0.20**	0.14**	0.15**	1.00					
9. Company size (EmpLog)	4.97	1.22	0.19**	0.08	0.14**	0.16**	0.18**	0.15**	0.14**	0.73**	1.00				
10. % Domestic revenue (DomRev)	95.58	13.09	−0.10*	−0.09	−0.10*	0.01	0.03	0.05	0.06	−0.05	−0.09	1.00			
11. % Revenue senior market (SrDir)	3.59	2.66	0.00	−0.03	−0.02	0.28**	0.15**	0.31**	0.31**	0.03	0.09*	0.12*	1.00		
12. Controllability (Cont)	4.27	1.04	0.21**	0.15**	0.23**	0.39**	0.43**	0.44**	0.52**	0.04	0.05	0.01	0.26**	1.00	
13. Opportunity Perception (Oppty)	3.91	1.48	0.19**	0.22**	0.20**	0.48**	0.40**	0.42**	0.42**	0.11*	0.11*	0.04	0.35**	0.54**	1.00

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

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