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MARKETING INSIGHT: THE CONSTRUCT, ANTECEDENTS, IMPLICATIONS, AND EMPERICAL TESTING

BY

ROBERTO FELIPE MORA CORTEZ

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree

Of

Doctor of Philosophy

In the Robinson College of Business

Of

Georgia State University

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ACCEPTANCE

This dissertation was prepared under the direction of the Roberto Mora Cortez Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Business Administration in the J. Mack Robinson College of Business of Georgia State University.

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ABSTRACT

MARKETING INSIGHT: THE CONSTRUCT, ANTECEDENTS, IMPLICATIONS, AND EMPERICAL TESTING

BY

ROBERTO FELIPE MORA CORTEZ

09/11/2018

Committee Chair:

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While firms' data are exponentially growing, the level of marketing insight within firms is not. Insight is becoming a buzzword and dissipating its value due to the lack of conceptual understanding. This research develops and tests a marketing insight nomological network to answer how firms can generate marketing insights and what are the consequences of managing marketing insights. The research findings are relevant for the literature because (1) define the term theoretical domain, (2) lead companies to increase their chances to generate marketing insights and (3) establish the activities to improve the positive financial effect of marketing insight generation.

ESSAY 1

What *is* a marketing insight?

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"Innovation without insight is failure." - Mark Simmonds

September 11, 2018

Experiencing the boom of big data and quantitative analytics, firms are seduced into hiring computer scientists and implementing technological solutions for data processing in the search for insights. Data analytics alone do not provide the market sensitivity required by companies. Indeed, although a firm's data and knowledge are rapidly growing, a firm's actual insight is not (Jaworski, Malcom, and Morgan 2016, p. 34). Understanding the concept of insight is relevant for companies because there is no clear differentiation among data, knowledge, and insight (Jaworski, Malcom, and Morgan 2016; Smith, Wilson, and Clark 2006). The term is becoming a *buzzword* (Actionable 2017), and it lacks connection with the formal business processes of a firm (Smith and Raspin 2008). Insight is turning into a prevalent concept for the marketing field (Kumar 2015; Smith, Wilson, and Clark 2006). Because the current paradigm for marketing is becoming an integral part of the firm's decision-making framework (Kumar 2015), we use the lens of marketing to conceptualize insight.

In this knowledge-based economy, fundamental changes in the social, legal, economic, political, and technical environment are the basis for the recent interest in what *is* marketing insight (MI) (Smith, Wilson, and Clark 2006). The current view in the literature is diffuse and mainly comes from practitioner discussion (e.g., American Marketing Association 2016; Duffy 2008; UMI 2017), thus missing academic rigor. The focus has been on customer or consumer insight (Jaworski, Malcom, and Morgan 2016), which is defined as "knowledge about customers which meets the criteria of an organizational strength; that is, it is valuable, rare, difficult to imitate and which the firm is aligned to make use of" (Smith, Wilson, and Clark 2006, p. 136). Thus, a static resource-based view of insight has been assumed. To our knowledge, MI does not appear to be well defined anywhere. Most recently, research has called attention to the need for clear

conceptualization of this theoretical domain (Mora Cortez and Johnston 2017). Accordingly, the first goal of this research is to provide an operational definition of the construct, identifying how a firm knows when it has a valuable MI.

Building over the significant role of insight for the practice of marketing (Kumar 2015), it is important to understand why some companies excel in insight generation while others show poor results. A favorable transition from data to insight has been supported with anecdotal evidence; thus, we know little about what drives the success or failure within an organization looking to create impactful MIs. For example, a study indicates that data, information, knowledge, and insight are part of an iterative-linear process without explaining the organizational conditions for such evolvement (Smith, Wilson, and Clark 2006). Therefore, the second goal of this research is to shed some light on the variables that drive a firm to generate MIs and the environmental conditions that can enhance or mitigate their effect.

Although the path from insight to value is acknowledged by marketing literature (e.g., Smith and Raspin 2008), there is limited empirical evidence to suggest that firms can benefit from the process of insight generation. LaValle et al. (2011) is one of the few endeavors where top-performing (i.e., higher economic returns in comparison with rivals) organizations are examined in their ability to ignite insights to guide future strategies and day-to-day operations. Top performers were twice as likely to use insights in comparison with lower performers. However, these results draw in a descriptive approach (p. 22). Thus, the third goal of this research is identifying the consequences of MI generation and the firm's internal conditions that affect the outcome variables.

By answering these questions, we make three contributions to previous research. First, the study reveals that, whereas extant literature relies on the resource-based view (e.g., Smith, Wilson, and Clark 2006), firms conceptualize the properties (i.e., dimensions) of a MI from a unique perspective, identifying five characteristics: (1) novelty, (2) actionability, (3) credibility, (4) market relevance, and (5) commercial potential. This new view provides a basis for further examination of the theoretical underpinnings related to MIs. Also, this finding reinforces the validity of a firm's market orientation (e.g., Kohli and Jaworski 1990) due to the explicit connection between the customer's benefits (i.e., market relevance) and potential economic benefits (i.e., commercial potential) for an organization when creating valuable insights.

Second, we identify six firm characteristics that are key for successful MI generation. In line with Tuli, Kohli, and Bharadwaj (2007), we do not aim to create an exhaustive list of antecedents for the focal construct. Therefore, we focus on factors that are not extensively discussed in prior marketing literature and provide stimulating ideas for future research (Kohli and Jaworski 1990), such as reflection orientation and data integration capability. In addition, the study addresses the fact that market turbulence and competitive intensity influence the ability to generate MIs. Therefore, variables other than those under managers' control affect the scenario for disruptive learning.

Third, we extend prior knowledge by determining relevant measures a firm can manage to strengthen the benefits of generating MIs. The study focuses on three different levels of an organization: (1) its leadership (i.e., C-suite), (2) its marketing function, and (3) its front-line

employees. In particular, we relate these factors to outcomes previously validated for firm performance, such as brand attitude (Homburg, Schwemmle, and Kuehnl 2015), innovation performance (Bharadwaj and Menon 2000), and attitude toward change (Dunham et al. 1989). We also connect these measures with traditional economic outcomes, such as sales revenue and profitability, to reach a more enlightened comprehension of MI consequences. This understanding fosters long-term financial sustainability of organizations (Morgan, Vorhies, and Mason 2009).

METHODOLOGY

Considering the sparse academic literature on MI, we draw on a qualitative field study based on in-depth interviews adopting a discovery-oriented, theory-in-use approach (e.g., Deshpandé 1983; Glaser and Strauss 2017) to develop a grounded model with robust conceptual themes (Strauss and Corbin 1998). In the next section, we focus on the description of the qualitative approach.

Sample and Data Collection

The sampling follows a theoretical procedure to identify practitioners across functions and hierarchies from multiple industries with at least five years of job tenure in business (e.g., Challagalla, Murtha, and Jaworski 2014; Kohli and Jaworski 1990). The purpose of this focused sampling was to engage participants who can provide a profound explanation of their experiences and thoughts. We recruited participants from a large state university marketing roundtable, the Institute for Study of Business Markets, and personal contacts. The total sample obtained was 35 respondents (see Table 1), a configuration consistent with the sample size suggested for exploratory research (McCracken 1988). An important driver of the sample is the idea of category saturation (Strauss and Corbin 1998), which means that researchers conducted the interview guide until information redundancy was accomplished (Beatty and Willis 2007). The interviewees were directly involved in market research, data analysis, organizational learning, new idea development, and articulation of marketing strategy and, therefore, had significant knowledge about what an insight means from an organizational level perspective.

Job Title	Industry	Experience (years)	Main Business Setting	Interview duration (minutes)
Senior Director of Digital Marketing	Beverages	24	B2C	55
VP of Business Development	Food processing	35	B2B	57
Strategic Project Manager	CPG	30	B2C	34
Director of Marketing Strategy	Pulp and paper	14	B2B	57
Project Manager	Finance	6	B2B	40
Commercial Excellence Leader	Chemicals	20	B2B	40
Senior Manager Marketing Strategy	Beverages	15	B2C	41
Senior VP Sales	Communications	25	B2C	51
Director of Marketing	Energy	34	B2B	45
VP Sales Operations & Development	Air transportation	32	B2C	47
Marketing Operations Manager	Energy	27	B2B	29
President	Construction	36	B2B	33
Product and Sales Manager	Pharmaceutical	25	B2B	46
Business Development Manager	Engineering	23	B2B	37
Application Engineering Manager	Electronics	21	B2B	35
Business Development Director	Engineering	25	B2B	52
Sales Manager	Insurance	15	B2C	36
Logistics Manager	Consultancy	28	B2B	40
President & CEO	Finance	22	B2B	41
President of Product Support	Emergency	35	B2B	47
Director of Innovation	Pulp and paper	25	B2B	48
Senior Sales Manager	Life sciences	25	B2B	46
Product Development Engineer	Health care	9.5	B2B	47
Marketing Communications Manager	Chemicals	32	B2B	47
Head of Marketing Intelligence	Plastics	27	B2B	40
Sales and Marketing VP	Packaging	30	B2B	40
Marketing Manager	Packaging	16	B2B	42
Account Manager	Software	5	B2B	36
СМО	Food services	42	B2C	51

СМО	Entertainment	37	B2C	47	
Market Research Manager	Chemicals	34	B2B	35	
President of Global Sales Operations	Logistics	25	B2B	46	
President and CEO	Transportation	18	B2C	51	
Marketing & Prod. Develop. Director	Mining	20	B2B	38	
СМО	Chemicals	22	B2B	37	

*Consumer packaged goods

TABLE 1: SAMPLE CHARACTERISTICS (CHRONOLOGICAL ORDER)

We followed a structured interview process (e.g., Challagalla, Murtha, and Jaworski 2014) regarding the MI concept (see the Appendix). We carefully worded the questions to avoid the potential pitfalls of "active listening" (McCracken 1988, p. 21). In addition, we gave practitioners the chance to share any other thought they considered relevant. We followed up with two practitioners for clarification. All participants accepted the request of audiotaping the interviews. The audiotapes were transcribed into 469 pages of text. We also took detailed notes during the interviews to avoid missing incipient ideas or reflections (Saldaña 2015).

Furthermore, we included several types of archival data in the research process that were directly provided by study participants. The material consisted of meetings content, internal presentations, research procedures (e.g., surveys), consultants' reports, and other documents that contributed to our understanding of the MI construct and its nomological network. These data provided valuable information on (1) the approach of firms to learning, (2) marketing intelligence processes, (3) transformation of data to insight, (4) the relevance of the insight concept for companies, and (5) type of MI.

Analysis and Interpretation

To identify the distinctive themes around the focal construct, we followed Corbin and Strauss's (2014) procedure (i.e., open, axial, and selective coding). Several marketing studies have implemented this approach successfully (e.g., Homburg, Wilczek, and Hahn 2014). First, two researchers independently undertook a general open coding approach with the help of the qualitative data analysis software NVivo (v.11). The main foundation of open coding is the identification of concepts, assigning labels. We specifically selected in vivo codes (participants' terms) to grasp the meaning of the topics (Charmaz 2014). If coding differences arose at this stage, they were settled under theoretical agreement (i.e., review of conceptual definitions). To complete the coding, a summary coding plan, displaying labels, definitions and representative informants verbatim, was jointly developed (Homburg, Wilczek, and Hahn 2014; Ulaga and Reinartz 2011).

Then, at the second stage, we applied axial coding that permits grouping similarly coded data, reducing the number of initial codes developed while sorting and re-labeling them into conceptual, more abstract categories (Saldaña 2015). We contextualized the first-order categories with supplementary literature, analyzing the properties and dimensions of the constructs. We also reassembled the data to investigate relationships between constructs (Charmaz 2014), establishing connections between and among the first-order categories to develop second-order categories. Finally, we conducted selective coding, defined as the refinement and consolidation of the theory (Corbin and Strauss 2014). This stage allowed synthesizing antecedents, the focal construct, moderators, and the consequences into an overall framework for MI.

To ensure the trustworthiness of our results, we applied suggestions for data and researcher triangulation. For data triangulation, we determined that most of our final categories were transferable across respondents' functions (e.g., innovation, marketing, sales), integrated information from the archival data, and then compared the field data with associated research topics. For researcher triangulation, we contacted two independent judges to verify the accuracy and reliability of the key themes that emerged from the field data by having them code 15 randomly selected transcripts. The inter-rater reliability, assessed by the proportional reduction in loss method, was .80, well above the .7 threshold recommended for exploratory research (Rust and Cooil 1994). For content validity purposes, we contacted interviewees again with the general results and asked for feedback, presented and discussed the results with a panel of five senior marketing academicians, and conducted two independent practitioner workshops. Overall, interviewees, other practitioners, and academicians expressed strong agreement with the proposed framework. Their main criticism involved unclear definitions and, consequently, minor adjustments in the wording of the definitions was executed. In the following sections, we discuss the resultant perspective about MI, the antecedents of MI generation, the variables moderating the relationship between the antecedents and MI generation, the consequences of MI generation, and the variables moderating the relationship between MI generation and the consequences.

THE MARKETING INSIGHT (MI) CONSTRUCT

Our field study indicates that the concept of MI is understood as being synonymous with market insight and it is loosely used by firms as a necessary step for organizational learning. Nowadays, the marketing concept is being strengthened within companies, while the marketing function is losing influence (Verhoef and Leeflang 2009). Many acknowledge that insights are created through dedicated market-oriented people. Therefore, labeling as "marketing insight" gives direction of responsibility about the marketing concept above and beyond the function of marketing, but concentrates resources into one voice. For example, in a pulp and paper firm, the area "in charge" of generating insights is market intelligence, which include practitioners called "insight leaders." However, this area responds to the marketing vice president (VP). In addition, as one practitioner said: "One functional area has to own and represent the voice of the customer...this needs to be marketing."

Managers interpret an insight from different angles such as "understanding of the market landscape," "it is something that help us to relate to our customers," and "new knowledge." The business development VP of a food processing firm refers to the concept as follows:

Marketing insight is about market trends that drive growth...(i)t is specific to answering with ingenuity who buys, what is used, when is needed and bought, how different elements of the company relates to give an answer, but mainly deep comprehension of the reason why something is happening or will be happening in a particular market.

We summarize all different perspectives about MI from our field study in Table 2. The findings suggest that a MI entails five key elements: (1) novelty, (2) actionability, (3) credibility, (4) market relevance, and (5) commercial potential. Accordingly, *MI* is formally defined as a firm's shift in understanding about the market, leading to action, credible for its employees, providing potential to create and capture value. Next, we elaborate on the five dimensions with more detail and relate them to extant literature.

First-order categories and informant quotes	Second-order
Unknown	Novelty
"Insight is the thing that people is missing. Most times they don't know it"	
"In reality there are gaps, just in a perfect world you would work based on	
facts. Marketing insight helps to bridge these gaps"	
Unique	
"Insight is more specific than knowledge, it is a deeper dive that requires	
expertise. So, it is an exceptional state"	
"Marketing insights are very special. The best insights are very granular"	
"It is something fresh, non-obvious"	
Usability	Actionability
"It means leveraging data to identify commonalities in the marketplace that	
can drive initiatives or projects"	
"Marketing insight is combining data and information into something useful"	
Transformation	
"It is understanding that lead to change"	
"It is a view on strategy to convert an idea to value, through implementation of	
a process"	0 111 111
Data-based	Credibility
"It has to be valid for the organizationsupported by data"	
"Marketing insight comes from an analytical format based on surveys or	
interviews"	
Logical	
"An insight is rational according to a particular business context" "It makes senseit is coherent with the market. Ultimately, it is accurate"	
Better understanding	Market
Dener understandung	relevance
"It is about understanding the experience customers are looking for"	
"Involves identifying what a consumer needs and has to be solved"	
Solution	
"Marketing insight involves providing an answer to customer needs"	
"Insight is about the reason why something is happening. It is the key to fix a	
problem or deliver better offerings for a group of customers"	
Buying behavior	Commercial
	potential
"Marketing insight would be to see a shift or defined direction on buying	
patterns"	
"Condition in our customer base that provide us an opportunity to sell"	
Value	
"Allows you to go to the market with more confidence and it is more likely to	
close the deal. It delivers positive financial results"	
"It means providing technical knowledge and cost saving ideas that would make our customer more profitable"	

TABLE 2: THE MARKETING INSIGHT (MI) CONSTRUCT

Novelty. The condition of newness for a MI is probably the closest to practitioners' appeals. From psychological literature (e.g., Metcalfe and Wiebe 1987), *insight* is a personal state of mind that can be transferred to others by learning. Therefore, insight comes from the mind (Sternberg and Lubart 1996) and it is an internal condition for a business unit based on "situated learning theory" (see Gherardi 2001). Three key phenomenological characteristics of insight are (1) suddenness due to the abrupt and significant leap of understanding (Mayer 1992), (2) spontaneity which indicates that insight is developed internally of its own accord (Davidson 1996), and (3) *unexpectedness* which explains that insight happens by surprise and in an unpredictable form (Metcalfe and Wiebe 1987), support the dimension of novelty for a MI at the organizational level. An insight is directional, and implies a shift in understanding about the market. Formally, *novelty* is the magnitude of the shift in understanding based on the MI. Therefore, the broader the turn, the more novel the insight. Many executives indicated that novelty is an integral part of MI. For example, the Sales VP of a packaging firm stated that: "A marketing insight brings something new to the table, it is ground breaking and should lead us to questioning the status-quo...in simple words a good insight is novel and surprising."

Novelty is the key distinctive feature of learning beyond understanding that is merely well conceived based on existent knowledge (Mueller, Melwani, and Goncalo 2012; Senge 1990). However, novelty can also promote a tension in evaluators' minds when they judge whether to pursue an idea (Mueller, Melwani, and Goncalo 2012, p. 13). Certainly, practitioners have difficulty grasping novelty and practicality as dimensions that can work together, often viewing

them as inversely related (Ritzschel, Nijstad, and Stroebe 2009). Therefore, a MI requires complementary dimensions in order to be valuable for companies.

Actionability. It is possible that a firm's low performance is attributable to deficiencies to respond effectively to the market, despite having clear insight into that market (Smith and Raspin 2008). A key component of a learning organization is the ability to modify its behavior to reflect new knowledge and insights (Garvin 1993 p.80). Organizational responsiveness through concrete actions has been recognized as relevant in prior marketing literature (e.g., Kohli and Jaworski 1990). An organization's understanding of how things are done is referred to as *theory in use* (Argyris and Schön 1978). As organizations learn, internal and external organizational actions reflect the operationalization of changes in theory in use, because actions are both the ultimate expression of learning and a means to facilitate new learning (Sinkula, Baker, and Noordewier 1997, p. 306-307). Therefore, the *actionability* property of a MI refers to the extent to which a firm can modify its activities in response to an insight.

In many instances, interviewees explained that actionability represented a key characteristic of MI. Actionability depends on firm features such as people, culture, and processes, because insight is a consequence of those factors and is firm-based. Also, learning is depicted within the boundaries of a domain of knowing and doing: a practice (Gherardi, 2001, p. 132). As one participant mentioned:

The potential of an insight is zero if we cannot change our procedures or people behavior. Marketing insight needs to lead to action. Execution is key to visualize the richness of an insight. Also, it tangibilizes the learning for our front-line people and amends the willingness to follow up from detractors.

Credibility. Most study participants conceived credibility as a critical part of a MI. In the words of the president & CEO at a firm in the finance industry: "A marketing insight is believable, meaning that it is able to be clearly articulated and based on facts. Being a credible insight is what give you the chance to mobilize managers."

Credibility in the context of information processing has been defined as the perceived presence or absence of particular traits in the source (Trumbo and McComas 2003, p. 344). Meyer (1988) identified five dimensions of information believability through analyzing its source: fairness, biasness, completeness, accuracy, and trust. Credibility for an insight is conferred when evidence to support it is presented (Lyles and Mitroff 1980). From the interviewees' perspective, a MI is credible when it is backed up by appropriate information and immersed in data. In the words of a CMO:

The first aha! moment was in 2014. Traditional wisdom was 80% of customers come from X. Through research, only 40% of our market was X, 5% state level, and 55% outside the state. Having these data delivered a huge insight and we turned to new markets. All of that was quite a shock, thus supportive information was key in convincing people to change our communications to digital.

Developing credibility for different hierarchical levels and different functional areas implies utilizing the best information within an organization (Piercy and Morgan 1994). Learning is perceived as more credible when it is tested and refined within a firm's context (Challagalla, Murtha, and Jaworski 2014, p. 9). Also, if the communicator is perceived as being biased or having a beneficial outcome from the situation, the credibility of the insight will be diminished (Lyles and Mitroff 1980).

Market relevance. Potential insights are plentiful, and unless a new understanding gets external support from its originator, it is difficult to disseminate and implement it. Convincing parties outside the insight nucleus about its merits is laborious; given the low success rate for new developments, there must be something really compelling before external stakeholders are convinced of the idea's viability in a business setting (Der Foo, Wong, and Ong 2005). An effective communicability of new ideas requires a balance in technical competence across managers and explanation regarding how an insight involves a solution to a customer problem (Goldenberg, Lehmann, and Mazursky 2001). This suggests that real MIs capture an existing market need, which serves as a language homogenizer within the organization and connector with customers. As a marketing strategy director at a pulp and paper firm pointed out:

Developing true, actionable, meaningful insight...it takes experience, time, resources, knowledge, investments.... You need cues from customers and prospects. Marketing insights are the true differentiation in the market. They are rooted in current market needs, we validate them with our customers and as a result they want to do business with us.

A strategic project manager of a CPG firm also emphasized market relevance as a key dimension of a MI: "With a marketing insight you are identifying a consumer need that has to be solved. Moreover, it is clear the degree or magnitude of impact for a specific customer or market segment."

Commercial potential. Katsikeas et al. (2016) analyze how market-based activities can be related to performance outcomes. In our study, interviewees stressed that MIs have foreseeable influence for a company and, thus, can be subject to control. For example, the president of a construction firm said: "When generating valuable insights from the market, at the end everything converges to what is the real impact caused by an insight in benefit of our company. It is decisive, then, that the results can be measured."

Performance can be measured at different levels, from customer mindset (e.g., satisfaction) to accounting and financial views (e.g., profit; see Katsikeas et al. 2016). Almost all executives participating in this study noted that a critical element of MI is the economic benefit expected from it. This is in line with current challenge of the marketing discipline to be more accountable from a financial perspective (Hanssens and Pauwels 2016; Katsikeas et al. 2016). In modern competitive markets, there is little space for failure and learning needs to be represented in tangible forms of benefit for a firm. Success of an idea or new development in a free market system is assessed in currency (e.g., dollars), so business-related actions are evaluated in monetary terms (Lehmann, 2004 p. 73). As one manager stated: "Corporate is not so happy at the moment of creating marketing insights itself...they are happier when they can see the implications. Overall, in our business unit people are attracted to an insight when short-term or long-term expectations are positive in the bottom line."

Estimates of an insight's commercial potential become objectives against which to compare the subsequent actual results and determine whether it is successful or not, and to what degree (Page 1993). Next, we discuss how MI may differ from concepts that also pertain to organizational learning and can create confusion.

Marketing Insight (MI) and Related Concepts

Extant literature has suggested that data, information, and knowledge are also intrinsically related to organizational learning (e.g., Nonaka 1994; Bierly III, Kessler, and Christensen 2000). Accordingly, we discuss the difference between marketing insight and these concepts in a hierarchical structure (see Table 1).

Data. Webster (1961) argues that something given, granted, or admitted is data because it is the root for argumentation or inferences. Therefore, data is a potential source or cause in organizational learning. Data are representations whose meanings are dependent upon a coding system (e.g., temperature in Celsius degrees versus Kelvin degrees; Likert scale five-point versus seven-point). Data are raw facts and learning about data is the process of accumulating facts about the market (Bierly III, Kessler, and Christensen 2000). Moreover, Smith, Wilson, and Clark (2006, p. 136) define market data as the recording of transactions or interactions with market players, quantitatively or qualitatively, explicitly or implicitly. Data-based learning is the most basic approach to market understanding. The purpose of data is neutral, whereas the purpose of MI is to better represent market needs and trends. Therefore, MI is a consequence more than a cause in organizational learning (Dominowski and Dallob 1996).

Information. Information is comprised of data that have been processed into a meaningful form for the recipient and is of perceived value for decision-making (Bierly III, Kessler, and Christensen 2000). *Information* is also defined as something (e.g., message) which can justify change in a construct (e.g., plan; Webster 1961). Two dimensions of information have been discussed in the literature: (1) syntactic, relative to the volume of information, and (2) semantic, relative to the meaning of information. In terms of organizational learning, the semantic aspect of information is more relevant (Nonaka 1994). From a market perspective, information is data which have been organized into patterns (Smith, Wilson, and Clark 2006, p. 136). The difference between data and information about a market is that the latter contains new meaning (Nonaka 1994). Information requires a context in order to be interpreted and builds over data. Thus, the recipient of information determines a pattern in data due to some existing knowledge. Information-based learning is the next level to market understanding and implies giving form to data (Bierly III, Kessler, and Christensen 2000). The key difference between information and insight is that the former can be an instrument to generate insights. Information as much as data possesses a neutral state, whereas MI leads to action in search of creating and capturing economic benefits in the market.

Knowledge. Webster (1961) states: "In this sense, knowledge is a justified true belief" (Nonaka 1994, p. 15). At the organizational level, a belief needs to be shared by employees and its justification stabilizes the existence of such knowledge through time. However, from a marketing perspective, knowledge is a dynamic human process relative to a firm's aspiration for the "truth" (Nonaka 1994). Knowledge as a "truth" about a market is non-neutral and has the power to be relevant for that market. Indeed, organizational learning implies that more organization's elements obtain knowledge and recognize it as potentially useful (Huber 1991). Knowledge involves both knowing how, which relates to tacit knowledge, and knowing about, which relates to explicit knowledge (Nonaka 1994). We recognize that no company is born at a zero-level knowledge because people are knowledge carriers experiencing continuous interaction with their environments. Ultimately, knowledge-based learning entails the analysis and synthesis of information. Having a great flow of information and data processing does not mean that there is a great deal of knowledge application (Bierly III, Kessler, and Christensen 2000). Herein lies the difference between knowledge and MI; the latter involves concrete applications of knowledge and will have a positive business impact for the firm. Knowledge represents a current state of understanding about a market, while MI is an "update" to such understanding. In the words of an interviewee: "You can have knowledge without insight, but you cannot have insight without knowledge."

Concept	Novelty	Actionability	Credibility	Market relevance	Commercial potential	Example
Marketing Insight	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	We have to modify our motor design, including insulation X, for distributors that sell our trucks to end-users operating in Southeastern Asia, India, Africa, Brazil, and Central America and the Caribbean. Normalizing the temperature of the motor will save them 20% of

				average annual fuel consumption, increasing our market share in 2% and gross margin in 3%
Knowledge	√	\checkmark	\checkmark	When is hot our motors decrease performance, consuming more fuel due to the extra mechanical effort
Information	\checkmark	\checkmark		98°F is hot
Data		\checkmark		98°F

TABLE 3: MARKETING INSIGHT AND RELATED CONCEPTS COMPARISON

ANTECEDENTS TO MARKETING INSIGHT (MI) GENERATION

MI provides an opportunity to reach competitive advantage by a substantive leap in market understanding (Smith, Wilson, and Clark 2006). Therefore, it is important for firms to identify what organizational factors drive or hinder the generation of MIs within a company. Our field study and examination of the literature suggest that six firm-level characteristics are relevant in this process: (1) market-focused discussion, (2) internal social networks, (3) creativity-focused mechanisms, (4) explorative approach, (5) reflection orientation, and (6) data integration capability. Accordingly, we discuss each antecedent and develop propositions. We define *MI generation* as a complex non-automated organizational learning capability that represents the extent to which a firm is able to create market-based insights (see Table 3).

Market-focused discussion. Discussing market-related themes among BU's employees emerged as one of the most relevant antecedents driving MI generation. Several study participants acknowledged the importance of having an exchange of opinions about what is happening in the market continuously. Discussing the market works as a priming channel for practitioners, which makes them consider market-based issues consciously and unconsciously. Through discussion, the market is emphasized as the core element in managing a business. For example, a product development engineer in the health care industry declared: "We meet periodically...we have a very fluid process of sharing information (formal and informal). It is not about time; it is about real time...you need to meet when is relevant. (Market) knowledge evolves through face-to-face discussion. It keeps you focused on the market."

Prior literature has also stressed the role of employees' discussions about the market. On the one hand, Slater and Narver (1995) assert that the use of structured processes for discussion generates exposure to new information, fostering multiple interpretations in a constructive manner, and leading to learning in a positive atmosphere. Providing forums for information exchange and discussion minimize the risk of knowledge dissipation. On the other hand, Gupta and Govindarajan (1991) assert that more uncertain market opportunities or problems require a more intense frequency and informality in the discussion patterns; this allows companies to be timelier to market events. In other words, formal and informal market-based discussions are essential to generating MIs. Thus:

P1: The more market-based discussion within an organization, the more likely it is to generate MIs.

Internal social networks. Internal social networks refer to the degree of interconnectivity within an organization. Having dense social networks within a firm ensures that knowledge and support are easily shared among all BU members (Mehra, Dixon, and Robertson 2006). Also, social networks advocate for interpersonal trust within a firm. Practitioners can draw on this trusted network to openly communicate and capture information about the market. Individuals can behave less opportunistically in intense social networks, providing new ideas that contribute to firm-level development because current and past behaviors are readily accessible by others (Mehra, Dixon, and Robertson 2006). As one marketing operations manager noted:

Different people have different perspectives. Individuals cannot work in silos. It is needed to make bridges internally to create more experiences and (learning) sources. Interpersonal connections will develop a single organizational language, which facilitates communication, balances knowledge across the organization, and people is more preoccupied about the firm's future. This generates a natural and healthy competition towards the creation of strong marketing insights.

Organizational learning literature (e.g., Tsai 2001) suggests that social links enhance interunit cooperation, stimulating the creation of new knowledge or critical insights. These links connect practitioners vertically (i.e., across hierarchies) and horizontally (i.e., across functions). Social networks facilitate the creation of new knowledge because a learning organization is characterized by motivated units intimately connected to one another (Huber 1991). To the extent that functional areas foster a high absorptive capacity, common meanings are developed and new ideas arise within a firm. A network of social links provides channels for knowledge and information dissemination in such a way as to stimulate and support innovative thinking and

actions (Tsai 2001). An organization with intense internal social networks is prompt to produce more MIs. Hence:

P2: The denser internal social networks within a firm, the more likely it is to generate MIs.

Creativity-focused mechanisms. Creativity relates to actions, processes, and programs that are meaningfully novel relative to existing practices (Bharadwaj and Menon 2000). Accordingly, we define creativity-focused mechanisms as the extent to which explicit and implicit systems for generating new relevant ideas are established in a firm. A MI must be novel and appropriate in the same line as any creative output. Generating insights as new ideas requires considerable effort, time, and ability to remain focused on the topic being addressed (Andrews and Smith 1996). Therefore, encouraging creativity within a firm is likely to motivate people to have the courage to deviate from the status quo. As one senior marketing strategy manager in a beverage company stated, "Generating marketing insights is hard. If not, everyone would do it. We need time and space to think out-of-the-box....Creativity and insight are interlinked. In order to create marketing insights, you need to think data and the context in a very creative way."

Firms such as 3M have acknowledged that putting in place mechanisms to foster creative thinking is key to pursuing promising opportunities and developing richer insights (Govindarajan and Srinivas 2013). 3M uses a "15% rule," which gives people 15% of their time to be free to look for fresh ideas. The logic is "to encourage experimental doodling. If you put fences around people, you get sheep. Give people the room they need" (p. 8). This organizational encouragement for creativity to develop innovative ideas and insights also has been supported by

marketing literature (e.g., Slater and Narver 1995; Andrews and Smith 1996). MI is facilitated if traditional perspectives and routine ways of doing things are flexibilized and challenged (Sethi, Smith, and Park 2001). Thus, we expect that:

P3: The more creativity-focused mechanisms are established within a firm, the more likely it is to generate MIs.

Explorative approach. Explorative approach refers to the extent to which a firm has a querying disposition towards markets. Having curiosity might be the key to the underlying foundation that stimulates learning and the willingness to be exposed to information (Harvey et al. 2007). An explorative approach can lead to discovering areas of customer thought and action that are not yet well understood (McQuarrie 1991). A firm with a high level of explorative or inquiring attitude is intrinsically motivated to generate MIs. If new information does not fit within an existing decision model, the firm is stimulated to seek information to reduce the perceptual tension that was created due to the lack of fit (Leonard and Harvey 2007). The more explorative a firm is, the more information it acquires. The more information a firm acquires, the more knowledge gaps it experiences. Hence, the more knowledge gaps a firm has, the more explorative it becomes and the more information it seeks and so forth (Harvey et al. 2007). This situation leads companies to develop MIs in order to avoid a permanent loop in searching for new information and fulfill the knowledge gap through concrete actions with potential financial benefits. As a senior director of digital marketing in a beverage firm declared:

Our company relies on being an inquisitive organization about search for knowledge. We are always observing and looking our customers in a continuous process. Without an explorative attitude it is difficult to reach a state of insight...This approach towards the

market gives you chance to find things that customers don't even know that they need. It can be hidden....You can be stepping on the base for your next marketing insight.

When employees across units in a firm have an explorative approach, there is ground for acquiring knowledge, leading to an increase in attention allocated to adapt to novel and challenging stimuli (Leonard and Harvey 2007). This is important because MIs are a response to gaps in a firm's market approach and perceived market events. It is argued that organizations with high levels of explorative approach will be more likely to actively pursue and take advantage of varied opportunities to gain and process information, and ultimately learning about the market (Leonard and Harvey 2007). Thus:

P4: The higher explorative approach in an organization, the more likely it is to generate MIs.

Reflection orientation. Nowadays, managers need to stop and think, to step back and reflect thoughtfully on their experiences (Gosling and Mintzberg 2003). Accordingly, *reflection orientation* refers to the extent to which a firm executes inward thinking to analyze and scrutinize its market practices. It is important because it allows firms to critique taken-for-granted assumptions, so that it can become receptive to alternative ways of reasoning and behaving (Gray 2007). In our context, it is likely to help companies to better understand the reason why something is happening in the market. As a participant argued:

Current market hostility and corporate pressure keep you going and going. If we can't stop, breathe, and think...how are we supposed to generate a brilliant idea...an insight

that contributes to firm growing? If you think about what you are doing, more ways to go will be analyzed and maybe you will turn the wheel.

As firms examine the justifications for their actions, the more chances for discovery are set. Through reflection, meaning is understood, but at the same time, it serves as catalyst for new paths to be developed. Action and experience do not necessarily lead to learning. Practitioners build up a mental model of how the market works; if experiences conform to this structure, mindsets can remain unaltered and no learning takes place (Gray 2007). Reflection can lead to insight generation while questioning market-based operations, because the space between experience and explanation is where firms find connections (Gosling and Mintzberg 2003). Thus:

P5: The higher reflection orientation in an organization, the more likely it is to generate MIs.

Data integration capability. Data integration capability refers to the extent to which a firm relates several data points from the market. This includes connecting dots from competitors' behaviors, internal market practices, front-line feedback, environmental changes, political maneuvers, industry trends, and top management actions involved in organizational learning. The integration of market data points serves a tool for managing the complexity of the market without individual or unit bias. It is a channel for getting the big picture of a market. For example, as the marketing and product development director at a mining supplier asserted:

One of the key elements of a marketing insight is its broad scope about the business. It can mix technical, financial, human, and sales aspects of the commercialization. Then,

you have to see from and capture several perspectives of the market to have a positive likelihood in generating an insight.

Data integration also gets more acceptance from different functional areas towards learning. It creates face validity for the organization as whole, because the output of a unit effort is connected to another piece of effort, especially for functional units traditionally rivals (e.g., manufacturing and marketing; Dougherty 1992). It affects managers' behaviors, the processes, and the results produced by individuals experiencing a firm in collaboration, in comparison to those working individually (Shah and González-Ibáñez 2011). Furthermore, data integration capability helps ensure the creation of synergic effects from data, producing a learning result that is greater than the sum of the individual data points. In turn, this enables the firm to understand hidden factors in customers' responses to market-based activities and visualize business opportunities. Thus:

P6: The higher data integration capability in an organization, the more likely it is to generate marketing insights.

Moderation Effects of Environmental Context

Environmental uncertainty has been related to the recognition of performance gaps that subsequently lead to creative thinking and behavior in an organization (Woodman, Sawyer, and Griffin 1993). Uncertainty can create the "right" tension for MIs to emerge (Govindarajan and Srinivas 2013). Accordingly, we explore the moderation effects of two external environmental factors (i.e., market turbulence and competitive intensity) on the antecedents-MI generation relationship. *Market turbulence. Market turbulence* refers to the degree of change in the composition of customers and their preferences (Kohli and Jaworski 1990). Rapid change can make prior understandings obsolete, so that it cannot be used in new settings and can also deny the time needed for MI to emerge. However, market turbulence can provoke tension to some extent that managers are not collapsed. On the one hand, low levels of market turbulence can create behavioral inertia due to the lack of modification in stable markets. On the other hand, high levels of market turbulence can create saturation and stress that immobilize managers' imagination (Gray, 2007), reducing a firm's ability to generate MIs. This indicates that the "right" tension from market turbulence follows an inverted U shape. Thus:

P7: As market turbulence increases to an optimal level, there is a stronger relationship between the antecedents and MI generation. After that optimal level, the relationship between the antecedents and MI generation is weakened.

Competitive intensity. Competitive intensity refers to the degree of rivalry in an industry (Kohli and Jaworski 1990). Similar to market turbulence, this context also provides tension within a firm. On the one hand, a low level of competitive intensity retains managers in a comfort zone guided by organizational inertia (Challagalla, Murtha, and Jaworski 2014). On the other hand, a high level of competitive intensity pushes managers to personal crisis and anxiety, which serves to hinder MI generation (Gray 2007). This also indicates that the "right" tension from competitive intensity follows an inverted U shape. In the words of the director of innovation of a pulp and paper firm:

We are careful with the competitive context. When competitors are weak due to their own issues, managers tend to be overconfident about our capabilities and adopt an automatic pilot mindset that is hard to shake off. Competitors recover, push hard...and many times we are surprised and freeze insight generation. We act to survive. From my experience, there is a golden situation...finding that time window...(where) there is a mid-range of hostility, it is when more revolutionary ideas and insights are cultivated.

Thus:

P8: As competitive intensity increases to an optimal level, there is a stronger relationship between the antecedents and marketing insight generation. After that optimal level, the relationship between the antecedents and marketing insight generation is weakened.

CONSEQUENCES OF MARKETING INSIGHT (MI) GENERATION

MI generation yields a shift in the understanding about a market with potential benefits for both customers and the focal supplier. From an insight generation firm perspective, such valuable learning provides the basis for improvement in decision-making towards a market, reinforcing the meaningfulness of MI. The senior sales manager of a life sciences firm pointed out the primary benefit of having such leap in understanding: "Marketing insight offers support to generate more insights in a virtuosic cycle within the firm."

The result of our fieldwork indicates that, beyond its contribution to self-enhancement of the concept, MI generation directly influences (1) brand attitude, (2) innovation performance, and (3) attitude toward organizational change; while it indirectly affects firm performance (see

Figure 1). We derive propositions to examine the relationship between MI generation and the three direct outcomes. Subsequently, we draw propositions for three firm-level variables that moderate the effect of MI generation on the outcome variables.

Brand attitude. Brand attitude refers to the degree of liking from psychological predispositions toward an object (Schmitt, 2012; Homburg, Schwemmle, and Kuehnl 2015). The attitude represents affect toward the object (Faircloth, Capella, and Alford 2001). In our context, MI generation works as a signal and can help customers to build a positive heuristic toward the corporate brand. Interviewees mentioned that MIs are at least partially validated with customers prior to implementation, which creates positive expectations about the supplier firm. This works as preannouncements of new developments for the market, which can familiarize potential beneficiaries from the insight, supporting a favorable attitude toward the firm (Liao and Cheng 2014). As the CMO of a food services firm stated:

With the generation of marketing insights, customers will feel heard and validated. The customers reward if they are being heard. They will go to social media being supporters of your firm....It will create emotional value. The emotional relationship will be stronger...and you will have a healthier brand.

Also, the novelty feature of MIs raises sentiments in a market. Prior marketing research (e.g., Cox and Locander 1987) shows that novel stimuli increase the amount of arousal (affective reaction), which can be captured by favorable brand attitude. In this regard, the CMO at an entertainment firm said that "marketing insights bring something new to the conversation with customers and the surprise factor clings emotions." Such arousal distinguishes the brand from competitors (Faircloth, Capella, and Alford 2001). Thus:

P9: The higher MI generation in an organization, the more likely it is to improve corporate brand attitude.

Innovation performance. The objects of innovation are classified as goods (products and services), or as changes in the processes to create and deliver goods (Assink 2006). Accordingly, innovation performance refers to the extent to which a firm exhibits non-routine behavior in offering development and related processes. MI generation can be conductive to innovative activity for two reasons. First, MIs are developed with an outside-in approach (i.e., strategy starts with the market; Day 2014). A key feature of insight is its ability to capture stated and unstated market needs (i.e., market relevance), representing a shift in understanding. Firms that are open to its external environment can improve its innovative performance (Laursen and Salter 2006). In this sense, MIs are a channel for better market representation, culminating in practical learning. As the VP of sales operations and development of an air transportation firm noted: "A substantial benefit of generating marketing insight is improving our capability to innovate. Key insights rise from deep exploration of the market, allowing new combinations of knowledge or gaining access to knowledge sources for developing new products."

Second, as MI generation requires a dense internal network and insight itself assures some degree of credibility, managers are likely to behave in a collaborative manner, facilitating innovative performance (Laursen and Salter 2006). Interviewees recognized that such

collaboration drives better innovation results due to open behavior. As a head of marketing intelligence declared:

We have accelerated our capacity to develop and launch better solutions to the market because when marketing insights are available...market sense making is a priority for everyone, nobody wants to get behind, people ask about implications and ramifications, and are willing to collaborate further.

Thus:

P10: The higher the MI generation in an organization, the more likely it is to improve innovation performance.

Attitude toward organizational change. Attitude toward organizational change refers to the degree to which an organization feels comfortable breaking the status-quo (Dunham et al. 1989). As markets are dynamic and their structure is shifting through time, organizational change is required to survive. As firms learn about the market, change in their activities or task serves as validation of the gained understanding. Indeed, the account manager at a software firm suggested that change is a challenge for her company even when it is in a continuous learning process:

Our firm invests in training and different other forms of learning. Actually, we have more training than ever...and don't get me wrong, it is much appreciated. But being honest, people in general keep doing the same whether it is not a mandate or a formal change in procedures. We say we need to change, though...(w)e need to be more receptive to change.

The aversion to change is commonly based on the perceived negative consequences that managers anticipate change can create (Dent and Goldberg 1999). Thus, more than a rejection of change, managers are afraid of change. MI provides actionability in a context of market relevance and potential value captured from a market, whether the change is achieved. When managers understand that behavioral change comes from a market-based insight, they are more likely to appreciate it and implement modifications to their activities. Furthermore, because MI is sustained by facts and data, its credibility reduces the concerns regarding change. Thus:

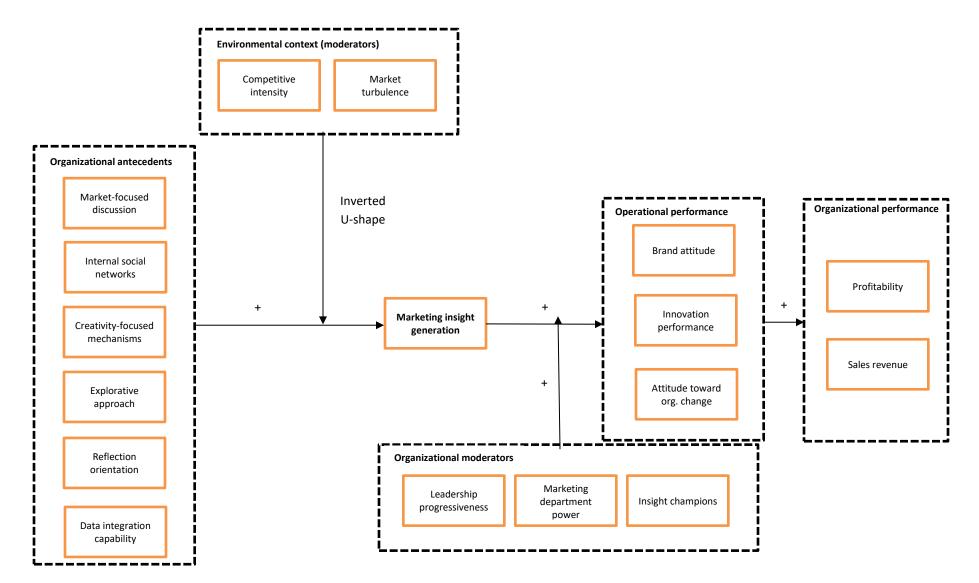


FIGURE 1: CONCEPTUAL FRAMEWORK

P11: The higher MI generation is in an organization, the more likely it is to have a positive attitude toward organizational change.

Finally, we acknowledge that brand attitude, innovation performance, and attitude toward organizational change are operational performance outcomes because they relate to value-chain activity areas of a firm (Katsikeas et al. 2016). Interviewees indicated that the ultimate impact of MI on a firm relates to increasing sales revenue and profitability, which are organizational performance outcomes (Katsikeas et al. 2016).

Moderation Effects of Organizational Factors

Based on our field research, we explore the moderation effects of three types of organizational factors that will ensure that MIs are supportive of firm performance. First, at the corporate level, we discuss leadership progressiveness. Second, at the unit level, we discuss marketing department power. Finally, at the front-line level, we discuss insight champions.

Leadership progressiveness. Leadership progressiveness refers to the extent to which a top management team is committed to push forward new ideas. Prior literature has recognized that leadership is a particularly important influence on reaching firm goals, when employees' efforts require transformation (Rasulzada and Dackert 2009). MI leads to new challenges, which needs support from the organization. A leader can positively influence the implementation of MIs, reinforcing and participating in change/development-oriented activities (Rasulzada and Dackert 2009). When leadership progressiveness is high, managers are more comfortable working harder toward achieving organizational goals and adapting to respond to MI (Oke,

Munshi, and Walumbwa 2009). This leadership feature is important because employees expect to see leaders as role models, and MI involves transforming ideas and potential into reality. In contrast, when leadership progressiveness is low, there is more risk associated with the process of implementing insights due to detriments in case of failure. Thus, we expect that:

P12: As leadership progressiveness increases, there is a stronger positive relationship between MI generation and operational performance outcomes.

Marketing department power. Marketing department power refers to the extent to which the marketing department is perceived as an important influencer within a firm (Moorman and Rust 1999; Verhoef and Leeflang 2009). In firms with an influential marketing department, it can be ensured that necessary investments are made to build intangible assets (Lehmann 2004; Homburg et al. 2015). MI is an intangible asset of a firm. Changes in intangible assets are not immediately represented in short-term performance outcomes, requiring resources and power from managers for implementation. The logistics manager at a consulting firm referred to this issue:

(M)arketing insight in nature is abstract, you see it but cannot touch it...the marketing department should be the source of strength to disseminate such insights. They embrace marked-based learning and marketing people is close to particular insights, so it is only logic that they can bring that extra help to reach the claimed benefits...someone needs to be responsible.

Thus:

P13: As marketing department power increases, there is a stronger positive relationship between MI generation and operational performance outcomes.

Insight champions. Insight champions refers to the extent to which a firm has liaison staff for the dissemination and support of market-based insights. Literature has shown that champions are people who possess three characteristics: (1) adopting a project as their own, (2) contributing by generating support from other practitioners in the firm, and (3) advocating a project beyond job requirement (Markham, 1998 p. 491). Interviewees noted that MI due to its intangible condition and outside-in approach requires front-line support to ensure its correct application. This is in line with research on innovation suggesting that reaching out to different groups and gaining advocates with different perspectives is crucial for new idea implementation (Schon 1963). Thus:

P14: As insight champions increases, there is a stronger positive relationship betweenMI generation and operational performance outcomes.

DISCUSSION

Theoretical Implications

This study offers three major implications for theoretical advancement in marketing and organizational learning domains. First, it provides a comprehensive conceptualization of five elements of MI: novelty, actionability, credibility, market relevance, and commercial potential. We enrich prior academic endeavors on MIs by moving away from a traditional resource-based view of the firm (cf. Smith, Wilson, and Clark 2006), where market-based insight is evaluated as any other asset within a firm. Our theory-in-use approach represents a foundation for the development of a theory of MIs. The results provide marketing researchers with a conceptual

framework, bridging the gap regarding the scarce consideration of academic work to the generation and management of market-based insight (Said et al. 2015). Also, MI proposes a new approach for organizational learning, taking advantage of today's data-rich environments. The properties of MI provide clear guidance to reach a new, higher order market understanding, avoiding the trap of information overload.

Second, prior research has highlighted the need to migrate from data analytics to insight analytics and acknowledged the insight domain as one of the seven big problems in marketing (Jaworski, Malcom, and Morgan 2016). We propose that the generation of MIs is driven by six organizational antecedents (e.g., market-focused discussion, reflection orientation). The study outlines that those factors are affected by the levels of surrounding market tension. Our results suggest that competitive intensity and market turbulence can create an optimal level of tension for which MI generation is maximized. Managers are motivated by challenge but can reach saturation whether a tolerance threshold is surpassed. As insight comes from the mind, independent of the sophistication degree of information technology and software owned by a firm, managers need particular conditions to seek unscripted opportunities (Govindarajan and Srinivas 2013). Our findings help to identify organizational patterns to prompt a practitioner's mind toward MI. Also, we have proposed that MI is not necessarily "knowing something your competitors don't know and that you can use to your advantage" (see Marketing Journal 2016). Two rival firms can generate two competing MIs about industry trends and consciously choose one over the other, stepping into implementation (e.g., Airbus A350 vs. Boeing 787 Dreamliner). Before any real speculation about the "value" of a MI, it needs to be managed following

procedures suggested by market-based organizational learning (e.g., Sinkula, Baker, and Noordewier 1997).

Third, the decline in the marketing department power and the prevalence of the market orientation concept within firms call for direction of a firm's focus on tasks involving accountability and innovativeness (Homburg et al. 2015; Moorman and Rust 1999; Verhoef and Leeflang 2009). MI generation responds to both dimensions. Also, MI, as a creative output in market-based organizational learning, offers a path to how a marketing department can regain more influence with creativity, as previously requested (e.g., Verhoef and Leeflang 2009). Therefore, MI is a good representation of how to bridge "intangible" elements (i.e., creativity) with "tangible" elements (i.e., accountability and innovativeness) to improve operational and organizational firm performance. When top management realizes the compatibility of both systems, the chances for marketing to be a valuable function for an organization is higher.

Limitations and Further Research

As is the case for all empirical studies, our research has some limitations that provide avenues for future research. We did not test the propositions, creating a natural opportunity for quantitative studies in the field. Our sample was characterized with relatively large companies in the supplier side of the market. It could be helpful to validate the proposed outcomes with small and middle size firms' data. Researchers could also investigate the profile and specific activities that insight champions represent. It would be interesting to shed some light on what makes an insight champion different from other champions in a firm. Some companies have created a unit in charge of insight generation. Thus, further research might consider exploring the implications of an insight unit and investigate the activities executed. Also, our data come from U.S. managers. Future research could evaluate whether our framework is sustained in an international setting.

Managerial Implications

Our study, deriving from its conceptual nature, provides several implications for managers. First, a sound definition of MI offers practitioners an operational representation and deep understanding of insight and why it constitutes the next level of market-based organizational learning. Defining MI helps managers to clearly identify what is an insight and what is not, avoiding confusion and subjective judgements. Also, having a common definition helps to homogenize language and facilitates communications across hierarchies and functions, vital for the current knowledge economy.

Second, establishing that MI is composed of five key elements: (1) novelty, (2) actionability, (3) credibility, (4) market relevance, and (5) commercial potential, expands a practitioner's common thought about an insight. Traditional wisdom converges to characterize it as "the aha or eureka moment!" Western societies have interpreted the insight concept as a fortuitous series of events, sudden burst of inspiration, and emerging relief after a moment of discovery, focusing on factors such as unexpectedness and satisfaction (Shanker 1995). However, our research shows that this perspective is deficient at least from a firm-level market-based learning approach. Consequently, companies should internalize our new MI conceptualization.

Finally, beyond our conceptualization of MI as comprising five dimensions, it has different levels of operationalization. Building over our findings about operational performance outcomes: (1) brand attitude, (2) innovation performance, and (3) attitude toward organizational change; we offer a managerial typology for MI. We suggest three general categories of insights based on the depth of firm activities transformation as shown in Fig. 2. Indeed, an executive expressed support for this typology, acknowledging that "there are levels of insight from the tactical and more specific to the strategic and more general."

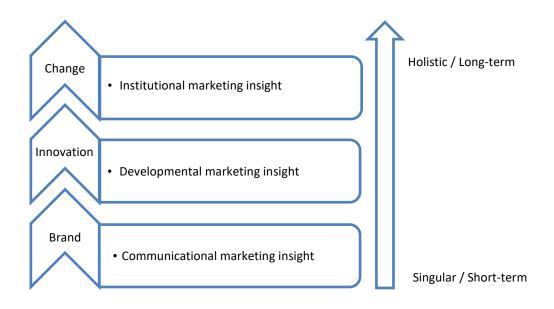


FIGURE 2: TYPOLOGY OF MARKETING INSIGHT

Communicational. When MI has a more tactical scope, it involves a promotional approach. We categorize these insights as communicational. At this level, MI is more beneficial for branding and communications. For example, an insight can call for modifying the claim, restructuring communication channels, appealing to new concepts, transforming advertising and media, redefining messages, or developing new sponsorships or co-branding alliances. This type

of MI helps firms to connect better with target audiences emotionally. Coca-Cola has been successful for more than 130 years, reinforcing and expanding its market position through exhaustive communicational insight generation (e.g., see McLellan 2006). Due to the scope of these MIs, renovations are regularly required through time.

Developmental. Some MIs reach a second level of complexity and more functions are involved in their implementation. When an insight calls for deeper and broader transformation, with focus on new products and/or services, we categorize it as developmental. A potentially successful new offering not only needs to connect emotionally but functionally with customers, advocating for interdisciplinary interaction (Homburg, Schwemmle, and Kuehnl 2015). At this level, MI involves integrated efforts from R&D, manufacturing, marketing, and sales. Nike has been a representative case of a firm sustaining its competitive advantage with developmental insights. For example, in the early 1990s Nike owned edge over Reebok due to its star new product, Air Jordans. The "sneaker war" also entailed intense advertising campaigns, connecting Nike's functions. Later on, Nike turned to practicing value co-creation with customers. Innovation was sustained by co-creating experiences of value through interactive platforms, where users could design their own shoes (e.g., see Ramaswamy 2008).

Institutional. Profound holistic transformations are also feasible from particular MIs. When insight calls for a whole organizational reshaping, affecting the essence of a corporate business strategy, we categorize it as institutional. This type of insight is infrequent and resonates longer than the previous categories. At this level, MI involves turning to new markets modifying a firm's organizational structure and most of its functional areas (if not all). An emblematic case is Nokia. This Finnish company was born in 1865 as a pulp mill with focus on the forestry and power industries. Through learning about the market and its competences, it developed new business units (cable, rubber, and electronics) in 1967. During the 1990s, MIs about the telecommunication and mobile networks industry and extinction of the Soviet Union as a significant buyer, completely changed the firm (disinvesting and eliminating businesses), converting it into a worldwide successful organization at the time (e.g., see Aspara et al. 2013). We hope that this study contributes to establishing an accepted MI conceptualization among researchers and practitioners and sheds some light on advancing market-based organizational learning theory.

Appendix

Interview guide

- (1) What is a marketing insight?
- (2) Can you recall an instance of yours generating a marketing insight? (If yes) How did that come about? What events led up to it? What actions of yours helped you generate the insight?
- (3) What organizational variables help individuals or teams generate marketing insights?What factors hinder the generation of marketing insights in organizations?
- (4) What organizational benefits can result from the development of marketing insights?
- (5) What organizational factors positively influence the implementation or use of marketing insights? What organizational factors have a negative influence?
- (6) What are the properties of a good marketing insight?

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ESSAY 2

Developing a measure of marketing insight and its antecedents

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"Dans les champs de l'observation le hasard ne favorise que les esprits préparés" - Louis Pasteur

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There is a widening gap between the ability of companies to generate and extract data from markets and their capacity to ignite and use insight to shape firm strategy. Practitioner and academic literature have called for the understanding of frameworks for marketing insights (MIs) that can be leveraged in the marketplace in contrast to the role of big data and analytics within firms (see Day 2011; Jaworski, Malcom, and Morgan 2016; Mela and Moorman 2018). Indeed, recent results from the CMO survey (2018) conducted by Duke University's Fuqua School of Business reports that, while companies plan to allocate more budget to marketing analytics, the effect of analytics at the firm level remains minor. To overcome the failure of marketing analytics, it is suggested that marketers should communicate insights and explanations instead of complex equations, technical jargon, or review of the modeling process (Mela and Moorman 2018).

The first step in communicating MIs is having clear comprehension of what a MI is. Surprisingly, scant literature has explored this construct and the focus has been customer or consumer insight (e.g., Said et al. 2015; Smith, Wilson, and Clark 2006). Reflecting this concern, the Marketing Science Institute's 2018-2020 research priorities included investigations into "Capturing information to fuel growth," stressing that there exists the potential for an explosion in MIs and, therefore, approaches to drive MIs should be studied (Marketing Science Institute Research Priorities 2018, p. 11-15). In response, Mora Cortez et al. (2018) proposed a set of antecedents for the generation of MIs and the consequences that are concomitant, defining a MI as a "firm's shift in understanding about the market, leading to action, credible for its employees, providing potential to create and capture value" (p. 11). We follow this conceptualization throughout the present paper. To the best of our knowledge, there is no previous systematic effort devoted to developing an empirical validation of the MI construct, following recommended procedures for scale development (e.g., Churchill 1979).

Though some qualitative studies address how organizations can generate MIs, acknowledging that data are not the same as insight (see Chun, Greenstein, and Kornfeld 2015; Said et al. 2015), measurement concerns have not been the focus of prior marketing literature. Furthermore, the conditions that a firm needs to enjoy for prompting the generation of MIs are not quantitatively validated, treated as a black-box to date. In an initial step, Said et al. (2015, p. 1166) report that insight generation can be viewed as "an organizational learning process of acquisition, dissemination, application and storage of insight." In this sense, MI is intrinsically related to organizational learning, but specific characteristics, capabilities and orientations of a firm induce the general context for MI at the organizational level. Such firm variables remain to be empirically tested.

Our purpose is twofold: (1) develop a measure of MI and its psychometric properties and (2) determine the effect of a set of factors pronounced in the literature on MI. Given the need for empirical testing of theory, our study is an engaging endeavor in addressing the outlined gaps and makes three key contributions. First, consistent with prior research (see Mora Cortez et al. 2018), we find that MI is best represented as a second-order construct, with five first-order dimensions, including novelty, credibility, and commercial potential. Second, based on the statement: "chance favors the prepared mind" (Berman et al. 2012), we show that MIs are generated due to a second-order construct called prepared-firm. This second order construct is composed of three first-order factors: (1) explorative approach, (2) reflection orientation, and (3)

data integration capability. Finally, we identify three antecedents for the prepared-firm construct, developing a valid and parsimonious structural equation model robust to endogeneity. Overall, we provide a nomological network for the MI construct that can be used in practice and that advances research on market-based organizational learning.

We continue by reviewing the literature on organizational learning and its relationship with MI in the business field. Afterward, we formalize our hypotheses development. We then describe a series of studies to test the psychometric properties of the constructs and empirically validate the proposed model. Next, we offer a general discussion, drawing theoretical and managerial implications. The paper concludes with the acknowledgement of limitations and future research directions.

THEORETICAL BACKGROUND

Organizational Learning Theory and Business Context

Today's economy is moving toward the knowledge era, where the management and application of knowledge overcome the manufacturing of components or service execution (Powell and Snellman 2004). In this sense, several authors stress the importance for organizations to emphasize learning (e.g., Dixon 1992; Marsick and Watkins 2003; Slater and Narver 1995). There are three forces intensifying the reason why learning is key for long-term sustainability and successful functioning of organizations. First, the nature of work is changing. More than three-quarters of the jobs in the U.S. economy currently involve creating and processing knowledge (Marquardt 2011). Knowledge workers have discovered that continuous learning is not only a prerequisite of employment, but is also a major form of work (Dixon 1992).

Therefore, there is convergence between work and learning. Second, the global economy is posing a competitive challenge. There are more suppliers available around the world. For longterm planning, organizations rely on core competencies enabling them to create new offerings and adapt to market changes better than competitors. Prahalad and Hamel (1990) propose that these core competencies stand for the collective learning of the firm. Moreover, the ability to learn faster than competitors could be the only sustainable competitive advantage (DeGeus 1988; Sinkula 1994). Third, organizations are increasing the pace of decision-making and experiencing internal and external transformations of unpredictable nature (Dixon 1992). From ecology, Revans (1980) suggests that, to survive, organisms must be able to learn (L) at a rate that reaches or exceeds the changes (C) that are taking place in the environment (i.e., $L \ge C$). The new business context is characterized by open communication channels, continual mergers, rapid technological evolution, and massive societal change (Ritzer and Stepnisky 2017); which increment the turbulence inside and outside the organization. The fundamental value proposition has changed from manufacturing a product and transferring its ownership to lifelong relationships with customers, dedicating special concern to anticipating and solving problems.

Organizational learning. This is defined as a process by which firms as collectives learn through interaction with their environments and internal components, and have the potential to influence behavior by creating new knowledge (Sinkula 1994; Slater and Narver 1995). Individuals are fundamental to the development of organizational learning. Argyris and Schon (1978, p. 20) argue that "there is no organizational learning without individual learning, and that individual learning is a necessary but insufficient condition for organizational learning." Individuals learn when disjunctures, surprises, discrepancies, contradictions, or challenges act as triggers that stimulate a response (Marsick and Watkins 2003). Then, individuals implicitly filter information through selective perceptions, values, beliefs, and framing of the situation. These filters can be originated by the individual's past and social contexts. Next, people generally design a plan of action and implement it. Often individuals assume that external forces caused undesirable outcomes and desirable outcomes are caused by their own actions (Argyris et al. 1985). Finally, people selectively create meaning of their experience and internalize these cognitive reconstructions as what is learned from the experience (Marsick and Watkins 2003). Behavior change is not necessary when learning, because new knowledge can merely confirm what is already expected (Slater and Narver 1995). In consequence, behavior might not change, but can be pursued more confidently as a result of the new knowledge, or this may be the nudge for some future behavior change to happen (Sinkula, 1994; Slater and Narver 1995).

Learning at the organizational level is a collective experience. The phases of learning may be similar to individual learning, but now it is based on and resulting from an interactive and interdependent process (Marsick and Watkins 2003). Organizational learning can be discerned when considering a performing organization such as an orchestra or soccer team (Dixon 1992). For example, winning a game is not the consequence of the effort and talents of a single player or even to the sum of individuals' knowledge. There is know-how that only can be credited by the collective interaction of the group. This know-how is embedded in the shared understanding of the group (Dixon 1992). It is important to stress that individuals in an organization come and go, but organizations can preserve knowledge, behaviors, mental maps, perspectives, norms and values over time (Daft and Weick 1984). Therefore, "organizational learning is the means by

which knowledge is preserved so that it can be used by individuals other than its progenitor" (Sinkula 1994, p. 36).

Types of organizational learning and marketing insights. Learning can be categorized based on when and why it happens, and the impact on those who are learning; theory converges in that there are two main types of organizational learning (Chinowsky and Carrillo 2007). First, a basic category of learning can be defined as incremental learning in which knowledge is attained by a natural stepwise manner, reactively as a response to the necessity of the organization. The second type is a dynamic process of continual learning, which is proactively sought out even before the actual necessity is recognized by the firm (Chinowsky and Carrillo 2007). The two conceptualizations of organizational learning have been understood by Argyris (1977) and Senge (1990) from different perspectives. First, Argyris describes learning as being of single- or double-loop. The focus of divergence between the two types of learning is what they change (Chinowsky and Carrillo 2007). Single-loop learning changes behavior or a process in response to information from previous events or incidents and builds over the symptoms of problems. Double-loop learning considers symptoms only as part of a deeper organizational endeavor, seeking to reach the root of problems to modify the fundamental principles and theory of behavior or a process. In brief, single-loop learning is more a consequence in the organization than a process to interact with the market; while double-loop learning is proactive and drives the organization through the adjustment of processes. From Senge's view, learning is classified as adaptive or generative. While Argyris is mainly concerned with what is changed during the learning experience, Senge's classifications focus on when learning occurs (Chinowsky and Carrillo 2007). On the one hand, adaptive learning is the method of companies to react to the

dynamic forces of the market; it works on the organization's assumptions about its environment and itself (Slater and Narver 1995). On the other hand, generative learning enhances a firm's ability to create (Senge 1990). Therefore, an organization is willing to question long-held assumptions about the company and its context. Contrasting both learning approaches, generative learning is inspired by the opportunity to change the future while adjusting to it and adaptive learning is established by perceived (i.e., real) change in the present (Chinowsky and Carrillo 2007).

Beyond the differentiation in labeling, Senge's and Argyris's categorizations of learning are intrinsically the same (Chinowsky and Carrillo 2007; Slater and Narver 1995; see Appendix A). Single-loop learning is an adaptive process, while double-loop is a generative process. Companies can identify as more disruptive and interesting when developing a generative or double-loop approach, but from practice, firms are commonly more involved with adaptive or single-loop learning. Organizations that focus on the most basic form of learning are minimally bearing the environmental requirements to adjust business practices and procedures. Leonard-Barton (1992) argues that an "unintended consequence" of primarily focusing on adaptive learning and maturating internal core competencies is that these capabilities can become "core rigidities" which, in turn, can hinder innovation (Slater and Narver 1995). However, companies should work on both learning approaches and keep a balance through time, probably with a dynamic prioritization but in equilibrium from a long-term view. Engaging in generative or double-loop learning should "not negate the value of everyday incremental fixes" (Nevis et al. 1995, p. 74). Firms will unavoidably face problems which are not dealt with in any generative learning processes and will be forced to reactively adjust practices or procedures just to survive

(Chinowsky and Carrillo 2007). Moreover, adaptive or single-loop learning may be the only way to consolidate generative learning into the organization (Nevis et al. 1995). Thus, it is essential to manage and control the right processes that allow a company to learn.

MIs strongly relate to generative learning because they imply a leap in understanding with foreseeing implications (Mora Cortez et al. 2018). Extant organizational learning literature stresses the role of MIs in comprehending complex, diverse, and fast-changing markets (Day 2011); a common characterization of contemporary business settings. Indeed, these insights are a central element within market-driven organizations (Day 1994). MIs are a requisite for anticipating trends and events before they are common sense. Thus, the creation and change features of generative learning are clearly represented in market-based insights. Day (2011) suggests that MIs are needed to build adaptive marketing capabilities that allow the generation of new MIs, enhancing a firm's market orientation. Therefore, as the generation of a MI is sustained through an outside-in approach to strategy and the exploration of new possibilities, the practice itself of developing market-based insights is generative (as learning) and adaptive (as capability) in nature. Along this line, Said et al. (2015, p. 1160) acknowledge that insight involves exploration, as MIs come into the organization or are generated within it. However, the disruption created by MIs can be seen as a window of competitive advantage that will be kept open only through continuous improvement (i.e., exploitation; Slater and Narver 1995).

HYPOTHESES DEVELOPMENT

Marketing insight (MI) construct. Building over a grounded theory approach (e.g., Glaser and Strauss 2017), Mora Cortez et al. (2018) define the MI construct as composed of five key elements: (1) *novelty*, which refers to the magnitude of the shift in understanding about the market, resulting from an insight; (2) *actionability*, which refers to the extent to which a firm can modify its activities in response to an insight; (3) *market relevance*, which refers to the extent to which an insight benefits current or new group or segment of customers; (4) *credibility*, which refers to the extent to which the employees of a firm believe in an insight; and (5) *commercial potential*, which refers to the extent to which a firm expects to create economic value from a MI. In this way, the proposed five factors are subcomponents or facets of the MI construct (Brown 2014). Thus, a hierarchical factor structure for MI with five fundamental dimensions is proposed because a second-order factor captures the common variance among the dimensions in a meaningful way (Hansen 2004). Stated formally:

H1: MI is a higher order construct composed of five dimensions: (a) novelty, (b) actionability, (c) market relevance, (d) credibility, and (e) commercial potential.

Antecedents to marketing insight (MI). Based on Mora Cortez et al. (2018) and the literature subsequently discussed, six internal organizational factors are argued to be antecedents of the MI construct. Our focus on internal factors is consistent with a more applied orientation due to the fact that practitioners are more able to succeed by controlling internal antecedents rather than environmental ones (Jaworski and Kohli 1993). Business unit (BU) level (1) creativity-focused mechanisms, (2) market-focused discussion, (3) internal social networks, (4) explorative approach, (5) reflection orientation, and (6) data integration capability are

hypothesized to be related to the MI construct. In order to formalize the proposed conceptual framework, we provide a figure identifying the key factors included in the empirical testing (Figure 1).

At the individual level, Seifert et al. (1996) acknowledge that being intelligent is not the same as being prepared to face the world and excel, asserting that insight comes from a "prepared-mind." This view strives toward determining how insight may emerge from a combination of internal-processing phases whose joint interactions enable subconscious quantum leaps during the generation of new mental products (Seifert et al. 1996, p. 75). At the organizational level, being market-oriented allows a firm to generate, disseminate, and respond to market intelligence (Jaworski and Kohli 1993). Hence, a market-oriented organization is an intelligent organization. However, as at the individual level, it does not lead necessarily to be a "prepared-firm." If this elusive state is reached, an entity takes advantage of common encounters with a rich surrounding conceptual and physical environment, advancing its creativity to confront market hurdles (Seifert et al. 1996). This implies that companies are susceptible to the immediate context, including elements such as competitors, regulations, industries, society, and events in general. In other words, prepared-firms are always dynamically interacting with the environment in a bi-directional manner (i.e., firms affect the market and the market affects firms).

Marketing, learning, and management literature, in line with Mora Cortez et al. (2018), identifies three key aspects of the prepared-firm. First, an explorative approach within a firm contributes to shaping the organization toward the creation and management of customer and brand assets, such as market-based insights (Day 2011). Having an explorative approach enhances the ideation process (Björk, Boccardelli, and Magnusson 2010), which is essential to firms as it constitutes the starting point for insight development. Neuroscience supports that entities reaching the "be prepared" (Scout motto) state experience a vivid curiosity (e.g., Dienel 2010). Overall, a firm that is prepared to ignite MIs is characterized by an explorative approach.

Second, reflection orientation is a key element of a prepared-firm. Reflection is defined as a process with a purpose and/or outcome in which manipulation of meaning is applied to relatively complicated or unstructured ideas in learning or to problems for which there is no obvious solution (Moon 2013, p. 161). The accelerating pace of market transformation and exhaustive competition and the proliferation of media channels and data sources are creating hazardous complexity to firm management (Said et al. 2015). Reflection requires time, and time would be assigned if, and only if, a firm identifies learning as integral for its survival and development. A reflective firm is able to release "oxygen" to keep the organizational learning flowing (Moon 2013). In this sense, reflection orientation is a strategic approach for helping firms navigate today's chaotic market environments (Day 2011).

Finally, there is a data integration challenge. Developing a capability to integrate data is representative of a prepared-firm. According to Mela and Moorman (2018, p. 2) as data are growing, and this growth is driven by IT investments rather than by coherent marketing goals, it is hard to separate insight from the junk. The value of data explodes when it can be linked and fused with other data (Dong and Srivastava 2013). Data in most organizations are not integrated, having different systems, lacking variables to match data, and using distinct coding schemes. To avoid these issues, there must be a consistent thread that often involves "translation" and a

"common domain of knowledge" in order for the transmitter and receiver of information to succeed in the communication process (Mela and Moorman 2018). In particular, firms require a capability able to create a scheme mapping (i.e., coding), record linkage, and real data fusion (see Dong and Srivastava 2013, p. 1189). Understanding how data will be merged has to be contemplated previous to data collection, as part of the organizational learning design. Moreover, due to the diversity of customers and interactions, a common language needs to be established (Mela and Moorman 2018). Having big data does not assure the creation of MIs; it has to be refined and connected through different ports within an organization. Once data are correctly merged, the chances of generating MIs are higher. Therefore, it can be expected that:

H2: A prepared-firm is a higher order construct composed of three dimensions: (a) explorative approach, (b) reflection orientation, and (c) data integration capability.

H3: There is a positive relationship between a prepared-firm and MI.

Firms willing to be prepared to face market changes and generate MIs operate in a vigilant manner, defending against individual and organizational bias, knowing how to ask the right questions, identifying what they do not know, and exploiting knowledge-sharing technologies (Day 2011). In this sense, to overcome organizational filters, establishing systems to enhance market-focused discussion is required. Formally, market-focused discussion refers to the extent to which a firm argues about interactions with industry players. Jaworski and Kohli (1993) and Slater, Mohr, and Sengupta (2010) stress how knowledge can be disseminated through informal hall talks, interdepartmental meetings, and discussion of customers' needs throughout an

organization. More important, market-focused discussions can reduce the risk of managers misinterpreting what they see in favor of what they want to see or dismiss results that challenge prevailing wisdom (Day 2011, p. 189). Communication based on market events brings together different perspectives on an issue and creates a more transparent and unobstructed working climate within a company. Market-focused discussion is a sign of concern about the future of markets and the organization, developing an eagerness to thrive by accurately interpreting and sharing information. Hence:

H4: There is a positive relationship between market-focused discussion and a prepared-firm.

With the advances of knowledge management and organizational learning, vertical organization siloes are being unbundled (Kleindorfer and Wind 2009). Internal social networks allow strategically positioned individuals to facilitate information dissemination through market-focused discussion, which, in turn, facilitates innovative behavior (Obstfeld 2005). Dense social networks enable cross-company, regional, and functional sharing of the organization's market knowledge (Day 2011, p. 189). The more knowledge managers access, the more validation is required. Organizational learning is enhanced through communication among co-workers (Senge 1990). This learning peer effect is maximized as practitioners are linked through different functions and hierarchies. The rationale is that opinion and behavior are more homogenous within than between groups, so managers connected across groups are more familiar with native ways of thinking and behaving (Burt 2004, p. 350). As new, good ideas emerge from the boundaries between groups, managers are motivated to discuss. Obstfeld (2005) advises caution

in consideration of the fact that practitioners discuss good ideas to display competence and to entertain, but not necessarily to modify marketing practices. Favorably, it enhances the preparation of a firm to resolve market-based challenges and to continue with organizational learning. Therefore, it is hypothesized that:

- H5: There is a positive relationship between internal social networks and marketfocused discussion.
- H6: There is a positive relationship between internal social networks and a preparedfirm.

Creativity and necessity foster initiatives to leverage social networks and open up the marketing organization to discussion toward market-based affairs across a firm (Day 2011). Developing creativity-focused mechanisms within a company is beneficial to the creation of ideas that contribute to business by reaching a state of awareness about the market. These mechanisms allow companies to establish a stimulating climate, incentives to improvement, methodical use of creativity tools, the use of formal ideation teams, and idea campaigns (Björk, Boccardelli, and Magnusson 2010). More concisely, creativity-focused mechanisms refer to the extent to which a firm has instituted formal approaches and tools, and provided resources to encourage meaningfully novel behaviors within the organization (Bharadwaj and Menon 2000, p. 424). As organizational creativity is rooted in individual creativity, firms need to establish practices and procedures that can overcome cognitive limitations (see Heath, Larrick, and Clayman 1998). Organizational creativity is cultivated while freedom and autonomy are balanced in an

organization, because too much freedom and autonomy may become a barrier to creativity (Blomberg, Kallio, and Pohjanpää 2017). Structure, in the context of ideation, is experienced by managers by the presence of organizational systems, procedures, and processes that enable creativity (Bharadwaj and Menon 2000). Thus, a prepared organization is represented by the equilibrium between freedom and control. For example, top management is required to motivate employees to think outside the box, while simultaneously sustaining a shared direction for new idea development (Andersen and Kragh 2015). Also, structure for the production of creative outputs implies a sufficient level of resources such as time and money (Blomberg, Kallio, and Pohjanpää 2017).

As creativity-focused mechanisms permeate an organization, individuals with diverse backgrounds and belonging to different functions feel more encouraged to relate to each other, as formal boundaries no longer provide perceived managerial authority. Through these mechanisms, the actions and interactions of organizational members are highlighted (Andersen and Kragh 2015). Then, practitioners adopt the idea of business sense-making as collective meaning, enhancing market-focused socialization. A discussion about the market between colleagues may signify the beginning of trust development and foundation of a firm creatively prepared to drive the market to its favor (Handzic and Chaimungkalanont 2004). Likewise, as creativity-focused mechanisms strive toward change, practitioners attracted to old organizational paradigms may abandon the company because they no longer accept the new cognitive style (Woodman, Sawyer, and Griffin 1993). Current and future organizational members will be supportive and prefer this working environment, developing stronger internal social networks, because organizational conditions will match their culture-cognitive style (Woodman, Sawyer, and Griffin 1993). Accordingly, we propose the following:

- H7: There is a positive relationship between creativity-focused mechanisms and market-focused discussion.
- H8: There is a positive relationship between creativity-focused mechanisms and a prepared-firm.
- H9: There is a positive relationship between creativity-focused mechanisms and internal social networks.

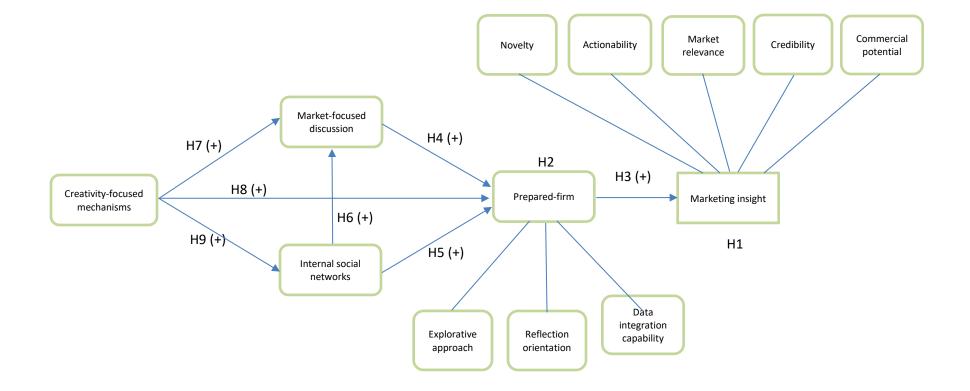


FIGURE 1: CONCEPTUAL FRAMEWORK

STUDIES 1 AND 2

A set of studies follow conventional scale-development procedures (see Appendix B). Studies 1 and 2 consisted of validating the MI concept as a higher order construct composed of five dimensions: (a) novelty, (b) actionability, (c), market relevance, (d) credibility, and (e) commercial potential. We followed established scale-development procedures (e.g., Churchill 1979) to elaborate a parsimonious scale with respect to the number of dimensions and items, and can be used across different industries and product/service categories in line with previous marketing research (e.g., Homburg, Schwemmle, and Kuehnl 2015).

The objective of Study 1 was to generate specific items for the proposed dimensions of MI and select the items that show content validity for a panel of five academic experts. To generate the items, we selected a manager-generated approach based on 35 in-depth interviews. Practitioners were asked to describe the characteristics of a particular MI developed during the last three years in their business unit (BU). Based on their answers and ideas gathered from an extensive literature review focused on concepts related to the five dimensions of MI (e.g., Poetz and Schreier 2012), we yielded an initial set of 35 items (see Appendix C).

A scale whose extension is about 30 items is considered too lengthy to be usable in practice (Homburg, Schwemmle, and Kuehnl 2015). Item reduction involves two approaches: managers' judgment and the statistical purification processes (Churchill 1979). We designed Study 2 to accomplish a parsimonious scale that is well understood by practitioners with proper statistical dimensionality. First, we assessed the content validity of items following MacKenzie, Podsakoff, and Podsakoff's (2011, p. 304) recommended content adequacy test. We asked 20 managers to

rate how well each item fit each dimension on a 5-point Likert-type scale (1 = "not at all," 5 = "completely"). We ran a one-way repeated measures analysis of variance (ANOVA) to analyze whether each item's mean significantly differed from its preassigned dimension in comparison with all remaining dimensions. The results were satisfactory for all items (ps < .05), except two; thus, we eliminated them.

Second, we applied statistical reduction procedures to purify the factors (Churchill 1979), including confirmatory factor analysis (CFA) and reliability analyses. For data collection, we collaborated with a U.S. market research entity with access to business, management, marketing, R&D, sales, and innovation managers with more than five years of experience. A sample of 137 practitioners used 7-point Likert scales to evaluate a particular MI (1 ="strongly disagree," and 7 = "strongly agree"). We provided a definition for MI and asked the sample to describe the MI to be sure that they were thinking of a concrete example. Due to lack of clarity in some descriptions, a final sample of 119 managers was used. The item order of the MI scale was randomized across participants. Building over the CFA results using R, we computed the standardized residual covariances and modification indices for thorough review of the scale's psychometric properties to analyze potential item deletion (Bagozzi and Yi 1988). The refined scale resulted in 15 items, with three items for each of the five types of MI dimensions (see Table 1). The moderate to high correlations among the first-order factors support the decision of MI as a higher order construct (Brown 2014). The final second-order construct, according to Hu and Bentler (1999) thresholds, had excellent fit: $\chi^2 = 99.980$, d.f. = 85, p = .128; CFI = .974; TLI = .968; RMSEA = .037; SRMR = .066. The first-order factors had adequately high discriminant validity (ϕ coefficients significantly < 1.0; Batra, Ahuvia, and Bagozzi 2012) and convergent

validity (factor loadings \geq .5, Composite reliabilities (CRs) \geq .6, average variances extracted (AVEs) \geq .5; Bagozzi and Yi 1988). This result confirms the higher order MI operationalization with the five dimensions, supporting H1.

			Q. 1 1. 1				
Indicator	Direction	Construct	Standardized loading	SE	p	CR	AVE
Novelty (NOV)	 ←	MI	.576	.079	.000	.749	.501
Actionability (ACT)	\leftarrow	MI	.952	.052	.000	.776	.539
Market relevance (MR)	\leftarrow	MI	.976	.041	.000	.805	.580
Credibility (CRED)	←	MI	.675	.067	.000	.848	.650
Commercial potential (CP)	←	MI	.753	.068	.000	.801	.577
The insight was ground breaking for our CEO	←	NOV	.691	.079	.000	.001	
The insight disrupted our market development tactics	←	NOV	.651	.073	.000		
The insight meant a shake up for our customer strategy	\leftarrow	NOV	.775	.070	.000		
This insight called for action in the market	←	ACT	.693	.055	.000		
Based on the insight, the BU altered its internal business procedures	←	ACT	.656	.063	.000		
The insight signified implementing concrete tasks	\leftarrow	ACT	.841	.051	.000		
The insight gave us the opportunity to better fulfill customer needs	\leftarrow	MR	.804	.049	.000		
This insight equipped us to offer customers the product/service they want	\leftarrow	MR	.797	.041	.000		
The insight had the potential to enable us to satisfy a large number of customers	←	MR	.678	.052	.000		
For our business unit (BU) employees, the insight had the appearance of truth	←	CRED	.754	.061	.000		
People in our BU found the insight to be plausible	←	CRED	.844	.057	.000		
BU employees were confident about this insight	\leftarrow	CRED	.818	.051	.000		
This insight pointed to opportunities for growth	←	СР	.886	.059	.000		

The insight indicated ways in which the BU could improve profitability	←	СР	.697	.068	.000
We could expand our business based on the insight	←	СР	.678	.064	.000
MI: Marketing insight					

TABLE 1: CONFIRMATORY FACTOR ANALYSIS FOR MARKETING INSIGHT (MI)

STUDY 3

The aim of Study 3 is to validate the prepared-firm concept as a second order construct composed by three elements: (a) explorative approach, (b) reflection orientation, and (c) data integration capability. *Explorative approach* refers to the extent to which a firm has a querying disposition toward markets. *Reflection orientation* refers to the extent to which a firm executes inward thinking to analyze and scrutinize its market practices. *Data integration capability* refers to the extent to which a firm relates several data points from the market (Mora Cortez et al. 2018). Overall, a prepared-firm refers to an organization state based on an explorative approach, reflection orientation, and data integration capability. To generate the items, during the development of Study 1, practitioners were asked to describe in detail firm-level characteristics that favor or hinder the creation of MIs in a BU. Also, we reviewed literature to generate items inspired by existing studies in the business field (e.g., Gray 2007). Through both approaches we constructed 29 items (see Appendix D). In addition, five academic experts from two large Southeastern U.S. universities examined the content of each item.

Following the directions of MacKenzie, Podsakoff, and Podsakoff (2011) we conducted a content adequacy test with 22 managers to rate how well each item fit each dimension on a 5-

point Likert-type scale (1 = "not at all," 5 = "completely"). The resultant one-way repeated measures ANOVA suggested the elimination of two items (DIC4 and EA7). A questionnaire containing 27 items was administered to a pool of 128 experienced managers from multiple industries, representing diverse business lines. The item order of the prepared-firm scale was randomized across participants. We examined reliability and CFA analyses to purify the scale. We discarded 16 items due to high standardized residual covariances (>3) and modification indices (> 10) and low factor loadings (< .5). The items were measured on a 7-point Likert scale (1 = "strongly disagree," and 7 = "strongly agree"). The consistent relatively high correlations among the first-order factors support the decision of a prepared-firm as a higher order construct (Brown 2014). The resultant second-order CFA model fit was deemed excellent on the basis of the following indices: $\chi^2 = 56.762$, d.f. = 41, p = .052; CFI = .976; TLI = .968; RMSEA = .053; SRMR = .040. In addition, as factor loadings, AVEs, and CRs results are close or higher than .5, .5 and .6 respectively, we found evidence of convergent validity. Also, we tested discriminant validity for the first-order constructs and found correlations significantly < 1.0 (Batra, Ahuvia, and Bagozzi 2012). This result provides support for H2, validating the prepared-firm concept as a second-order construct.

			Standardized				
Indicator	Direction	Construct	loading	SE	р	CR	AVE
Explorative approach (EA)	\leftarrow	PF	.921	0.045	0.000	0.759	0.512
Reflection orientation (RO)	\leftarrow	PF	.959	0.041	0.000	0.799	0.499
Data integration capability (DIC)	←	PF	.907	0.038	0.000	0.867	0.619
Marketing and Sales employees have an inquiring mind about customers' future needs	←	EA	.684	0.059	0.000		

We are well-known for asking smart questions about industry trends	←	EA	.749	0.064 0.000
This BU has an inquisitive instinct to examining customer's operations	←	EA	.713	0.057 0.000
In our business meetings, value (\$) captured by customers is quantified	\leftarrow	RO	.691	0.068 0.000
Our TMT always conducts a thorough analysis of our offerings performance	←	RO	.739	0.058 0.000
Customer satisfaction metrics are scrutinized at least once per year	←	RO	.702	0.065 0.000
Our TMT analyzes monthly reports about service performance	←	RO	.692	0.066 0.000
We excel in consolidating multiple sources of marketing intelligence	←	DIC	.798	0.039 0.000
To create improvement plans, Marketing combines customers' complaints to identify general themes to work on	←	DIC	.814	0.037 0.000
We have the ability to connect one piece of information to another piece of information from the market	←	DIC	.769	0.044 0.000
When analyzing information from customer surveys, our research area merges common issues across customers	←	DIC	.766	0.041 0.000

TABLE 2: RESULTS OF CONFIRMATORY FACTOR ANALYSIS FOR PREPARED-FIRM

STUDIES 4 AND 5

The research continued by developing measures for the three antecedents previously argued: (a) market-focused discussion, (b) creativity-focused mechanisms, and (c) internal social networks. Following the procedure proposed by Churchill (1979), we generated an item pool for each construct. We used the literature in marketing, innovation, and management (e.g., Bharadwaj and Menon 2000; Day 2011; Mora Cortez et al. 2018) as guidance for developing the items and the subsequent item refinement. A questionnaire containing 16 items resulted (see Appendix E). We conducted this survey to a pool of 175 practitioners from a business panel with different backgrounds and industry experiences. We examined the reliability coefficient and CFA to purify the scale. The resultant survey was composed of nine items. The items were measured on a 7-point Likert scale (1 = "strongly disagree," and 7 = "strongly agree"). The first-order CFA, according to Hu and Bentler (1999) thresholds, had excellent fit: $\chi^2 = 29.626$, d.f. = 24, *p* = .197; CFI = .992; TLI = .988; RMSEA = .036; SRMR = .035 (see Appendix F).

We presented the final questionnaires for the higher order constructs prepared-firm and MI and the three first-order constructs to a panel of five academic experts and conducted two international workshops for further validation. Given the overall consensus from the panel and the practitioners, we proceeded by testing the proposed conceptual framework through an online survey with 225 executives participating in a business panel from a research firm (see sample characteristics in Table 3). To prevent the potential bias of common method variance (CMV) we applied four suggestions from the literature: (1) respondents were assured of the anonymity and confidentiality of the study, (2) the survey design used different endpoints scales, (3) item ambiguity was checked by a panel of five academic experts, and (4) we randomized the order of the questions per section using Qualtrics (Podsakoff et al. 2003). We screened key informant competencies by including four open acknowledgements: (1) minimum five years of business experience, (2) job title of manager or higher, (3) tenure in current firm of 18 months or more, and (4) knowledge about the firm's financial performance. If a practitioner responded no to any statement, s/he was automatically banned from the research setting.

Criterion	Sample size $(n = 225)$
Product	144
Service	81
B2B	135
B2C	90
Functional area	
Marketing	5.34%
Business development	22.22%
Sales	35.55%
Innovation and R&D	7.11%
Management	29.78%
Experience in business (years)	27.14
Firm size (employees number)	1590.56
Respondent's title	
C-level	14.22%
Executive VP	7.55%
VP	20.00%
Director	47.12%
Senior Manager	4.89%
Manager	6.22%

TABLE 3: SAMPLE CHARACTERISTICS

The full proposed model estimated the relationships among the higher-order prepared-firm factor, the three antecedents, and the MI higher-order factor as a consequence. We operationalized the *MI* construct (dependent variable) as the evaluation of the MIs generated during year 2017 in the respondent's BU, using items from scales validated in Studies 1 and 2.

The remainder scales were operationalized as the assessment of BU characteristics during year 2017, using items from scales validated in Studies 3 and 4. We controlled for the nature of industry (service versus product) and type of BU (B2B versus B2C) with dummy variables, and size of the BU by the total employee numbers (log).

Results

We ran the final structural equation model with bootstrapping (5,000 repetitions), which yielded acceptable model fit¹: $\chi^2 = 713.2$, d.f. = 545, p = .000; CFI = .918; TLI = .910; RMSEA = .048; SRMR = .072. These fit indices are in line with the established thresholds (Bagozzi and Yi 1988; Hu and Bentler 1999). All items loaded significantly on their designated first-order constructs, which, in turn, loaded onto the designated second-order factors with no evidence of any crossloading. All factor and item loadings exceeded .55, with all t-values > 2.26, providing evidence of convergent validity among our measures. We also examined composite reliabilities, with all values above .6. Internal consistency was measured by Cronbach's alphas, with values ranging from .68 to .81. We assessed discriminant validity using comparative CFA models, the test constrains the estimated correlation for each pair of constructs to one and compares the chisquare value with each pair of constructs covarying freely (i.e., unconstrained). The results were lower for each pair of unconstrained constructs, with significant chi-square differences (ps < 1.08), indicating discriminant validity (Bagozzi and Yi 1988; see correlation matrix in Appendix G). As we predicted, all path coefficients in the model are positive and significant (ps < .05), supporting H3, H4, H5, H6, H7, H8, and H9 (see Table 4).

¹ We report results without the inclusion of the control variables because they are not significant at p = 0.01 level.

			Standarized	Boostrapped			
Factor	Direction	Construct	coefficient	SE	Р	Hypothesis	Support
Novelty (NOV)	\leftarrow	MI	.550	.114	.000	H1	\checkmark
Actionability (ACT)	\leftarrow	MI	.933	.067	.000	H1	\checkmark
Market relevance (MR)	←	MI	.994	.046	.000	H1	\checkmark
Credibility (CRED)	←	MI	.693	.189	.000	H1	\checkmark
Commercial potential (CP)	←	MI	.739	.163	.000	H1	\checkmark
Explorative approach (EA)	\leftarrow	PF	.957	.049	.000	H2	\checkmark
Reflection orientation (RO)	\leftarrow	PF	.928	.042	.000	H2	\checkmark
Data integration capability (DIC)	←	PF	.914	.033	.000	H2	\checkmark
MI	\leftarrow	PF	.637	.083	.000	H3	\checkmark
PF	←	MFD	.369	.127	.004	H4	\checkmark
PF	\leftarrow	ISN	.245	.120	.026	H5	\checkmark
PF	\leftarrow	CFM	.432	.113	.000	H8	\checkmark
Market-focused discussion(MFD)	←	ISN	.474	.117	.000	H6	\checkmark
MFD	\leftarrow	CFM	.364	.118	.002	H7	\checkmark
Internal social networks (ISN)	← 1	CFM	.485	.107	.000	H9	\checkmark

CFM: Creativity-focused mechanisms

TABLE 4: RESULTS OF PROPOSED STRUCTURAL EQUATION MODEL

The relatively high R^2 values observed – particularly for the prepared-firm (79.2%) and MI (40.6%) constructs – indicate the importance of our hypothesized antecedents in the structural equation model. The R^2 values ranged between 23.5% and 98.8% (see Appendix G). Overall, the proposed model is representative of a satisfactory system to generate MIs at the organizational level.

Robustness checks. Based on Westland's (2010) algorithm, a minimum sample size of 204 (considering 13 latents and 40 items, 0.8 power, 0.3 effect size, and $\alpha = 0.05$) is adequate to render sufficient statistical power to rely on our results. To alleviate CMV concerns, per Podsakoff et al. (2003), we included a direct measure of a latent common method factor, allowing items to load on their respective theoretical constructs as well as on a latent CMV factor, and examined the significance of the coefficients with and without this additional factor. The pattern and magnitude of paths did not change significantly. These analyses suggest that common method bias is not a major concern.

In addition to the proposed model, we tested two alternative models. On the one hand, we estimated a model that included a path from market-focused discussion to MI. The inclusion of this path in the alternative model did not improve the fit significantly. The difference in chi-square values between the two models was .818 (p = .366). On the other hand, we estimated a model that did not include the path that links creativity-focused mechanisms to prepared-firm. The alternative model had a worse fit: $\chi^2 = 732.9$, d.f. = 546, p = .000; CFI = .909; TLI = .901; RMSEA = .050; SRMR = .077. The chi-square different test was significant ($\Delta \chi^2 = 19.7$, Δ d.f. = 1, p < .01). Therefore, our hypothesized model is more parsimonious, showing higher nomological validity.

Further validation of the structural equation model. A firm's decision to establish creativity-focused mechanisms, internal social networks, and market-focused discussion are choice variables that may be endogenously determined. Endogeneity issues are a threat to inferring causal effects related to the dependent variable by leading to inconsistent and biased

estimates of the regression effects and potentially erroneous conclusions (Papies, Ebbes, and Van Heerde 2017). For structural equation models, Bollen (1996) suggests the application of model implied instrumental variables (MIIVs) and two-stage least squares (2SLS) estimators. MIIVs are the observed variables in a model that can serve as instrumental variables in a given equation (Bollen and Bauer 2004, p. 425). The identification of MIIVs has been automated through an algorithm applicable in statistical software with matrix capabilities (e.g., Stata, SAS, or R; see Bollen and Bauer 2004). The key advantages of using MIIV-2SLS are three: (1) each overidentified equation has an overidentification test, (2) less likely to spread bias from structural misspecifications through a system, and (3) asymptotic distribution free estimator (Bollen 2017).

Using R, we re-estimated the hypothesized model with MIIV-2SLS. Overidentification tests were used to evaluate the assumption of orthogonality between the instruments and equation residuals. Rejection of the null hypothesis implies a deficit in the logic leading to the instrument selection (Fisher et al. 2017, p. 14). Overall, the results of the Sargan's overidentification tests (Sargan 1958) are supportive of the model specification (see Appendix H). The structural coefficients are in line with previous maximum likelihood (ML) results, except for H4 (see Table 5).

Variable	Direction	Construct	Estimate	t-value	р	Hypothesis	*Support
NOV1	\leftarrow	NOV	1.000				
NOV4	\leftarrow	NOV	.573	4.106	.000	H1	\checkmark
NOV5	\leftarrow	NOV	.905	6.381	.000	H1	\checkmark
ACT1	\leftarrow	ACT	1.000				
ACT3	\leftarrow	ACT	.818	5.559	.000	H1	\checkmark
ACT4	\leftarrow	ACT	.909	6.991	.000	H1	\checkmark
MR1	\leftarrow	MR	1.000				
MR2	\leftarrow	MR	.715	8.569	.000	H1	\checkmark

MR4	\leftarrow	MR	.718	6.945	.000	H1	\checkmark
CRED1	\leftarrow	CRED	1.000				
CRED2	\leftarrow	CRED	1.062	7.282	.000	H1	\checkmark
CRED4	\leftarrow	CRED	1.001	6.641	.000	H1	\checkmark
CP1	\leftarrow	CP	1.000				
CP2	\leftarrow	CP	.673	5.781	.000	H1	\checkmark
CP4	\leftarrow	СР	.762	6.844	.000	H1	\checkmark
EA1	\leftarrow	EA	1.000				
EA3	\leftarrow	EA	.793	7.207	.000	H2	\checkmark
EA4	\leftarrow	EA	.748	7.028	.000	H2	\checkmark
RO1	←	RO	.678	6.104	.000	H2	\checkmark
RO2	\leftarrow	RO	1.000				
RO3	\leftarrow	RO	.628	6.153	.000	H2	\checkmark
RO4	←	RO	.569	6.214	.000	H2	\checkmark
DIC2	←	DIC	.879	8.905	.000	H2	\checkmark
DIC3	\leftarrow	DIC	1.000				
DIC5	←	DIC	.902	9.889	.000	H2	\checkmark
DIC6	\leftarrow	DIC	.793	9.719	.000	H2	\checkmark
MFD1	\leftarrow	MFD	1.000				
MFD4	\leftarrow	MFD	.736	7.201	.000		
MFD5	\leftarrow	MFD	.993	9.405	.000		
CFM2	\leftarrow	CFM	1.000				
CFM4	\leftarrow	CFM	.719	7.300	.000		
CFM5	\leftarrow	CFM	.729	7.094	.000		
ISN2	\leftarrow	ISN	1.000				
ISN3	\leftarrow	ISN	.870	7.201	.000		
ISN4	\leftarrow	ISN	.822	8.072	.000		
NOV	\leftarrow	MI	1.000				
ACT	\leftarrow	MI	.507	3.635	.000	H1	\checkmark
MR	\leftarrow	MI	.848	5.421	.000	H1	\checkmark
CRED	\leftarrow	MI	.287	2.596	.009	H1	\checkmark
СР	\leftarrow	MI	.451	3.882	.000	H1	\checkmark
EA	\leftarrow	PF	1.000				
RO	\leftarrow	PF	.763	5.140	.000	H2	\checkmark
DIC	\leftarrow	PF	.930	7.439	.000	H2	\checkmark
MI	\leftarrow	PF	.215	.091	.018	H3	\checkmark
PF	\leftarrow	MFD	138	603	.546	H4	Х
PF	\leftarrow	ISN	.683	2.952	.003	H5	\checkmark
MFD	\leftarrow	ISN	.539	2.449	.014	H6	\checkmark
MFD	\leftarrow	CFM	.325	2.084	.037	H7	\checkmark
PF	\leftarrow	CFM	.340	2.138	.032	H8	\checkmark

ISN	\leftarrow	CFM	.291	2.898	.004	H9	\checkmark
*at $p = .0$	05 level						

TABLE 5: RESULTS OF STRUCTURAL EQUATION MODEL WITH MIIV-2SLS

GENERAL DISCUSSION

Theoretical Implications

With recent practitioner and academic interest in MI, the American Marketing Association (2016) and the Marketing Science Institute (2018) have positioned the construct as an emergent, important concept for marketing theory (Jaworski, Malcom, and Morgan 2016; Mela and Moorman 2018; Mora and Johnston 2017; Said et al. 2015). However, manifest gaps still exist with regard to its operationalization and empirical validation as well as for the investigation of the antecedents and their structure to influence MI at the organizational level. Thus, we contribute to closing these gaps in several ways.

First, prior research on MIs has been predominantly conceptual, abstract, and away from theoryin-use methods. Our field-based research approach helps to provide operational meaning to the focal construct (i.e., MI), to articulate its measurement, and to identify its nomological network (Jaworski and Kohli 2017). In this sense, our investigation represents the first systematic empirical examination of MI and define it as a second order construct composed of five elements: (a) novelty, (b) actionability, (c) market relevance, (d) credibility, and (e) commercial potential. This result parallels the conceptual findings reported by Mora et al. (2018). Also, this new construct represents an indigenous concept in the theory of marketing, addressing calls for such organic innovation in the field (e.g., Kohli 2009). Second, the MI scale is short and easy to administer by academicians, consisting of only 15 items. Also, it is generalizable to different research contexts (e.g., nature of industry, offering classification, or size of a firm), internally consistent, and reliable across samples. Furthermore, our operationalization discriminates from the traditional process-based organizational learning approach (i.e., acquisition, dissemination, application and storage of insight; Said et al. 2015), allowing MI comparison in a rigorous and simple metric protocol. In our tested model, the MI first-order factors with highest loadings are *actionability* and *market relevance*, deviating from prior exacerbation in the psychological and sociological literature of the novelty (e.g., unexpectedness) and commercial potential (e.g., self-serving satisfaction) factors from the aha! experience (see Shanker 1995).

Third, we conceptualize and operationalize a prepared-firm as comprised of three elements: explorative approach, reflection orientation, and data integration capability. The prepared-firm concept is better represented as a higher order construct. The first-order factors define a firm state apt to experience transformation. We find that MI at the organizational level is facilitated in a prepared-firm. In line with previous research, our study suggests that more than being an intelligent organization, firms need to be better prepared for the future and to shape it in order to realize a favorable future state (e.g., Cagnin, Havas, and Saritas 2013, p. 3). As MI and transformation seem to be intrinsically related, a prepared-firm is set up to exercise generative learning (Sinkula 1994; Slater and Narver 1995). Therefore, our results serve as a supplement to extant knowledge in organizational learning theory. Fourth, we identify three firm choice variables that can be managed by organizations to reach the prepared-firm state: market-focused discussion, creativity-focused mechanisms, and internal social networks. Our findings extensively support the role played by creativity-focused mechanisms and internal social networks. The former enhances market-focused discussion, internal social networks, and a prepared-firm by stimulating creative thinking skills that fuel a practitioner's ability to be curious, observant, and able to connect the dots (i.e., cognitive association; Chun, Greenstein, and Kornfeld 2015). The latter fosters market-focused discussion and a prepared-firm through socialization. Subramaniam et al. (2009) support that linguistics is related to insight generation by influencing managers' neural circuits of information flows. Overall, developing creative thinking skills and socialization within a firm lead an organization to be better prepared for the future, facilitating MIs.

Fifth, we advance the theory of adaptive marketing capabilities. The progress related to marketing analytics intensifies the need to identify new marketing capabilities (Day 2011; Mela and Moorman 2018). Our study indicates that firms have to develop a data integration capability in order to be prepared for the future. This capability is adaptive because it starts with the market and focuses on finding new explanations for market players' behavior. Therefore, we contribute by identifying a specific capability that goes beyond the traditional marketing mix and established wisdom (cf. Vohries and Morgan 2005). This does not imply that pricing or channel management capabilities, for example, are unnecessary, but market and organizational goal transformations nowadays emphasize a focus on the relationship across multiple market players and characteristics.

Managerial Implications

The scales and the hypothesized model will be useful not only in academic research but also in marketing practice. The MI scale can be used to establish the average "quality" level of an insight, which subsequently helps to prioritize resource assignment and project activation. Our results, as previously stated, highlight the relevance of *actionability* and *market relevance* factors. This section focuses on the managerial implications derived from the average relative scores that a firm can obtain from its MIs, applying our scale. Practitioners can use our mean values based on a 5-point Likert scale (1 = "strongly disagree," and 5 = "strongly agree"; ACT_M = 3.36 and MR_M = 3.68) as thresholds. We assume a *ceteris paribus* state for the novelty, credibility and market potential factors (at their mean level or higher; NOV_M = 2.64, CRED_M = 3.60, CP_M = 3.92).

We suggest a set of strategies to manage MIs in the form of a 2x2 matrix as shown in Figure 2. Using a chess metaphor to ease interpretation, we labeled each of the four quadrants as follows: Queen insight (high actionability/high market relevance), King insight (low actionability/high market relevance), Rook insight (high actionability/low market relevance), and Pawn insight (low actionability/low market relevance).

Queen insight. When a MI scores a higher level of actionability and market relevance, means that it is internally applicable and externally relevant. The MI should be implemented rapidly, which implies top management support and resource access to accomplish this goal. The action plan should be aggressive and proactive because the company would know exactly what tasks or activities to execute, while the appreciation from the market would give the insight a quick answer from customers. Therefore, the specific strategy for this type of MI is called "advance." The sales function needs to be actively integrated into the insight dissemination process because it is the most common communication channel between an insight originator firm and customers and prospects. Salespeople will need to show face validity about the insight; only if they are fully committed, will they be able to drive the market. Also, marketers should provide concrete, interpretable rationales for a MI whether the insight originator firm is avid to implement it effectively. This information can be use internally and externally.

King insight. For certain MIs, practitioners evaluate them with high market relevance and low actionability. Top management in the insight originator firm needs to "protect" the MI while tasks and activities that should be involved in implementing the insight are reviewed. In these cases, some investments in technology or human resources (e.g., hiring) can be in place. For example, during our interviews a marketing VP explained that a couple of years ago, a low-end, high volume segment of customers would be better served if the transaction could be executed via a digital platform, saving time for customers, diminishing transactional cost for the firm, and increasing customer satisfaction. However, this involved months developing the platform, coaching and training the sales force, and modifying the sales incentive plans accordingly. Several departments participated in the adjustment process (e.g., Sales, Human Resources, Finance), which incremented the bureaucracy to reach final decisions. Overall, the objective here is to maintain the high market relevance of a MI and use this contingency to mobilize people as fast as the adaptation process can carry on.

Rook insight. In some cases, the MIs generated by a firm are highly internally actionable (i.e., low level of effort to set up), but have low levels of market relevance. For the originator firm is key to revisit the estimations related to market relevance. Therefore, we call the proper strategy for this type of MI as "rationalize." For example, a CEO described the history of the Airbus A380. After 10 years of its launching, it can be seen as a technological marvel and a market rejection. At the beginning of the 2000s decade, the firm bet on two market situations: (1) the core of the long-haul business model would be hub-to-hub flights (e.g., Los Angeles-London) and (2) the aviation routes would remain a scarce commodity. Airbus went to full implementation because operationally it had the infrastructure, supply-chain required, and production capacity, but based on wrong perceptions about the market relevance of its new product concept. The market characterization was different: (1) air travel is mainly point-to-point (i.e., city-pairs), (2) unstable demand (summer versus winter), and (3) new Asian airports and Middle East airlines growth (i.e., international airline hub structure turned asunder). Therefore, additional market information is required to make a final decision about the MI validation, including the selection of the right research methods and thorough inspection of the results.

Pawn insight. In these cases, a MI exhibits a lower level of actionability and market relevance, which suggests that the insight is likely to be discarded by the originator firm. This type of MI would be considered for implementation only if no other insight is currently positioned in the other three previously described quadrants during the time of evaluation. In a more general context, the right strategy for this type of MI is called "cultivate." As the levels of novelty, credibility and commercial potential are favorable for the originator firm, practitioners can further develop a pawn insight by studying approaches to simplify the tasks and activities

required for its implementation and developing importance from market perspective. For example, Eaton Corporation started airbag research in 1964, going to full implementation and by 1971, helped build the first experimental airbag fleet, using the "Auto-Ceptor" pillow (Schreiber 2014). In parallel, Talley Industries also commenced research and patented a chemical compound that inflates airbags almost instantaneously. Today's consumers ask how many airbags a car offers as standard equipment, but in the 1970s, the idea had a difficult time getting accepted, by both automakers and consumers (Schreiber 2014). Both companies had practical problems with the design and operational mechanisms and low acceptance from the market. While Eaton decided to sell the business unit, Talley kept cultivating the insight (delaying its implementation) and by the late 1980s reached success with revenues above \$270 million (New York Times 1988).

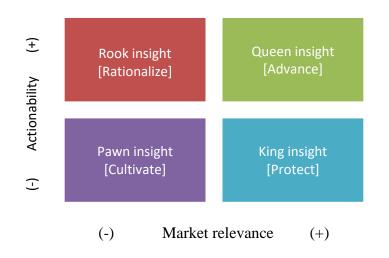


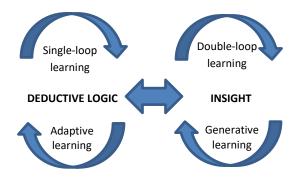
FIGURE 2: MANAGING MARKETING INSIGHTS MATRIX

To further validate the proposed set of strategies to manage MIs, we conducted a discussion forum with 15 practitioners who have decision-making power in their organizations, involving different industries and business lines. We explored the real ability of firms to administrate insights, how to establish a prioritizing system for MIs, and additional issues related to the concept and this study. First, the panel reached consensus about the number of MIs that can be managed in a middle-sized and big-sized company. It was agreed that three to four insights are reasonable to be managed simultaneously per year. Second, there was consensus about the relevance of the proposed managing MIs matrix (Figure 2) with a high average concordance score of 8.33 (on a 9-point Likert scale with 1 = "strongly useless," and 9 = "strongly useful"). However, from the discussion with the managers, it was concluded that the matrix is an adequate starting point, requiring more specificity. For example, they suggest that three key executives from different areas should be the judges, after a preliminary screening using the MI scale; ideally, the CEO, CFO, and CMO. Also, it is recommended to create a prioritizing algorithm based on industry thresholds. Third, the panel acknowledged that a MI can be born in different functional areas, but the marketing "label" reinforces an outside-in approach and gives a sense of responsibility for implementation. Fourth, it was suggested to further investigate the relationship of prepared-firm with other consequences and its path to firm performance. The new *reflection* orientation was especially intriguing and valuated by the panel due to the agitated pace that companies face nowadays. Finally, we discussed the concept of MI with concrete examples and it was concluded that strategic marketing is a mix between science and art, because top management must make decisions with partial information and assumptions. The key question is: How valid are its assumptions?

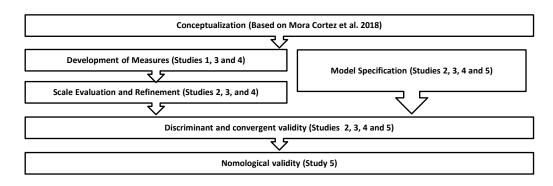
Limitations and Future Research Directions

This work, as with any study, has some limitations that can offer avenues for further research. First, although our structural equation modeling setting accounted explicitly for measurement error and dealt with the concerns of endogeneity, CMV bias, omitted variables, and constructs' operationalization, our findings are susceptible to single-informant and perceptual measures bias because we rely on survey data. Whenever possible, future research should include objective measures and/or proceed with a multiple informant approach. Second, we test our hypothesized model using U.S. data with different industry and market characteristics. However, it is important to validate our results in other languages and national culture contexts to be able to demonstrate global generalizability. For example, a linguistic issue for Spanish speaking countries is that there is no direct translation to the word *insight*. Third, this study focuses on internal variables that firms can directly control as antecedents. Further research can explore the moderation effects of environmental characteristics such as market turbulence and competitive intensity (e.g., Jaworski and Kohli 1993). Fourth, our findings regarding the MI construct are built up from a "quality" perspective. It is also important to know how firms can increase the number of insights developed within an organization. Fifth, we collected the model variables in a single period of time; thus, our study is based on cross-sectional variation. Using longitudinal data, further research could explore the time-varying effect of the model antecedents on the MI construct. Finally, our sample is composed of for-profit private equity firms. It would be worthwhile to investigate whether the antecedents of MI are sustained for nonprofit companies or state-owned organizations. All in all, the theory of MI seems to be prominent and provoking.

Appendix A



Appendix B



Appendix C

- 1. Novelty
 - A. The insight was ground breaking for our CEO (NOV1).
 - B. The insight was so revolutionary that it should have received attention from the board (NOV2*).

C. The insight removed an old market paradigm for this company (NOV3*).

- D. The insight was so unique that it modified our business planning (NOV4*).
- E. The insight created a conceptual movement in our account management program (NOV5*).
- F. The insight disrupted our market development tactics (NOV6).
- G. Our top management team (TMT) was surprised due to the unusual content of the insight (NOV7*).
- H. The insight meant a shake up for our customer strategy (NOV8).

2. Actionability

A. This insight called for action in our company (ACT1).

- B. The insight had clear implications for improving our new product development (ACT2*).
- C. Our functional departments could take specific actions suggested by this insight (ACT3*).
- D. The firm could incorporate the essence of the insight redefining our value propositions (ACT4*).
- E. We had the potential to adjust our market communication processes based on the insight (ACT5*).
- F. The insight implied several individuals would need to change their behaviors (ACT6*).
- G. Based on the insight, the BU altered its internal business procedures (ACT7).
- H. The insight signified implementing concrete tasks (ACT8).
- I. Based on the insight, the BU adapted its market-focused activities (ACT9*).

3. Market relevance

- A. The insight gave us the opportunity to better fulfill customer needs (MR1).
- B. This insight equipped us to offer customers the product/service they want (MR2).
- C. This insight contributed to providing superior offerings to our customers (MR3*).
- D. What customers want was more attainable thanks to this insight (MR4*).
- E. The insight had the potential to enable us to satisfy a large number of customers (MR5).

4. Credibility

- A. In this BU, most people considered the insight to be compelling (CRED1*).
- B. The insight was strongly supported by data (CRED2*).
- C. For our BU employees, the insight had the appearance of truth (CRED3).
- D. Records (e.g., photos, audios, notes) backing up the insight were available to anyone who has interest within our firm (CRED4*).

- E. People in our BU found the insight to be plausible (CRED5).
- F. The insight was sustained by statistical analyses (CRED6*).
- G. Our functional teams were convinced of the insight (CRED7*).
- H. BU employees were confident about this insight (CRED8).
- 5. Commercial potential
 - A. This insight pointed to opportunities for growth (CP1).
 - B. The insight indicated ways in which the BU could improve profitability (CP2).
 - C. The insight showed us how to capture more value from customers (CP3*).
 - D. This insight increased our chances of reaching our financial goals (CP4*).
 - F. We could expand our business based on the insight (CP5).

* Items were removed during the scale refinement process

Appendix D

Explorative approach

- A. Marketing and Sales employees have an inquiring mind about customers' future needs (EA1).
- B. Our TMT is pleased when end-users recognize our desire to explore their operations (EA2*).
- C. We are well-known for asking smart questions about industry trends (EA3).
- D. This BU has an inquisitive instinct to examining customer's operations (EA4).
- E. Our commercial areas are curious about what customers want (EA5*).
- F. Marketing takes the initiative on exploring our customers' sites, even if there is no problem with our offerings (EA6*).

- G. Sales enjoys participating in trade shows to hear potential customers' needs (EA7*).
- H. Our sales reps are inquisitive in seeking new business opportunities (EA8*).
- I. This BU has the curiosity of a boy/girl scout (EA9*).

Reflection orientation

- A. Our TMT analyzes monthly reports about service performance (RO1).
- B. In our business meetings, value (\$) captured by customers is quantified (RO2).
- C. Customer satisfaction metrics are scrutinized at least once per year (RO3).
- D. Our TMT always conducts a thorough analysis of our offerings performance (RO4).
- E. We are a rational market actor, pricing is thoughtfully managed (RO5*).
- F. The marketing activities are evaluated by return on the investment (RO6*).
- G. Finance helps different areas to analyze the profitability of every product, account and market (RO7*).
- H. Sales people think in terms of value propositions and profits as well as sales volume and products (RO8*).
- I. Every quarter, this BU reviews its marketing implementation capabilities (RO9*).

Data integration capability

- A. In our quarterly meetings, the BU relates data from customers, competitors, regulations, and suppliers (DIC1*)
- B. When analyzing information from customer surveys, our research area merges common issues across customers (DIC2).
- C. When our TMT studies a potential market, it integrates the input from Sales, Marketing, Operations, and other functional departments (DIC3*).
- D. Finance consolidates results from all our target markets, when reviewing BU performance (DIC4*).
- E. If a customer wants to leave us, senior executives bring different historical data points together before making a retention plan (DIC5*).

- F. When our technical team visits a potential customer, it maps the flow of customer's whole operation to see how each process affects the subsequent one (DIC6*).
- G. To create improvement plans, Marketing combines customers' complaints to identify general themes to work on (DIC7).
- H. We excel in consolidating multiple sources of marketing intelligence (DIC8).
- I. We have the ability to connect one piece of information to another piece of information from the market (DIC9.)

* Items were removed during the scale refinement process

Appendix E

Market-focused discussion (based on Mora Cortez et al. 2018)

- A. After an important customer calls customer service, Sales and Marketing discuss the key points of the conversation (MFD1).
- B. We have meaningful dialogue after a key industry player interacted with us (MFD2*).
- C. When our CEO talks with the government, he/she conducts a meeting with the TMT (top management team) to argue about the trends affecting the business (MFD3*).
- D. After interacting with a customer, Marketing, R&D, and Sales debate about the main takeaways from the meeting (MFD4).
- E. After visiting a customer, Marketing and Sales compare notes about their field observations (MFD5).
- H. After visiting a customer, a sales rep holds a conference with his/her supervisor about the customer's pain points (MFD6*).

Internal social networks (based on Mehra et al. 2006)

- A. In this business unit (BU), our CEO has a direct link to everyone (ISN1*).
- B. This BU works as an interconnected community (ISN2).
- C. Our TMT is linked to front-line employees (ISN3).

- D. Functional departments deploy connections to be readily accessible by every other department (ISN4).
- E. Creating new links across employees is a distinctive characteristic of this BU (ISN5*).

Creativity-focused mechanisms (based on Bharadwaj and Menon 2000)

- A. This BU has bulletin boards (digital or analog) to draw new ideas (CFM1*).
- B. This BU has a reward system to encourage idea generation (CFM2).
- C. This BU has tools to stimulate and preserve new ideas across the BU (CFM3*).
- D. This BU has signs throughout the workplace supporting creativity (CFM4).
- E. There is a budget for idea generation activities in this BU (CFM5).

* Items were removed during the scale refinement process

Appendix F

Indicator	Direction	Construct	Standarized loading	SE	р	CR	AVE
After an important customer calls customer service, Sales and Marketing discuss the key points of the conversation (MFD1)	←	MFD	0.727	0.042	0.000	0.829	0.620
After interacting with a customer, Marketing, R&D, and Sales debate about the main takeaways from the meeting (MFD4)	←	MFD	0.725	0.043	0.000		
After visiting a customer, Marketing and Sales compare notes about their field observations (MFD5)	←	MFD	0.897	0.049	0.000		
This BU works as an interconnected community (ISN2)	←	ISN	0.747	0.041	0.000	0.822	0.608
Our TMT is linked to front-line employees (ISN3)	←	ISN	0.747	0.040	0.000		

Functional departments deploy connections to be readily accessible by every other department (ISN4)	←	ISN	0.841	0.034	0.000
This BU has a reward system to encourage idea generation (CFM2)	\leftarrow	CFM	0.704	0.048	0.000 0.791 0.558
This BU has signs throughout the workplace supporting creativity (CFM4)	~	CFM	0.773	0.043	0.000
There is a budget for idea generation activities in this BU (CFM5)	←	CFM	0.763	0.044	0.000

Appendix G

	NOV ^a	ACT	MR	CRED	CP	EA	DIC	RO	CFM	MFD	ISN
NOV	.303										
ACT	.773	.870									
MR	.464	.886	.988								
CRED	.223	.628	.667	.481							
CP	.313	.646	.735	.579	.545						
EA	.214	.520	.682	.598	.354	.916					
DIC	.229	.582	.644	.515	.307	.831	.836				
RO	.130	.541	.644	.512	.339	.893	.879	.860			
CFM	.404	.545	.497	.315	.335	.633	.782	.687	-		
MFD	.215	.363	.530	.393	.315	.835	.701	.647	.583	.525	
ISN	.177	.339	.477	.379	.209	.794	.537	.663	.476	.649	.235

^aDiagonal values represent the constructs R^2 . The values for PF and INS are .792 and .406 respectively.

Appendix H

Variable	Direction	Construct	Sargan	df	р	Support MIIV*
NOV1	\leftarrow	NOV	NA			
NOV4	\leftarrow	NOV	36.37	32	.272	\checkmark
NOV5	\leftarrow	NOV	33.23	32	.407	\checkmark

ACT1	←	ACT	NA			
ACT3	\leftarrow	ACT	31.96	32	.469	\checkmark
ACT4	\leftarrow	ACT	35.15	32	.321	\checkmark
MR1	\leftarrow	MR	NA			
MR2	\leftarrow	MR	32.02	32	.466	\checkmark
MR4	\leftarrow	MR	39.63	32	.166	\checkmark
CRED1	\leftarrow	CRED	NA			
CRED2	\leftarrow	CRED	24.47	32	.827	\checkmark
CRED4	\leftarrow	CRED	40.70	32	.139	\checkmark
CP1	\leftarrow	CP	NA			
CP2	\leftarrow	CP	40.82	32	.136	\checkmark
CP4	\leftarrow	CP	22.16	32	.903	\checkmark
EA1	\leftarrow	EA	NA			
EA3	\leftarrow	EA	51.90	32	.014	\checkmark
EA4	\leftarrow	EA	52.88	32	.012	\checkmark
RO1	\leftarrow	RO	29.22	32	.608	\checkmark
RO2	\leftarrow	RO	NA			
RO3	\leftarrow	RO	45.80	32	.054	\checkmark
RO4	\leftarrow	RO	50.70	32	.019	\checkmark
DIC2	\leftarrow	DIC	37.23	32	.241	\checkmark
DIC3	\leftarrow	DIC	NA			
DIC5	\leftarrow	DIC	44.36	32	.072	\checkmark
DIC6	\leftarrow	DIC	31.58	32	.487	\checkmark
MFD1	\leftarrow	MFD	NA			
MFD4	\leftarrow	MFD	41.07	32	.131	\checkmark
MFD5	\leftarrow	MFD	34.74	32	.338	\checkmark
CFM2	\leftarrow	CFM	NA			
CFM4	\leftarrow	CFM	55.45	32	.006	Х
CFM5	\leftarrow	CFM	45.19	32	.061	\checkmark
ISN2	\leftarrow	ISN	NA			
ISN3	\leftarrow	ISN	40.08	32	.154	\checkmark
ISN4	\leftarrow	ISN	41.57	32	.120	\checkmark
NOV	\leftarrow	MI	NA			
ACT	\leftarrow	MI	35.10	28	.167	\checkmark
MR	\leftarrow	MI	32.76	28	.245	\checkmark
CRED	\leftarrow	MI	29.54	28	.385	\checkmark
CP	\leftarrow	MI	46.99	28	.014	\checkmark
EA	\leftarrow	PF	NA			
RO	\leftarrow	PF	37.83	27	.080	\checkmark
DIC	\leftarrow	PF	33.02	27	.196	\checkmark
MI	\leftarrow	PF	24.84	16	.073	\checkmark

PF	\leftarrow	MFD	5.09	3	.165	\checkmark		
PF	←	ISN	5.09	3	.165	\checkmark		
MFD	←	ISN	NA					
MFD	\leftarrow	CFM	1.22	2	.543	\checkmark		
PF	\leftarrow	CFM	5.09	3	.165	\checkmark		
ISN	\leftarrow	CFM	.02	1	.890	\checkmark		

* at p = .01 level

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ESSAY 3

Marketing Insights, Marketing Department Power, and Firm Performance

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"A powerful new idea can kick around unused in a company for years, not because its merits are not recognized, but because nobody has assumed the responsibility for converting it from words into action." – Theodore Levitt

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Interest is growing in the marketing insight (MI) concept. MI is a shift of understanding about the market. A major question involves its differentiation from previous marketing concepts. This is a concern for both practitioner and academic literature (e.g., Forbes 2018; Marketing Week 2016; Smith, Wilson and Clark 2006). MI can be managed as an intangible asset comprised of five elements: novelty, actionability, credibility, market relevance, and commercial potential (see Mora Cortez et al. 2018). In our knowledge-based economy, there is great relevance of MI for organizations. The American Marketing Association (2016) and the Marketing Science Institute (2018) have recognized the concept as a key challenge in shaping marketing practice and theory.

Current turbulent competitive scenarios and abundant access to non-validated market information have increased tension in decision-making. MI is a response to current big data availability and a fast-cycle-time environment (Hult 2003), implying that decisions are made with some degree of uncertainty, not exclusively based on facts. The goal of market research is to reduce uncertainty and MIs capture uncertainty with further understanding beyond data. Thus, working with insights involves accepting that decision-making is a *propositive* representation of market needs and trends. In this sense, Hult (2003, p. 189) acknowledges that having the right understanding at the right time and in the right format creates an important intangible asset. For example, Tyler Kettle, Google's International Insights Program Manager, stresses that 70% or 80% certainty is better than being late in the market, enhancing the value of using MIs (Forbes 2018). Overall, several companies, such as IBM, rely on MIs for (partially) informed decisionmaking in order to improve market management and associated returns (Said et al. 2015; IBM 2011). Also, MI has been posited to lead organizational financial performance (Mora Cortez et al. 2018). However, despite the growing body of conceptual research by practitioners and academics, there is no systematic empirical evidence concerning MI and firm performance.

Organizational learning from MI is dependent on the processing of the new understanding, shared interpretation, and prioritization of the proposed knowledge and its implications. Therefore, in addition to the intrinsic value of a MI, organizational characteristics can affect its deployment. Also, it is important to acknowledge that the origin of a MI can be rooted initially to any department or function, in line with the theoretical underpinnings of a disruptive marketing strategy (see Hult and Ketchen 2017). The boundary spanning role played by a department in market-based learning is becoming a source of power (Tell et al. 2017; Zhao and Anand 2013). Traditional wisdom would suggest that a strong Human Resources (HR) department is key for managing MI deployment initiatives within an organization (e.g., Russ, Galang, and Ferris 1998). Nevertheless, as the role played by different departments in knowledge management is increasingly interlinked, and market-based learning has become an organization-wide phenomenon (Morgan 2004), clarity is needed. Sinkula (1994) alludes to market-based organizational learning as unique in the creation of knowledge. As market-based information is more equivocal, the Marketing department is relevant for its right interpretation and, consequently, for the implementation of MIs. This remains to be tested.

Our study is an initial step in addressing the outlined gaps between market-based learning and better firm financial results. More explicitly, the purpose of this study is (1) to establish a nomological network from MI to firm performance and (2) to compare the impact of a powerful Marketing department versus a powerful HR department in leveraging the influence of MI on firm performance. By fulfilling the study purposes, we offer several contributions to the literature. First, we develop and validate a mechanism to connect MIs and firm performance. Our nomological network includes employees' commitment, attitude toward organizational change, brand attitude, innovation performance, and firm financial results. We focused on the strategic business unit (BU) level²; thus, primary data is collected. In addition, we assessed BU financial results using objective and subjective measures to increase the reliability of our findings. Second, using a longitudinal approach, we find that operational performance (i.e., fulfillment of valuechain area goals of a firm) leads to organizational performance (i.e., resultant economic outcomes) in line with the marketing-performance outcome chain suggested by Katsikeas et al. (2016, p. 2-3). In particular, our study suggests MIs have an indirect positive effect on market share, profitability, return on assets (ROA), and sales revenue. Third, building on the boundary spanning nature of the marketing function, this study demonstrates the higher relative importance of the Marketing department over the HR department in developing a favorable attitude toward organizational change, which leads to better innovation performance. Also, we show that the Marketing department power is positively related to building a favorable brand attitude from the market, while the HR department power is positively related to enhancing employees' commitment within the BU. Overall, we provide the first empirical testing of MI and its consequences for organizations.

In the next section, we present the literature review regarding organizational knowledge creation, marketing insight (MI), and Marketing department power. Then, we develop testable research hypotheses. Afterward, we describe a series of three studies to examine our hypotheses and

² A relatively autonomous division of a firm that operates as an independent enterprise with responsibility in profits and losses

analyze our findings. Finally, we conduct a general discussion, including implications for theory and managers and present ideas for future research.

LITERATURE REVIEW

Organizational Knowledge

Knowledge is created continuously around the world and doubles every two to three years (Marquardt 2011). Scientific knowledge has evolved from the first two academic journals in the mid-1600s to the more than 100,000 that exist today (Marquardt 2011). However, organizational knowledge has not grown at the same pace. Organizations base their existence on paradigms that understand themselves as processors of information or problem-solvers, which is a passive and static view of firms (Nonaka 1994). Therefore, a modern and intelligent organization needs to create information and knowledge. Both terms are distinguishable from each other. Knowledge is a "justified true belief" (Nonaka 1994, p. 15), while information is "a flow of messages or meanings which might add to, restructure or change knowledge" (Nonaka 1994, p. 15). Knowledge is present in any social collectivity (such as a firm) and is subject to cultural assumptions, practices, and power relations operating within that organization (Pertland 1995). Knowledge and organizational actions (behavior) are connected in the foundations of human thinking. Thus, organizational creation of knowledge needs to be analyzed from the active, subjective nature of knowledge, operationalized from concepts such as belief and commitment that are rooted in the value systems of individuals (Nonaka 1994). In the analysis of the interaction between information and knowledge, it is relevant to consider the syntactic and semantic aspects of information. On the one hand, the syntactic perspective is centered on the

volume of information, without any consideration to its value. In marketing communications, for example, an ad in an industry magazine (in a specific page) is quantified (cost) on the basis of the size of the advertising, not on the content of it. On the other hand, the semantic perspective focuses on conveyed meaning and is more important in terms of creating knowledge (Nonaka 1994). MI relates to creating new meaning about market needs and trends to facilitate anticipation. Thus, MI is key in learning to learn about markets (Day 1994).

Organizational knowledge creation is defined as the development of new content or replacing existing content within the organization's explicit and tacit knowledge (Alavi and Leidner 2001). The first type refers to knowledge that is transferable in formal, systematic language (Nonaka 1994). Also, explicit knowledge is discrete and can be captured in records and storage for future use in entities such as libraries, archives, and databases. The second type involves a personal quality, and it is embedded in action, commitment, and involvement in a specific context (Nonaka, 1994); hence, it is difficult to formalize and communicate. Moreover, tacit knowledge relates to cognitive and technical elements. On the one hand, the cognitive perspective centers on the operation of mental models (Day 1994), which represent the framework for the interpretation of the world by creating and manipulating analogies in individuals' minds (Nonaka 1994). On the other hand, the technical perspective focuses on "concrete know-how, crafts, and skills that apply to specific contexts" (Nonaka 1994, p. 16). The literature stresses the articulation of the tacit perspectives of knowledge as a driver of organizational proactivity (Alavi and Leidner 2001; Nonaka 1994), a key factor in the creation of knowledge. Organizational knowledge creation involves the tacit and explicit dimensions of knowledge interacting, while developing a growing spiral flow as knowledge moves from the individual to group or organizational levels (Alavi and Leidner 2001). Building over this model (see Nonaka 1994, p. 20), four modes of knowledge creation are presented: (1) socialization, (2) combination, (3) externalization, and (4) internalization. The first mode refers to conversion of tacit knowledge to new tacit knowledge through interaction and joint experience between individuals (e.g., apprenticeship). The second mode pertains to creation of new explicit knowledge through exchange mechanisms such as merging, sorting, adding, recategorizing, synthetizing, and recontextualizing previous explicit knowledge. The third mode refers to conversion of tacit knowledge to new explicit knowledge, where the concept of metaphor plays a relevant role. Metaphor relates concepts that are far apart in the individual's memory and allows identifying contradictions or inconsistencies in their association (Nonaka 1994). These contradictions can be harmonized by using analogies. The new explicit knowledge "represents a model within which inconsistencies are solved and concepts become transferable through coherent and systematic logic" (Nonaka 1994, p. 21). The fourth mode pertains to creation of new tacit knowledge from explicit knowledge through a process of learning by doing (action) or grasping tacit concepts from reading and discussion.

The four modes of knowledge creation are interdependent and intertwined, and can lead to organizational knowledge creation only if the whole system (all modes) is managed organizationally in a continuous cycle (Alavi and Leidner 2001; Nonaka 1994). A progressive system for knowledge creation needs to include the role played by MIs, as substantive leaps in understanding loaded with potential new knowledge about the market are necessary to be

attached to firm capabilities. Thus, organizational knowledge creation based on insights represents a particular case of internalization (i.e., mode four). MIs provide knowledge potential to making sense of rapidly changing industries due to the current turbulent macro-environment (Smith, Wilson, and Clark 2006; Smith and Raspin 2008).

For any company, the value of organizational knowledge is warranted on its application. Unless knowledge is applied in practice, there is no chance to improve or at least sustain performance that characterizes the organizational process of learning in a business context. Application can take many forms, but it is a necessary part of any organizational learning system (Pertland 1995). Moreover, "it is difficult to make an attribution of knowledge or competence to an organization that did not produce knowledgeable or competent performances" (Pertland 1995, p. 3). In this sense, it is reasonable to ask how to apply firm's knowledge in unique scenarios with greater imagination, efficiency, and sophistication. MI, as a novel, actionable, credible, internally and externally relevant shift in understanding about the market, relies on firm processes to reach organizational members other than its originator (Mora Cortez et al. 2018). Thus, its complexity requires a formal approach and structure (i.e., responsibility) for dissemination.

The Power of the Marketing Function and Marketing Insight (MI)

The power of a functional department is defined as its ability to influence other people and departments in the firm (Feng, Morgan, and Rego 2015, p. 2). Specifically, power pertains to the ability to cope with uncertainty, nonsubstitutability, and centrality of a department (Auh and Merlo 2012). Coping with uncertainty refers to the department's effective administration of events with uncertainty and have an impact on firm's strategic decisions. Nonsubstitutability

relates to the impossibility to transfer responsibilities and knowledge to a different function within the company. Centrality is defined as the degree to which other firm functions rely on the work of a particular function (i.e., pervasiveness) and the impact of a particular function on business performance (i.e., immediacy; Auh and Merlo 2012). From a practical perspective, the power of a business function or department depends on "having a seat at the table" when big decisions are discussed and more important is the relative weight of the function voice over these decisions (Webster, Malter and Ganesan 2003). There is an evident interdependence between power and perceived value of functions within a company. According to Auh and Merlo (2012, p. 862), as a function gains control over resources that are critical or influences the work of other areas, dependency increases, giving one actor power over the others. For example, Nath and Mahajan (2011) found that the power of the CMO is greater when the CMO position oversees sales in comparison with when s/he does not. Therefore, while more power has a function, more value is expected to create for the company, which is controlled by the impact on a firm's financial performance.

To understand the bottom line influence of marketing, it is necessary to revisit the roots of its contribution for companies. After many years of theory development and practical enrichments, focusing on customer-centric analyses, accountability, service logic, and product management, the literature (e.g., Auh and Merlo 2012) asserts that the marketing function has not reached its full potential. In this sense, Verhoef and Leeflang (2009, p. 28) suggest that "research could focus on the construct of creativity and how a marketing department can regain more influence with creativity despite its intangible nature and the current misfit with top management practices." As MI involves creative inputs for market-based organizational learning (see Mora

Cortez et al. 2018), the relationship between insight and marketing department power converge in a setting of knowledge management.

The marketing function facilitates the link between the customer and various key processes within the firm (Day 1994). Firms with a strong marketing department are more market-oriented, and, consequently, these firms have better business performance (Verhoef and Leeflang 2009). There is some evidence regarding the declining influence of the formal marketing function as a department (Verhoef and Leeflang, 2009; Homburg et al., 2015); while marketing knowledge of the top management team is developing within some firms (Nath and Mahajan 2011). If a firm works on the adoption of the marketing concept, validating the relevance of the marketing thought, it may lead to depreciate the power of the marketing function (Verhoef and Leeflang 2009). However, contradictory evidence is presented by Feng, Morgan, and Rego (2015), showing that, on average, marketing department power increased during the 1993-2008 period. The foundation of these divergent views can be rooted in the omission of MI as a source of new knowledge creation and driver of organizational change. In this sense, Day (1994, p. 24) acknowledges that "good managers must use knowledge to think through how the market will respond to actions and thwart competitors. Whether they succeed depends on the quality of the information uncovered during the inquiry stage, the way mental models color their thinking, and the availability of the market insights at the point of decision" (emphasis added).

HYPOTHESES DEVELOPMENT

Based on a systematic literature review of marketing journals regarding outcomes for indigenous constructs (e.g., Brakus, Schmitt, and Zatantonello 2009; Homburg, Schwemmle, and Kuehnl 2015; Jaworski and Kohli 1993; Mora Cortez et al., 2018), we focus on five key attitudinal, behavioral, and financial outcomes. Consistent with prior marketing research, we expect that MI affects these outcomes through direct and indirect paths. Measured at the BU level (1) employees' commitment, which refers to the extent which employees are fond of the organization, see their future tied to that of the organization, and are willing to make personal sacrifices (Jaworski and Kohli 1993, p. 60); (2) attitude toward organizational change, which refers to the extent to which employees express favorable feelings, cognitions, and their intentions to any alteration in organizational activities or tasks (e.g., Rashid, Sambasivan, and Rahman 2004); (3) brand attitude, which refers to psychological tendencies to evaluate objects along a degree of favor or liking (Homburg, Schwemmle, and Kuehnl 2015; Schmitt 2012); (4) innovation performance, which refers to the extent to which an organization excels in adopting or implementing new ideas, processes and products (Hurley and Hult 1998); and (5) firm performance, which refers to the extent to which an organization has a positive evaluation of its business results, are hypothesized to be consequences of the MI construct. Also, we introduce marketing department power as a moderator to account for BU heterogeneity, and we compared it with the role played by HR department power. Building on previous theoretical perspective and literature review, we hereafter develop more detailed and testable hypotheses as indicated in Figure 1.

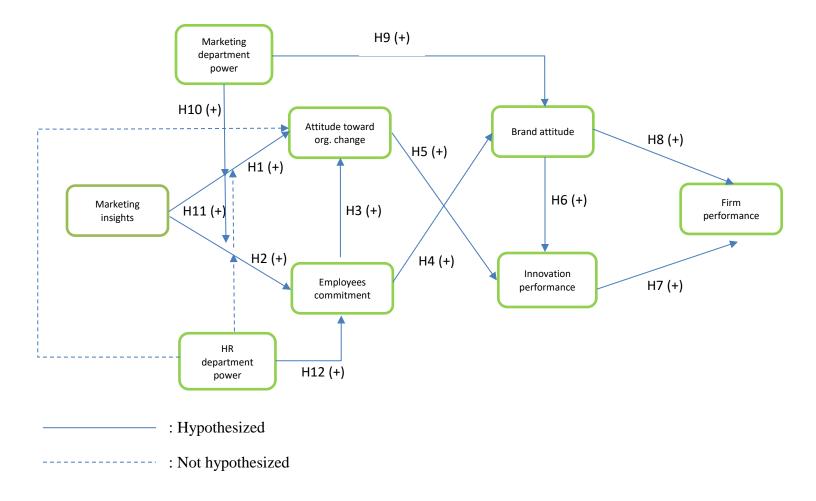


FIGURE 1:CONCEPTUAL FRAMEWORK

Organization literature (e.g., Rashid, Sambasivan, and Rahman 2004) suggests that change within a firm takes place in response to business and economic events and to processes of managerial actions and perceptions, where practitioners account for the need for change. MI provides a causal explanation that serves managers with positive dispositional and situational factors. As a MI is actionable, implying subsequent change, its market relevance, commercial potential and credibility generate a favorable disposition toward the future, driving an openness to or acceptance of change (Herold et al. 2008). Also, MI connects a change process with anticipated change outcomes positively, leading to better employees' attitude toward change, in the sense of moving away from a present state (Kaufman 2017; Oreg 2006).

Moreover, MI offers a solution to market challenges, which makes organizational behavior less tense. As market challenges are dissipated or there is the expectation to be successful, the high levels of stress are regulated and practitioners experience relief. Insight provides concrete elements to expect a better future, fostering a sense of pride within a firm. Such psychological and sociological benefits to employees are based on MI features regarding the opportunity to better serve the market, while capturing value for the firm, supporting employee positions and reducing the chances of losing one's job (Oreg 2006). Both the feeling of job safety and moving toward a better firm economic position increase the sense of employees' belongingness and, as consequence, commitment to the organization (Herold et al. 2008; Jaworski and Kohli 1993). Also, employees with high organizational commitment are more supportive of the goals and values of the firm, willing to expend considerably more effort on behalf of the organization, and, thus, more likely to accept organizational change (Yousef 2000 p. 518). Accordingly, we propose the following:

- H1: MI affects attitude toward organizational change positively.
- H2: MI affects employees' commitment positively.
- H3: Employees' commitment affects attitude toward organizational change positively.

Brands are constructed through time by employees' efforts in different functions and hierarchies via the delivery of a right customer experience. The translation of the corporate strategy internally to employees must be supported by the mission, values, and culture of a firm (Aaker 2004). It is important for employees to buy into organizational values and programs in order to develop commitment to the firm. If employees appear engaged, interested in customers, empowered, responsive, and competent, the organization brand will engender greater respect, liking, and attitude from the market (Aaker 2004; Keller 2015). Hence:

H4: Employees' commitment affects brand attitude positively.

It is argued that innovation capacity in organizations is significantly influenced by the extent of attitudinal views possessed by firm employees (Bharadwaj and Menon 2000). Internal constraints such as previous investments, limits on the internal information received by managers, internal political constraints supportive of vested interests, and organizational history create strong inertial pressures for employees (Haveman 1992). However, when employees' attitude toward organizational change is positive, at least some employees will break the inertia to mobilize masses to develop a capacity to innovate (Gebhardt, Carpenter, and Sherry 2006). Then, organizations will have the ability to adopt or implement new ideas, processes, or products successfully (Hurley and Hult 1998). A favorable attitude toward organizational change proved

beneficial if what it is expected is a response to environmental shifts threatening organization competitiveness (Haveman 1992), leading to a better innovation performance.

Similarly, a favorable attitude toward organization (corporate) brand should influence innovation performance. An organization brand defines the firm that will deliver and stand behind the offering that the customer will buy and use (Aaker, 2004, p. 6). A strong organization brand works for customers, on an emotional level, by providing a valued relationship with what a company does (Keller, 2015). For example, a brand can play an endorser role rendering credibility that can reassure the new buyer, especially in situations of radical innovation (Aaker, 2004). An organization brand can serve as a signal and help consumers to overcome uncertainty such as doubts about the quality of a new offering (Homburg, Schwemmle, and Kuehnl, 2015, p. 50). Thus:

- H5: Attitude toward organizational change affects innovation performance positively.
- H6: Brand attitude affects innovation performance positively.

Managing firm performance is the ultimate goal for any organization. On the one hand, marketing theory supports innovation performance as one of the most important determinants of firm performance (e.g., Hurley and Hult 1998). Nevertheless, empirical testing of this link needs to be further explored (Calantone, Cavusgil, and Zhao, 2002; Rosenbusch, Brinckmann, and Bausch 2011). A firm must be innovative to gain competitive edge, while prioritizing projects in order to control indebtedness levels and subsequently stabilizing its weighted average cost of capital. Overall, to survive and achieve higher levels of business performance, firms have to develop a greater capacity to innovate. On the other hand, less tangible factors such as brand elements influence firm performance (Keller 2015). In this sense, brand attitudes are generalized dispositions to behave toward an organization or product brand, and they lead to increased offering preference and purchase intentions (Aaker, 2004; Homburg, Schwemmle, and Kuehnl 2015). Firms with favorable brand attitudes will be higher in firm performance due to higher levels of repeated purchases and willingness to pay a premium (Keller 2015). Although attitudes are often not stable over time, and the attitude–behavior link is weak and subject to numerous moderator effects (Schmitt 2012, p. 13), they are usually managed in the long-run to build brand equity (Feng, Morgan, and Rego 2015). Also, brand attitude is positively related to brand loyalty, which has a direct impact on firm performance (Keller 2015). In light of these notions, we hypothesize:

- H7: Innovation performance affects firm performance positively.
- H8: Brand attitude affects firm performance positively.

Managing promotion and advertising for brand building is one of the most common marketing activities linking an offering with customers (e.g., Moorman and Rust 1999; Comstock, Gulati, and Liguori 2010). As a Marketing department becomes more powerful, it gets better talent and funding, having more and more effective communication with the market, reinforcing the firm value propositions and subsequently leveraging the customer's brand attitude (Aaker, 2004; Feng, Morgan, and Rego 2015). If a Marketing department is weak, there is no certainty about the control over the communication process with the market, increasing the risk generated by visible negatives over a brand (see Aaker 2004). Thus, we hypothesize the following:

H9: Marketing department power affects brand attitude positively.

The boundary spanning role is defined as managing activities of an organization's employees that serve to functionally relate an entity to its environment. Organizations create boundary spanning roles in response to environmental contingencies that can affect a firm's long-term and short-term well-being. A boundary spanner as information processor contributes to avoid organizational information overload (Russ, Galang, and Ferris 1998). Therefore, MI and the boundary spanner's role are intrinsically related. What function should play a primordial boundary spanning role in the context of MI? In prior business and management literature, this responsibility has been strongly associated with the role of the HR department (e.g., Farndale, Scullion, Sparrow 2010; Russ, Galang, and Ferris 1998; Yahya and Goh 2002). This function concentrates its power mainly in four managerial areas: (1) training, (2) decision-making, (3) performance appraisal, and (4) reward and compensation. These managerial tasks give, on average, strong relative practical power to the HR department, generating an influential role in organizational intelligence and socialization within the firm (Farndale, Scullion, Sparrow 2010). However, recent reports have recognized that the HR department is losing involvement with the rest of an organization and consequently decreasing its power (e.g., Kim and Ryu 2011).

The rationale behind how a company relates to their markets is a foundational assumption that affects several strategic decisions within every organization. If the activities developed by a function play a significant role in an organization's boundary spanning, the more influential will be that function. Thus, the higher the power of a function, the higher the boundary spanning role played by that function. Nowadays, organizations relate to their markets based on a market orientation, where firms are concerned with customer retention and ensuring customer satisfaction toward firm's offerings (Yahya and Goh 2002). This means that organizational

boundaries will be crossed by some individuals within a firm in order to deal with external influences, only if such influences are related to market-based customer issues. Also, instability in the environment increases the need for boundary spanning roles (Russ, Galang, and Ferris 1998), which is the case for our current economy. As MI requires implementation to make a real impact, employees' commitment and attitude toward organizational change need to be leveraged. The Marketing department's closeness to the customer and other market players provides merits to the function, facilitating its social relations with line managers and front-line employees; consequently reducing their aversion to change and increasing their commitment to the organization. In this context, the Marketing department seems to be more prepared than the HR department, because effectiveness in the boundary spanner role is led by the relationship that a function can establish with line managers and front-line employees (Kim and Ryu 2011). Overall, the influence of a boundary spanner is based on its validation as interpreter of the external environment (Russ, Galang, and Ferris 1998). Thus, depending on the power of the (boundary spanning) department, the positive impact of MI is likely to be increased. The discussion above suggests that:

- H10: The greater Marketing department power, the stronger the relationship between MI and attitude toward organizational change, beyond the effect of HR department power.
- H11: The greater Marketing department power, the stronger the relationship between MI and employees' commitment, beyond the effect of HR department power.

The HR department can influence employees' commitment due to its ability to develop and be guardian of culture, control and monitoring of human processes, and management of internal receptivity (e.g., career management; Farndale, Scullion, Sparrow 2010). Generally, the HR department is the "owner" of the training and coaching budget, which allows employees to

develop their talents. This department, in collaboration with the CEO, defines the tasks and responsibilities of each position and area within an organization. Also, the HR department usually manages compensation packages which, if well-developed (i.e., fair), generate employees' commitment. Therefore, the HR department oversees employees' well-being and commonly has a mindset toward "the employee first." However, as the function plays a relevant role in jobs control, open communication with line managers and front-line employees is key to influence diverse organizational stakeholders (Kim and Ryu 2011). Whether the HR department is powerful and successful in developing inter- and intra-departmental social capital, employees' commitment will be fostered. Stated formally:

H12: HR department power affects employees' commitment positively.

STUDY 1

We conducted a confirmatory factor analysis (CFA) of the MI second-order construct following Mora Cortez et al.'s (2018) operationalization. For data collection, we collaborated with a U.S. market research entity with access to business, management, marketing, R&D, sales, and innovation managers with more than five years of experience. A sample of 185 practitioners used 7-point Likert scales to evaluate the MIs generated in their business units (Bus) during 2017 (1 = "strongly disagree," and 7 = "strongly agree"). We used a previously established scale of 15 items, with three items for each of the five types of MI factors (see Appendix A; Mora Cortez et al. 2018). The item order of the MI scale was randomized across participants. The second-order CFA model fit, according to Hu and Bentler (1999) thresholds, was deemed acceptable: χ^2 = 148.85, d.f. = 85, *p* = .000; CFI = .95; TLI = .94; RMSEA = .06; SRMR = .07. The first-order factors had adequately high discriminant validity (ϕ coefficients significantly < 1.0; Batra, Ahuvia, and Bagozzi 2012) and convergent validity (factor loadings \geq 0.5, composite reliabilities (CRs) \geq .6, average variances extracted (AVEs) \geq .5; Bagozzi and Yi 1988).

We also examined the second-order factor structure by conducting a one-factor CFA on the average scores of the five first-order factors. The model fit was $\chi^2 = 25.46$, d.f. = 5, *p* = .000; CFI = .93; TLI = .90; RMSEA = .08; SRMR = .07, in line with established thresholds (e.g., Bagozzi and Yi 1988). All the path coefficients were positive and significant at the α = .05 level. Thus, consistent with common practice in marketing research (e.g., Kumar and Pansari 2016), we used the aggregated scale based on the average score of the five factors of MI as construct's indicators for further analysis.

STUDY 2

Procedure

We examined the nomological network from MI to firm performance, using a cross-sectional approach. A total of 220 decision-makers participated in Study 2 due to their collaboration with a U.S. market research entity. To ensure key informant competency, we established hierarchical and experience thresholds, accepting participation of practitioners with a job title of manager or higher, tenure of 12 months or higher in the current BU, and a minimum of five years of business experience. Also, to avoid concerns of representativeness, practitioners belonged to different departments, such as business development, management, marketing, R&D, sales, and innovation. The sample was balanced in nature of industry (product versus service) and type of firm (B2B versus B2C; see Appendix B). Using several techniques in the questionnaire design

and application such as (1) respondents were assured of anonymity and confidentiality of the study, (2) the survey design used different endpoints scales, (3) item ambiguity was checked by a panel of five academic experts, and (4) we randomized the order of the questions per section using Qualtrics, we eliminated many of the concerns with common method variance (CMV) in survey research (e.g., Podsakoff et al. 2003). Each participant rated the extent to which the items described her or his appraisal of the MIs generated during 2017 at the BU, organization characteristics such as employees' commitment and attitude toward change, and BU performance outcomes such as brand attitude, innovation performance, and ROA (using archival data).

The MI scale included the 15-item scale we used in Study 1. To assess employees' commitment, we included three items from a scale previously developed by Jaworski and Kohli (1993). We assessed attitude toward change, using three items from Dunham et al. (1989). The scales were measured on a 5-point Likert scale (1 = "strongly agree," and 5 = "strongly disagree"). We assessed brand attitude and innovation performance as single-item constructs: "Our customers' attitude toward the corporate brand is very positive" (1 = "strongly agree," and 7 = "strongly disagree"), adopted from Homburg, Schwemmle, and Kuehnl (2015), and "How do you rate your BU's actual performance in making innovation happen" (1 = "basic," and 7 = "superior"), adopted from Bharadwaj and Menon (2000). The use of single-item measures is supported in prior studies (e.g., Homburg, Schwemmle, and Kuehnl 2015) and helps to deliver a short, more efficient survey (Bergkvist and Rossiter 2007). Participants evaluated BU performance with an objective measure (2017 ROA³) and a subjective measure ("ROA for this year [2018] will be higher than 2017," 1 = "strongly disagree," and 9 = "strongly agree"). ROA has been used in

³ ROA is calculated as: Net income / total assets for a particular period.

previous marketing research (e.g., Morgan, Vorhies, and Mason 2009) because it represents how efficient a BU's management is at using its assets to generate earnings. Figure 2 represents the assessed theoretical model (for simplicity, we keep hypotheses' nomenclature from Figure 1).

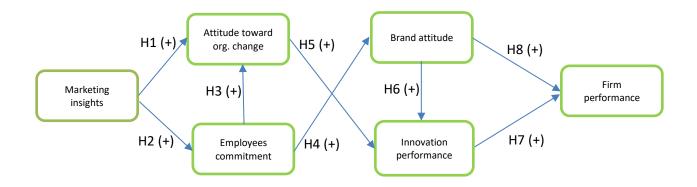


FIGURE 2: HYPOTHESIZED MODEL

Measurement Model

Before estimating the path coefficients of the proposed structural model, we proceeded to fit a CFA on all the seven factors (including ROA and expected ROA as single-item constructs). To test the measurement model, we created a randomized subsample of 180 respondents. The seven-factor CFA model exhibited a good fit with the data ($\chi^2 = 220.14$, d.f. = 73; CFI = .93; TLI = .91; RMSEA = .09; and SRMR = .05). The standardized factor loadings ranged from .51 to .91 and were statistically significant at the α = .01 level. Therefore, all the constructs exhibited convergent validity. We examined discriminant validity using an approach recommended by Anderson and Gerbing (1988). It was compared to the chi-square values for the unconstrained models (allowing each pair of constructs to covary freely) with those of the constrained models (fixing the Φ coefficients for each pair of estimated constructs to one). The chi-square difference

tests were always significantly lower for the unconstrained models at $\alpha = .01$ level (see correlation matrix in Appendix C).

We used the Harmon's one-factor test to assess whether a single latent factor would account for all the observable variables. This would indicate whether CMV represented a relevant threat to the interpretation of the results from this study (Podsakoff et al. 2003). We conducted a chi-square difference test against the measurement model to assess the effect of CMV. A significant difference between the chi-square values of the compared models showed that the fit in the one-factor model was significantly worse than it was in the seven-factor model ($\Delta \chi^2 = 287.7$, $\Delta d.f. = 17$, p < .001). This provided just preliminary support to the measurement model being robust to CMV. To further investigate CMV concerns, per Podsakoff et al. (2003), we included a direct measure of a latent common method factor, allowing items to load on their respective theoretical constructs as well as on a latent CMV factor, and examined the significance of the paths with and without this additional factor. The direction and effect size of parameters did not change significantly. In summary, the measurement model possessed acceptable agreement with the covariance in the data, the factors exhibited both convergent and divergent validity, and CMV bias did not pose a serious threat to the interpretation of the results from this study.

Theoretical Model

To test our hypotheses, we ran a structural equation model (see Figure 2) in R with bootstrapping (5,000 repetitions) with both reliabilities of .9 and 1 (Jöreskog and Sörbom 1989) for our singleitem measures⁴. We found no significant difference in our results. Thus, we present results with a

⁴ A reliability value of .9 for $x1 = (1 - .90) \times VAR(x1)$

reliability value of 1. Firm size (log), nature of industry, and type of firm were included as control variables with direct paths to the performance dependent in each model⁵. The results of our analyses are presented in Table 1. The models yielded adequate model fit based on Bagozzi and Yi (1988) and Hu and Bentler (1999) recommendations (objective ROA model: $\chi^2 = 196.27$, d.f. = 72; CFI = .93; TLI = .92; RMSEA = .09; and SRMR = .06; subjective ROA model: $\chi^2 = 195.04$, d.f. = 72; CFI = .94; TLI = .92; RMSEA = .09; and SRMR = .5). All factor loadings were above .5; all AVEs were above .5; all composite reliabilities were above .6 (see Appendix D). We found discriminant validity, based on Anderson and Gerbing (1988), for all factors. Both models support H1 to H6. However, H7 is only supported in the subjective model, while H8 is not supported in either model. These results suggest the possibility of lagged effects from MI, arguing for the use of a longitudinal approach. Accordingly, this possibility will be tested subsequently in Study 3.

Dependent	Direction	Construct Standardized Standardized S		SE	р	Hypothesis	*Support
Objective ROA model							
Attitude toward change (CHANGE)	\leftarrow	MI	.155	.07	.029	H1	\checkmark
Employees commitment (EMP)	\leftarrow	MI	.628	.07	.000	H2	\checkmark
CHANGE	\leftarrow	EMP	.822	.07	.000	H3	\checkmark
Brand attitude (BRAND)	\leftarrow	EMP	.732	.05	.000	H4	\checkmark
Innovation performance (INNOV)	\leftarrow	CHANGE	.453	.09	.000	Н5	\checkmark
INNOV	\leftarrow	BRAND	.246	.09	.013	H6	\checkmark
Firm performance (PERF)	\leftarrow	INNOV	.047	.07	.516	H7	Х
PERF	\leftarrow	BRAND	.137	.08	.089	H8	Х
Subjective ROA model**							
PERF	\leftarrow	INNOV	.161	.08	.042	H7	\checkmark

⁵ Non-significant results were found. Thus, we presented model results without including the control variables.

PERF	←	BRAND	.003	.07	.967	H8	Х
							-

* At α = 0.05 level; marketing insight = MI ** Omitted paths are consistent with previous model

TABLE 1: PATH COEFFICIENTS (STUDY 2)

Regarding the standardized direct effect of MI on internal variables, the effect on employees' commitment (.628) was about four times the effect on attitude toward organizational change (.155). Also, the indirect effect of MI on attitude toward organizational change (CHANGE, 0.516) is significant at the $\alpha = 0.01$ level. As both direct and indirect effects are significant, we are in the presence of partial mediation (Iacobucci 2010). Employees' commitment (EMP) is a mediator that works as a mechanism to influence attitude toward organizational change. The indirect effect is more than three times the direct effect. The total effect (i.e., adding the direct and indirect effects, .671) is significant at the $\alpha = .01$ level. This result suggests the importance of MI and EMP in cultivating the right attitude for the future as changes are inevitable. MI also indirectly influences brand attitude (BRAND) and innovation performance (INNOV); the former through EMP with an effect size of .460 (p < .01) and the latter through EMP, BRAND, and CHANGE with an effect size of .417 (p < .01). EMP is also important for a firm to be successful in innovation performance. The indirect effect through BRAND and CHANGE is positive and significant (.552, p < .01). Thus, the proposed theoretical mechanisms are supported at the operational level in the chain of marketing outcomes but require further examination at the organizational level (see Katsikeas et al. 2016).

STUDY 3

Procedure

Using a longitudinal approach, we further investigated the nomological network from MI to BU performance. For stage 1 (t = 1, February-March 2018), we reached 600 decision-makers participating in a panel for a U.S. market research entity. To ensure key informant competency, we established hierarchical and experience thresholds, accepting participation of practitioners with a job title of director or higher, tenure of 18 months or higher in the current BU, and a minimum eight years of business experience. Also, to avoid concerns of representativeness and balance, we followed the procedure described in Study 2. Moreover, using the techniques described in Study 2 for questionnaire design and application, and considering our longitudinal approach, we ruled out CMV bias (Podsakoff et al. 2003). Each participant rated the extent to which the items described her or his appraisal of the MIs generated during 2017 at the BU, organization characteristics, such as employees' commitment and attitude toward change, and operational performance such as brand attitude and innovation performance. Also, respondents evaluated the power of the Marketing and HR departments in their BU. All measures are based on year 2017, except BRAND and INNOV (based on the time of survey application).

For stage 2 (t = 2, May-June 2018), we received 267 completed questionnaires (response rate = 44.5%). We discarded 17 responses because of missing data and/or misspecifications in cross-validation of descriptive measures. We compared the firms and respondents' characteristics of the practitioners who dropped out with our final sample and found no significant differences in firm size (p = .78), job tenure (p = .61), or business experience (p = .69). Each participant rated the extent to which the items described her or his appraisal concerning BU performance outcomes such as market share, profitability, and sales revenue. Table 2 presents details on the

final sample characteristics. Our sample size is in line with previous structural equation models in marketing research (e.g., Batra, Ahuvia, and Bagozzi 2012; Brakus, Schmitt, and Zatantonello 2009) and common rules of thumb (e.g., n > 200; Iacobucci 2010). Following Westland's (2010) algorithm, considering a medium effect size (.3), a desired statistical power of .8, 10 latent variables (see Figure 1), and 53 observed variables (including interaction items), the recommended sample size is 190. Therefore, our sample size provides adequate statistical power to have confidence in our results.

Criterion	Sample size $(n = 250)$
Product	167
Service	83
B2B	140
B2C	110
Functional área	
Marketing	11%
Business development	13%
Sales	25%
Innovation and R&D	15%
Management	36%
Experience in business	27.8
(years)	27.0
Firm size (employees	1540.4
number)	10 10.1
Respondent's title	
C-level	24%
Executive VP	36%
VP	20%
Director	20%
BU headquarter location	
Northwest	16%
Northeast	30%
Southwest	28%
Southeast	26%

TABLE 2: SAMPLE CHARACTERISTICS (STUDY 3)

We assessed MI, CHANGE, EMP, BRAND, and INNOV using the measures and scale formats described in Study 2. We assessed a department power using three items from Moorman and Rust (1999): "In this BU, the functions performed by the Marketing/HR department are generally considered to be more critical than other functions," "In this BU, Marketing/HR tends to dominate other functions in decision-making," and "In this BU, the Marketing/HR department is considered to be more influential than other departments." We measured the department power items on a 7-point Likert scale with 1 = "strongly agree" and 7 = "strongly disagree."

We assessed market share⁶ as an objective measure for the first quarter 2018, regarding the main served market. Thus, answers fluctuated from 0% to 100%. BU's profitability (PROFIT) and sales revenue (SALES) were evaluated considering the performance of the major line of business at the moment of survey application, relative to competitors. We measured PROFIT and SALES using eight items from Morgan, Vorhies, and Mason (2009): "market share growth" (SALES1), "increasing sales to current customers" (SALES2), "acquiring new customers" (SALES3), "growth in revenue sales" (SALES4), "business unit profitability" (PROFIT1), "return on investment" (PROFIT2), "return on sales" (PROFIT3), and "reaching financial goals" (PROFIT4). Each 9-point Likert scale was anchored by "much worse than competitors" (1) and "much better than competitors" (9).

The Measurement Model

To test the measurement model, we examined a CFA including all the 10 factors: MI, Marketing department power, HR department power, EMP, CHANGE, BRAND, INNOV, market share

⁶ Market share represents a BU's sales as a percentage of sales for all brands in a specific offering category or market segment.

(MS), PROFIT, and SALES. The model fit was good: $\chi^2 = 631.69$, d.f. = 308; CFI = .95; TLI = .94; RMSEA = .06; and SRMR = .04 (Hu and Bentler 1999). All standardized factor loadings are significant (*p*s < .01) and ranged from .57 to .95. This provided evidence that all constructs exhibited convergent validity. Also, all AVEs were above .5; all composite reliabilities were above .6; and all internal consistencies were satisfactory (Cronbach's alphas > .7; see Appendix E). We found discriminant validity for all factors by a procedure that Anderson and Gerbing (1988) recommend (see correlation matrix in Appendix 6).

The Theoretical Models

To test H1-H8, following the nomological network of Figure 2, we estimated a structural equation model with objective MS and subjective PROFIT and SALES as dependent variables; including an additional direct path from MI to firm performance to test potential mediation effects in the three models. Firm size (log), nature of industry, and type of firm were included as control variables in each model, but no significant results were achieved. Thus, we did not include these variables in further analyses. We ran the models with bootstrapping (5,000 repetitions) and reliabilities of 1 and .9 for our single-item measures⁷. The estimated models fit the data reasonably well: $\chi^2 = 215.21$, d.f. = 71; CFI = .93; TLI = .92; RMSEA = .09; and SRMR = .05 (objective performance with MS); $\chi^2 = 277.12$, d.f. = 112; CFI = .95; TLI = .94; RMSEA = .08; and SRMR = .05 (subjective performance with PROFIT); and $\chi^2 = 305.17$, d.f. = 112; CFI = .94; TLI = .93; RMSEA = .08; and SRMR = .05 (subjective performance with SALES). The results of our three models are presented in Table 3.

⁷ We show results with a reliability value of 1 because no significant differences were found in comparison with a .90 reliability value

Dependent	Direction	Construct	Standardized estimate	SE	р	Hypothesis	*Support
Objective MS model							
Attitude toward change (CHANGE)	\leftarrow	MI	.191	.071	.007	H1	\checkmark
Employees commitment (EMP)	\leftarrow	MI	.627	.060	.000	H2	\checkmark
Firm performance (PERF)	\leftarrow	MI	.049	.084	.556		
CHANGE	\leftarrow	EMP	.783	.070	.000	H3	\checkmark
Brand attitude (BRAND)	\leftarrow	EMP	.719	.049	.000	H4	\checkmark
Innovation performance (INNOV)	←	CHANGE	.501	.088	.000	Н5	\checkmark
INNOV	\leftarrow	BRAND	.214	.094	.023	H6	\checkmark
PERF	\leftarrow	INNOV	.175	.072	.015	H7	\checkmark
PERF	\leftarrow	BRAND	.013	.075	.857	H8	Х
Subjective PROFIT							
model							
CHANGE	\leftarrow	MI	.197	.074	.008	H1	\checkmark
EMP	\leftarrow	MI	.637	.062	.000	H2	\checkmark
PERF	\leftarrow	MI	.379	.072	.000		
CHANGE	\leftarrow	EMP	.778	.075	.000	H3	\checkmark
BRAND	\leftarrow	EMP	.719	.049	.000	H4	\checkmark
INNOV	\leftarrow	CHANGE	.499	.087	.000	H5	\checkmark
INNOV	\leftarrow	BRAND	.215	.094	.023	H6	\checkmark
PERF	\leftarrow	INNOV	.192	.073	.009	H7	\checkmark
PERF	\leftarrow	BRAND	.253	.079	.001	H8	\checkmark
Subjective SALES							
model				. – .			
CHANGE	\leftarrow	MI	.194	.073	.008	H1	\checkmark
EMP	\leftarrow	MI	.631	.060	.000	H2	\checkmark
PERF	\leftarrow	MI	.316	.074	.000		
CHANGE	\leftarrow	EMP	.781	.072	.000	H3	\checkmark
BRAND	\leftarrow	EMP	.719	.048	.000	H4	\checkmark
INNOV	\leftarrow	CHANGE	.500	.089	.000	H5	\checkmark
INNOV	\leftarrow	BRAND	.214	.095	.025	H6	\checkmark
PERF	\leftarrow	INNOV	.242	.076	.001	H7	\checkmark
PERF	\leftarrow	BRAND	.316	.077	.000	H8	\checkmark

* At α = .05 level; marketing insight = MI

TABLE 3: PATH COEFFICIENTS (STUDY 3)

The three models support all hypotheses, except for H8 in the objective MS model. R² values for the MS, PROFIT and SALES dependent variables range between relatively low to relatively high (4.5%, 44.9%, 49.9%, respectively), giving additional support to the presence of MI lagged effect. In the objective MS model, the MI direct effect on firm performance is not significant (.049) and the indirect effect is significant (.083) at the α = .05 level (total effect = .132, *p* = .057). Therefore, the effect of MI on firm performance is fully mediated. In the two subjective PROFIT and SALES models, both direct (.379 and .316) and indirect (.201 and .250) effects are significant at the α = .05 level (total effects = .580 and .566, respectively). Hence, the effect of MI on firm performance is partially mediated. Overall, the results support our theoretical nomological network, indicating the importance of MI indirect, direct, and total effects in explaining firm performance.

To test H9-H12, following the nomological network of Figure 1, we included Marketing department power (MPOW) and HR department power (HRPOW) as moderators. We estimated three structural equation models with objective MS and subjective PROFIT and SALES as dependent variables. Following Foldnes and Hagtvet's (2014) "all by all approach," the models specification included interaction constructs to appropriately represent the hypothesized model. The interaction indicators were created using double-mean centering (Lin et al. 2010). To account for potential non-normality (due to the interaction factors), the models were estimated through Robust Maximum Likelihood (MLR). In particular, to test H10 and H11, we followed a three-step procedure: (1) a model that includes the MPOW and HRPOW factors but with the

interaction paths constrained to 0; (2) a model where the MPOW interaction paths are free but the HRPOW interaction paths are still constrained to 0; and (3) a model where all interaction paths are free to be estimated. The results of the three-step procedure are presented in Table 4.

Model	Chi- square	d.f.	CFI	TLI	RMSEA	SRMR	ΔX^2
1	2200.23	1063	.903	.888	.072	.081	-
2	2188.94	1061	.903	.888	.072	.078	11.29
3	2188.17	1059	.903	.888	.072	.078	.77

TABLE 4: THREE-STEP PROCEDURE

Because all three models are nested, chi-square tests can be applied. The difference in chi-square values between models 1 and 2 was 11.29 (Δ d.f. = 2, p < .01), supporting model 2. The chi-square difference for models 2 and 3 was .767 (Δ d.f. = 2, p > .05), supporting model 2. Base on the chi-square difference tests, model 2 fits the data better and is more parsimonious. We present the results in detail for the selected objective MS model in Table 5 (see results for the two subjective models in Appendix G). Eliminating the paths constrained to 0 in model 2, the fit measures indicate satisfactory agreement with the covariance in the data: $\chi^2 = 893.19$, d.f. = 497; CFI = .94; TLI = .93; RMSEA = .06; and SRMR = .06. All factor loadings are positive and significant at the α = .05 level (see Appendix H).

Dependent	Direction	Construct	Standardized estimate	SE	р	Hypothesis	*Support
Objective MS model CHANGE	←	MI	.147	.102	.150	H1	Х

EMP	\leftarrow	MI	.136	.127	.284	H2	Х
CHANGE	←	EMP	.694	.083	.000	H3	\checkmark
BRAND	\leftarrow	EMP	.651	.061	.000	H4	\checkmark
INNOV	\leftarrow	CHANGE	.509	.090	.000	H5	\checkmark
INNOV	←	BRAND	.209	.095	.028	H6	\checkmark
PERF	\leftarrow	INNOV	.191	.069	.006	H7	\checkmark
PERF	←	BRAND	.028	.068	.683	H8	Х
BRAND	←	MPOW	.171	.064	.007	H9	\checkmark
CHANGE	←	MI*MPOW	.116	.041	.005	H10	\checkmark
EMP	\leftarrow	MI*MPOW	.078	.059	.186	H11	Х
CHANGE	←	HRPOW	.214	.124	.085		
EMP	\leftarrow	HRPOW	.660	.103	.000	H12	\checkmark
* * * 0.051 1	1 . •	· · · · · · · · · · · · · · · · · · ·					

* At $\alpha = 0.05$ level; marketing insight = MI

TABLE 5: RESULTS OF THE HYPOTHESIS TESTING

The model results support H9, positively linking MPOW and BRAND (p < .01). HRPOW has a positive and significant effect on EMP (p < .01), supporting H12. Also, the interaction of MI and MPOW is positively linked with CHANGE (p < .01), supporting H10. However, no support is found for H11 linking the interaction of MI and MPOW with EMP, while in the hypothesized direction, is not significant at the $\alpha = 0.05$ level. Thus, we conclude that MPOW does moderate the effect of MI on CHANGE, but does not moderate the effect of MI on EMP. We highlight that the effect of EMP on BRAND is more than three times the effect of MPOW on BRAND, in line with the tenets of employee engagement theory (see Kumar and Pansari 2016). Finally, the effect of MI on EMP becomes insignificant (p > 0.05) in the presence of HRPOW, meaning a substitution effect. In summary, we found support in different models for all hypotheses but H11.

GENERAL DISCUSSION

In this study, we offer a framework that researchers and practitioners can use to connect the MI concept with firm financial performance. We followed suggestions of Rindfleisch et al. (2008) in terms of reducing CMV bias and enhancing causal inference. First, our study located highly educated, experienced respondents, who are highly knowledgeable about the MI topic. Second, to avoid the impact of potential intervening events, we followed a cross-sectional approach in Study 2. Also, considering the relative abstraction of the MI concept and its emerging nature as a theoretical domain, we followed a longitudinal approach for Study 3. Overall, our findings are consistent in the cross-sectional and longitudinal approach, except for the impact on financial results. This is explained by the lagged effect of creating MIs and their operational implementation. In this section, we highlight the research and managerial contributions of our study.

Theoretical Implications

As we noticed at the commencement of this article, although MI has emerged as an important concept for both researchers and academics, theoretical progress has been limited to conceptual pieces and low empirical validation. In particular, guidance is lacking with regard to the operationalization of MI as well as for the investigation of MI outcomes. Prior market-based knowledge management literature has stressed the relevance of intangible assets (e.g., Morgan, Vohries, and Mason 2009), without distinguishing the impact of MI. In closing these gaps, we contribute to marketing literature in several ways.

First, we provide support to the MI operationalization as a second-order construct comprised of five factors: novelty, actionability, market relevance, credibility, and commercial potential. This

operationalization refutes common wisdom, which focused on the concept as a new self-serving phenomenon to reach a better internal state (cf. Smith, Wilson, and Clark 2006). We show that in terms of maximum theoretical and explanatory power, MI starts with market relevance appraisal due to its highest coefficient across the first-order factors (see Appendix A). Therefore, MI reinforces the notions of market orientation and outside-in approach for successful firms.

Second, we extend the market-based learning stream of research by showing a nomological network involving several constructs previously studied independently. Also, we have demonstrated for the first time how they relate to MI to form an integrated framework, leading to firm financial performance. We find that, on average, MI helps growing financial returns through a theoretical mechanism including attitude toward change, employees' commitment, brand attitude, and innovation performance. Therefore, MI has an attitudinal, behavioral, and financial impact; it directly and indirectly affects firm performance (financial) through innovation performance (behavioral), which, in turn, is affected by brand attitude and attitude toward organizational change (attitudinal). Also, we provide support to the marketing-performance outcome chain suggested by Katsikeas et al. (2016), studying our model's nomological validity, using different financial measures (e.g., market share, ROA, sales revenue).

Third, our study supplements the theoretical underpinnings of market-based organizational change (e.g., Gebhardt, Carpenter, and Sherry 2006). Change is difficult for most organizations and many develop (unintentional) mechanisms and processes that impede learning and adaptation (Morgan, 2004). Our research illustrates that MI is a positively related antecedent of attitude toward organizational change. The richness of the concept influences practitioners to

think more positively about change. Previous studies recognize that managers more than being afraid of change are concerned with the negative outcomes of change (e.g., Oreg 2006). As organizations institutionalize MI, organizational development (i.e., change) is led by practitioners' involvement and participation in related processes and activities. In consequence, supported by our empirical results, behavioral change (innovation) is likely to succeed and achieve higher levels of performance.

Fourth, we have shown that a powerful Marketing department is more relevant for firms than a powerful HR department in the context of transforming the organization toward a better firm performance. This finding is especially relevant for organization theory. CEOs need to define department functions based on expected results. In managing critical contingencies for the organization, such as MIs, a department must take control and play a boundary spanner role, while building *collective bridges* to reduce the risk of knowledge distortion and loss (see Zhao and Anand 2013). As the new knowledge transferred—based on MIs—is highly complex, managers require a unified perspective about the future. Market experience provides organization members with shared meaning and purpose (Gebhardt, Carpenter, and Sherry 2006, p. 51); such experiential knowledge is commonly found in a powerful Marketing department. Therefore, powerful marketers facilitate the right deployment of resources and enthusiasm, enabling multidepartment practitioners to engage in collaboration. Shared market experiences help individuals involved in knowledge transfer to understand and cooperate with each other better. For example, in a study of time-to-market for a new product development project found that engineers who worked with counterparts from different departments took 20-30% less time to complete their

tasks when they had a common market understanding and close personal relationships (Zhao and Anand 2013).

Managerial Implications

To make the implementation of the MI framework sustainable, we need to understand the general and specific market perspectives of firms and the challenges for key decision-makers. The MI nomological network builds over the tenets of market-based knowledge management and the power of the Marketing department. This can help a firm design the role of the Marketing department. We conducted 25 interviews based on our theoretical framework and empirical findings to develop a practical scheme, regarding the role of a Marketing department. These managers represented B2B and B2C firms from different countries. We obtained a list of possible interviewees through the exhibitors of two international trade shows (mining and consumer electronics). We interviewed 10 managers in North America, five in South America, four in Europe, three in Asia, and three in Africa. We conducted open-ended, semi-structured interviews by phone with an average duration of 31 minutes. Following the Marketing Science Institute's 2018-2010 research priorities, we focused the managerial interviews on answering: How can Marketing enhance its voice in the C-suite? (Marketing Science Institute 2018, p. 15). Our discussions with the managers converged to the matrix shown in Figure 3.

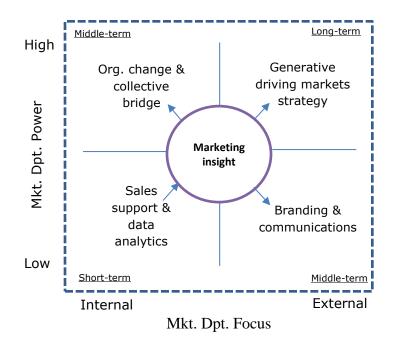


FIGURE 3: REVISITING THE ROLE OF MARKETING

Although managers noted that environmental conditions differ across BUs, industries, or countries, they also stressed that a modern, powerful Marketing department can be developed through time having the concept of MI at the core of the firm strategy. The suggestion for the proposed focus of the Marketing department should cover a firm's responsibilities across three temporal levels, regarding the future in a continuous process: short-term (0-6 months), middle-term (6-12 months), and long-term (1-5 years). The evolvement of the Marketing department follows the diagonal with a positive slope in the matrix. First, an incipient but weak (or recently designed) Marketing department should focus on being a support to sales and leading data analytics to impact the creation of MIs. This will foster the department to get involved in multi-department projects with exhaustive financial control. Then, the Marketing department can extend its responsibilities by pursuing two paths: (1) taking control of branding and communications and/or (2) driving organizational change and being a collective bridge across

departments. This will determine a higher relevance in decision-making for the Marketing department, by gaining control of middle-term activities and capabilities, especially through its impact on MI implementation. For a broader understanding of the collective bridge role, please refer to Zhao and Anand (2013). Finally, to be respected and have a strong voice in the C-suite, the Marketing department needs to be in charge of managing a *generative driving markets strategy*, impacting firm performance in the long-run. We define it as *a process by which the structure of the market is shaped to the advantage of the firm, while being responsive to current customers' met and unmet needs by the continuous creation and implementation of MIs.* This is in line with the suggestions of Jaworski, Kohli, and Sahay (2000, p. 53) to balance a firm's ability to be both market-driven and drive markets. We think that their concern about the assumptions of managers, regarding the nature of the competitive environment, is answered by the inclusion of the MI concept into the field.

We acknowledge that the Marketing department of a firm can currently be in any (combination) of the four quadrants in our matrix, but the majority of organizations have not reached the level of managing a generative driving markets strategy. Moving from a short-term impact as a Marketing department involves taking control of both middle-term responsibilities in our matrix, while moving toward the highest level of Marketing department sophistication entails engaging in the development of a *generative driving markets strategy*. Therefore, a Marketing department willing to lead a generative driving markets strategy, having impact on short-, middle-, and long-term firm performance is simultaneously managing: (1) data analytics and its support to sales; (2) branding and communications; and (3) organizational change and performing as a collective bridge.

Limitations and Further Research

Our work has some limitations, which may offer avenues for further research. First, although we took consideration in reducing CMV bias and enhancing causal inference, the results are prone to the general limitations of survey research. We relied on single-informant data, but we also used archival data delivered by the interviewees. Their high levels of education and experience in an anonymous research setting, increased our confidence that the measures are reliable. However, future research can consider focusing on the firm level to gather secondary data or collecting data from multiple informants. Second, we limited the comparison of the Marketing department power with the HR department. Sometimes the Sales department is very competitive with Marketing regarding budget and responsibilities assignment. This should be examined. Third, our sample was representative of the U.S. market, and BUs sold more than \$1M per year. Thus, our framework may be studied in small firm settings or international markets, taking consideration of the diversity in uncertainty avoidance across countries. Finally, companies operate under different orientations that determine their approach to markets. Hence, MI's effects on attitude toward organizational change or employees' attitudes can be moderated by strategic orientations, such as market orientation (e.g., Jaworski and Kohli 1993) and engagement orientation (Kumar and Pansari 2016). Given the increasing importance of MI to theory and practice, our contributions here open an extensive research agenda.

Appendix A

Indicator	Direction	Construct	Standardized loading	SE	р	CR	AVE
Novelty (NOV)	\leftarrow	MI	.610	.064	.000	.755	.508
Actionability (ACT)	\leftarrow	MI	.904	.039	.000	.737	.486

Market relevance (MR)	←	MI	.963	.030	.000	.814	.594	
Credibility (CRED)	\leftarrow	MI	.787	.044	.000	.815	.595	
Commercial potential (CP)	←	MI	.827	.042	.000	.788	.555	
The insight was ground		NOV	755	0.40	000			
breaking for our CEO (NOV1)	\leftarrow	NOV	.755	.049	.000			
The insight disrupted our								
market development tactics	\leftarrow	NOV	.630	.057	.000			
(NOV2)								
The insight meant a shake up								
for our customer strategy	\leftarrow	NOV	.746	.050	.000			
(NOV3)								
This insight called for action in			641	051	000			
the market (ACT1)	\leftarrow	ACT	.641	.051	.000			
Based on the insight, the BU								
altered its internal business	\leftarrow	ACT	.634	.052	.000			
procedures (ACT2)								
The insight signified								
implementing concrete tasks	\leftarrow	ACT	.804	.039	.000			
(ACT3)								
The insight gave us the								
opportunity to better fulfill	\leftarrow	MR	.786	.035	.000			
customer needs (MR1)								
This insight equipped us to								
offer customers the	←	MR	.788	.035	.000			
product/service they want	,	WIIX	.700	.055	.000			
(MR2)								
The insight had the potential to								
enable us to satisfy a large	\leftarrow	MR	.737	.040	.000			
number of customers (MR3)								
For our business unit (BU)								
employees, the insight had the	\leftarrow	CRED	.726	.043	.000			
appearance of truth (CRED1)								
People in our BU found the								
insight to be plausible	\leftarrow	CRED	.805	.037	.000			
(CRED2)								
BU employees were confident	\leftarrow	CRED	.781	.039	.000			
about this insight (CRED3)								
This insight pointed to	←	СР	.800	.038	.000			
opportunities for growth (CP1)								
The insight indicated ways in		CD	714	0.45	000			
which the BU could improve	\leftarrow	CP	.714	.045	.000			
profitability (CP2)								
We could expand our business	\leftarrow	СР	.717	.045	.000			
based on the insight (CP3)								-
MI: Marketing insight								

Appendix B

Criterion	Sample size $(n = 220)$
Product	140
Service	80
B2B	118
B2C	102
Functional area	
Marketing	13%
Business development	15%
Sales	22%
Innovation and R&D	17%
Management	33%
Experience in business (years)	21.43
Firm size (employees number)	1104.18
Respondent's title	
C-level	21%
Executive VP	13%
VP	19%
Director	24%
Senior Manager	9%
Manager	14%

Appendix C

	MI	BRAND	EMP	CHANGE	INNOV	ROA	E_ROA
MI	1.00						
BRAND	.475	1.00					
EMP	.625	.729	1.00				
CHANGE	.669	.678	.910	1.00			
INNOV	.436	.552	.605	.611	1.00		
ROA	.221	.163	.240	.262	.122	1.00	
E_ROA	.079	.086	.045	.086	.159	.162	1.00

Appendix D

Indicator	Direction	Construct	Standardized loading	SE	р	CR	AVE
NOV*	\leftarrow	MI	.505	.066	.000	.857	.552
ACT*	\leftarrow	MI	.754	.043	.000		
MR*	\leftarrow	MI	.847	.031	.000		
CRED*	\leftarrow	MI	.753	.05	.000		
CP*	\leftarrow	MI	.807	.038	.000		
Changes tend to stimulate us (CHANGE1)	\leftarrow	CHANGE	.792	.044	.000	.860	.673
Our customers think that we support change (CHANGE2)	←	CHANGE	.793	.047	.000		
In this BU, change is seen as positive (CHANGE3)	\leftarrow	CHANGE	.873	.031	.000		
Employees would be happy to make personal sacrifices if it were important for the BU's well-being (EMP1)	←	EMP	.722	.044	.000	.884	.720
In general, employees are proud to work in this BU (EMP2)	\leftarrow	EMP	.904	.022	.000		
It is clear that employees are fond of this BU (EMP3)	←	EMP	.906	.022	.000		
Our customers' attitude toward the corporate brand is very positive (BRAND1)	←	BRAND	1.000	NA	NA		
How do you rate your BU's actual performance in making innovation happen? (INNOV1)	←	INNOV	1.000	NA	NA		
Objective ROA 2017 (ROA)	\leftarrow	PERF	1.000	NA	NA		
Expected ROA growth 2018 (E_ROA)	←	PERF	1.000	NA	NA		

*Average of the factor items

Appendix E

Indicator	Direction	Construct	Standardized loading	t- value	Cronbach's alpha	CR	AVE
NOV*	\leftarrow	MI	.571	12.32	.851	.862	.560
ACT*	\leftarrow	MI	.793	28.26			
MR*	\leftarrow	MI	.843	35.92			

CRED* CP* CHANGE1	$\begin{array}{c} \leftarrow \\ \leftarrow \\ \leftarrow \end{array}$	MI MI CHANGE	.769 .736 .807	25.51 22.26 31.32	.870	.870	.691
CHANGE2 CHANGE3	\leftarrow	CHANGE	.817	32.83	.070	.070	.071
EMP1	<i>←</i>	CHANGE EMP	.868 .726	42.81 22.48	.880	.889	.730
EMP1 EMP2	<i>←</i>	EMP	.726 .906	22.48 59.98	.880	.009	.750
EMP2 EMP3	<i>←</i>	EMP	.900	59.98 65.06			
In this BU, the functions performed by the Marketing department are generally considered to be more critical than other functions (MPOW1)	←	MPOW	.796	29.26	.894	.897	.744
In this BU, Marketing tends to dominate other functions in decision-making (MPOW2) In this BU, the	←	MPOW	.881	43.16			
Marketing department is considered to be more influential than other departments (MPOW3)	←	MPOW	.906	48.36			
In this BU, the functions performed by the HR department are generally considered to be more critical than other functions (HRPOW1)	←	HRPOW	.844	36.85	.877	.877	.704
In this BU, HR tends to dominate other functions in decision-making (HRPOW2)	←	HRPOW	.826	33.75			

In this BU, the HR department is considered to be more influential than other departments (HRPOW3)	←	HRPOW	.847	37.54			
BRAND1	←	BRAND	1.000	NA			
INNOV1	←	INNOV	1.000	NA			
Market share Q1 2018	\leftarrow	MS	1.000	NA			
SALES1	\leftarrow	SALES	.867	49.89	.945	.944	.808
SALES2	\leftarrow	SALES	.892	60.17			
SALES3	\leftarrow	SALES	.910	71.09			
SALES4	\leftarrow	SALES	.925	81.65			
PROFIT1	\leftarrow	PROFIT	.946	116.31	.964	.966	.878
PROFIT2	\leftarrow	PROFIT	.940	106.74			
PROFIT3	\leftarrow	PROFIT	.926	89.83			
PROFIT4	\leftarrow	PROFIT	.935	101.04			
* A	14 TTT				N /	•	

*Average of the factor items; HRPOW = HR department power; MPOW = Marketing department power

Appendix F

_	MI	MPOW	HRPOW	BRAND	EMP	CHAN	INNOV	MS	PROFIT	SALES
MI	1.00									
MPOW	.561	1.00								
HRPOW	.796	.550	1.00							
BRAND	.468	.425	.558	1.00						
EMP	.624	.385	.728	.712	1.00					
CHAN	.674	.362	.751	.669	.894	1.00				
INNOV	.489	.431	.634	.544	.615	.629	1.00			
MS	.144	.185	.122	.132	.106	.142	.206	1.00		
PROFIT	.574	.402	.617	.533	.646	.654	.510	.222	1.00	
SALES	.568	.423	.655	.592	.645	.659	.564	.219	.901	1.00

Appendix G

Dependent	Direction	Construct	Standardized estimate	SE	р	Hypothesis	*Support
Subjective PROFIT							
model							
CHANGE	\leftarrow	MI	.147	.102	.151	H1	Х
EMP	\leftarrow	MI	.136	.127	.284	H2	Х
CHANGE	\leftarrow	EMP	.694	.083	.000	H3	\checkmark
BRAND	\leftarrow	EMP	.651	.061	.000	H4	\checkmark
INNOV	\leftarrow	CHANGE	.509	.090	.000	H5	\checkmark
INNOV	\leftarrow	BRAND	.209	.095	.028	H6	\checkmark
PERF	\leftarrow	INNOV	.312	.074	.000	H7	\checkmark
PERF	\leftarrow	BRAND	.363	.078	.000	H8	\checkmark
BRAND	\leftarrow	MPOW	.171	.064	.007	H9	\checkmark
CHANGE	\leftarrow	MI*MPOW	.116	.041	.005	H10	\checkmark
EMP	\leftarrow	MI*MPOW	.078	.059	.186	H11	Х
CHANGE	\leftarrow	HRPOW	.214	.124	.085		
EMP	\leftarrow	HRPOW	.660	.103	.000	H12	\checkmark
Subjective SALES							
model							
CHANGE	\leftarrow	MI	.147	.102	.150	H1	Х
EMP	\leftarrow	MI	.136	.127	.284	H2	Х
CHANGE	←	EMP	.694	.083	.000	H3	\checkmark
BRAND	\leftarrow	EMP	.651	.061	.000	H4	\checkmark
INNOV	\leftarrow	CHANGE	.509	.090	.000	H5	\checkmark
INNOV	\leftarrow	BRAND	.209	.095	.028	H6	\checkmark
PERF	\leftarrow	INNOV	.342	.073	.000	H7	\checkmark
PERF	\leftarrow	BRAND	.407	.075	.000	H8	\checkmark
BRAND	\leftarrow	MPOW	.171	.064	.007	H9	\checkmark
CHANGE	\leftarrow	MI*MPOW	.116	.041	.005	H10	\checkmark
EMP	\leftarrow	MI*MPOW	.078	.059	.186	H11	X
CHANGE	\leftarrow	HRPOW	.214	.124	.085		
EMP	\leftarrow	HRPOW	.660	.103	.000	H12	\checkmark

* At $\alpha = 0.05$ level; marketing insight = MI

Appendix H

Indicator	Direction	Construct	Standardized loading	t- value	CR	AVE
NOV*	\leftarrow	MI	.564	9.350	.862	.559

ACT*	\leftarrow	MI	.789	21.073		
MR*	←	MI	.847	32.021		
CRED*	←	MI	.769	18.835		
CP*	←	MI	.740	15.447		
MPOW1	←	MPOW	.798	18.896	.897	.744
MPOW2	\leftarrow	MPOW	.876	36.201		
MPOW2	\leftarrow	MPOW	.910	51.019		
HRPOW1	\leftarrow	HRPOW	.839	31.292	.877	.703
HRPOW2	\leftarrow	HRPOW	.821	19.903		
HRPOW3	\leftarrow	HRPOW	.855	34.943		
CHANGE1	\leftarrow	CHANGE	.802	20.290	.867	.685
CHANGE2	\leftarrow	CHANGE	.817	21.616		
CHANGE3	\leftarrow	CHANGE	.862	31.452		
EMP1	\leftarrow	EMP	.723	18.541	.888	.728
EMP2	\leftarrow	EMP	.908	46.025		
EMP3	\leftarrow	EMP	.915	51.006		
NOV*MPOW1	\leftarrow	MI*MPOW	.577	6.149	.925	.459
NOV*MPOW2	\leftarrow	MI*MPOW	.544	5.432		
NOV*MPOW3	\leftarrow	MI*MPOW	.586	6.055		
ACT*MPOW1	\leftarrow	MI*MPOW	.750	6.939		
ACT*MPOW2	\leftarrow	MI*MPOW	.751	10.491		
ACT*MPOW3	\leftarrow	MI*MPOW	.830	14.168		
MR*MPOW1	\leftarrow	MI*MPOW	.589	3.553		
MR*MPOW2	\leftarrow	MI*MPOW	.742	11.712		
MR*MPOW3	\leftarrow	MI*MPOW	.839	14.902		
CRED*MPOW1	\leftarrow	MI*MPOW	.614	4.823		
CRED*MPOW2	\leftarrow	MI*MPOW	.653	8.526		
CRED*MPOW3	\leftarrow	MI*MPOW	.723	9.421		
CP*MPOW1	\leftarrow	MI*MPOW	.427	2.239		
CP*MPOW2	\leftarrow	MI*MPOW	.677	8.911		
CP*MPOW3	\leftarrow	MI*MPOW	.729	9.471		
BRAND1	\leftarrow	BRAND	1.000	NA		
INNOV1	\leftarrow	INNOV	1.000	NA		
MS Q1 2018	\leftarrow	PERF	1.000	NA		

*Average of the factor items; MI = marketing insight

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