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# The impact of industry environment on early market entry decisions by B2B managers in the U.S. and Japan

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ABSTRACT

Managers form simplified mental models to cope with market environment uncertainties and to process information. A critical decision is whether to enter a high-potential market early. Large innovation and development investments involved in this decision increase uncertainty. We examine the importance ascribed by U.S. and Japanese managers to competitive forces when making early market entry decisions. We expect that the competitive forces will have different effects on the likelihood of early market entry in the U.S. versus Japan due to cultural and business environment differences, and we thereby develop several propositions. We develop a decision-making exercise simulating early market entry decisions, and tested our propositions with managers in medium to large business-to-business (B2B) firms from both countries. We assessed impacts of the competitive market forces on entry strategy selection via relative weights, repeated-measures analysis of variance, and frequency analysis. Our findings revealed differences in the mental models of Japanese and U.S. managers. Buyer power had a larger effect on the decision to make an early market entry for Japanese managers, while threat of new firm entry had a larger effect for U.S. managers; these findings were consistent with our propositions. We also found several areas of agreement between U.S. and Japanese managers. We conclude with theoretical implications and recommendations to B2B management.



In the global business environment facing today's business-to-business (B2B) marketing manager, the decision of when to enter a particular market with a new product has become extremely complex. The first mover usually requires considerable investment in innovation and has greater risk exposure, but potentially captures a leadership position in the market and achieves sustainable competitive advantage (Lieberman & Montgomery, 1988, 1998). Later entrants face their own set of risks, but may learn from the first mover's mistakes (Schnaars, 1991; Song, Di Benedetto and Zhao, 1999). The market entry decision must be timed to balance the risks of premature entry against the missed opportunity of late entry. Complicating the decision task is the fact that managers are typically working in uncertain, ambiguous environments in which it may be quite difficult for them to communicate their conceptual processes (Gartner, Bird & Starr, 1992; Hill & Levenhagen, 1995).

B2B market entry decisions are further complicated by the fact that managers working within multiple cultural or business environments may exhibit different ways of responding to competitive threats and opportunities. Cross-cultural managerial studies indicate that enduring cultural traits influence managerial perceptions and actions (Tan & Farley, 1987; Tse, Lee, Vertinsky & Wehrung, 1988; Kotabe, Duhan, Smith, Jr., and Wilson, 1991; Ralston, Gustafson, Cheung & Terpstra, 1993; Smith, Peterson & Zhong, 1996). In addition to cultural differences, governmental policies or other factors in the business environment will differ as well; these differences will also affect managerial decision making as they may make some opportunities more or less attractive. B2B managers therefore cannot assume that foreign competitors will view the global market the same way they do. Japanese and U.S. B2B managers may use different criteria in deciding whether to make an early market entry into a potential new market, because they simplify and understand the complex competitive environment within which they work differently (Porac & Thomas, 1990). That is, they may place different levels of importance on the competitive forces when assessing the environment, and may consequently view the same market as more or less attractive. Few studies have examined the market entry strategy decision across different cultural or business environments, and even fewer have specifically

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examined this decision in the B2B context. The research findings reveal interesting differences and also concordances in the early market entry decisions as made by managers of Japanese and U.S. B2B firms.

A simple, robust model of the competitive environment is Porter's five competitive forces model (Porter, 1980). In this model, the many competitive threats, barriers and uncertainties faced by a firm are subsumed into five forces: the intensity of competitive rivalry, the threat of new entrants, the bargaining power of suppliers and of buyers, and the threat of substitute products. Though it has not generally been used in academic research to model likelihood of early market entry, the Porter model has been validated and frequently used in previous research as an effective representation of competitive activity that models managers' assessments of competition (Porter, 1980, 1985; Schnaars, 1991) and we will use it as a concise way to describe competitive scenarios to our decision-maker respondents.

In this study, we seek to determine if there are cross-national differences between U.S. and Japanese B2B managers regarding their likelihoods of making an early market entry into a competitive market. Due to differences in the cultural and business environments between the U.S. and Japan, we expect that managers will differ in their likelihoods of entering a market early. We use the Porter model to specify the characteristics of the competitive environment.

We propose a descriptive, qualitative model to assess the importance of different environmental characteristics on the likelihood of entering a new market early, and how this importance differs between B2B managers in the U.S. and Japan. We develop four propositions concerning expected differences in decision making, based on differences in the cultural and business environments in the U.S. and Japan. We then test our propositions with a sample of 142 U.S. and 206 Japanese managers in medium to large B2B firms. To do this, we present different scenarios of competitive structure (based on Porter's five forces model) to managers, and elicit their likelihoods of early market entry.

We use a judgmental analysis approach, based in multiple criteria behavioral decision theory, to assess the importance of the environmental characteristics to the early market entry decision. Our approach, which is computationally equivalent to multilevel modeling in hierarchical linear modeling (HLM), converts their stated likelihoods of early market entry into standardized relative weights, which represent how important each force is to the early market entry decision, and identify significant cross-national differences in assigned weights using repeated-measures analysis of variance. We also use regression analysis to determine the direction of relationships between competitive force and likelihood of early market entry. We expect differences between U.S. and Japanese B2B managers in their likelihoods of early market entry; these cross-national differences will be reflected in different amounts of importance being assigned to the competitive forces in the Porter model. We believe this is the first empirical study that uses the Porter model to assess the relative importance of various aspects of the competitive environment in a cross-national, business-to-business setting. We also further explore cross-national differences in decision making by examining frequencies of weight patterns. We conclude with a discussion of theoretical implications of our results and recommendations for B2B managerial practice.

## 1. Theory and research propositions

### 1.1. Early mover advantage

We begin by briefly examining the first mover advantage literature (Lieberman & Montgomery, 1988, 1998; Kerin, Varadarajan and Peterson, 1992; Kalyanaram, Robinson Urban, 1995). Several empirical studies found a positive relationship between order of entry and long-term market share (Robinson & Fornell, 1985; Urban, Carter, Gaskin & Mucha, 1986; Lambkin, 1988; Miller, Gartner & Wilson, 1989; Kalyanaram et al., 1995; Robinson and Min, 2002). The first mover can also position itself as the category standard and ultimately set ground rules for later entrants (Day & Wensley, 1988; Carpenter & Nakamoto, 1989). Successful first movers can create several entry barriers: information asymmetry (customers are reluctant to switch to a competitor since they lack information about it), better access to distribution channels and management talent, patent and other proprietary protection, and so on (Porter, 1980; Karakaya & Stahl, 1989; Golder & Tellis, 1993).

A parallel literature, however, suggests that being one of the first in might be preferable to being the first mover (Glazer, 1985; Carpenter & Nakamoto, 1989; Golder & Tellis, 1993; Lieberman & Montgomery, 1988, 1998). We can refer to this as the early-mover, as opposed to the first-mover, advantage. First movers face higher levels of market, technological, and competitive uncertainty than do later entrants, thus being the first mover is inherently risky (Carpenter & Nakamoto, 1989; Golder & Tellis, 1993; Lieberman & Montgomery, 1988). First movers also have the problem of sustaining their early competitive lead: they can lose market share over time due to declining relative cost advantages, deteriorating competitive product quality, or “free-riding” behavior on the part of competitors (Robinson & Fornell, 1985; Lieberman & Montgomery, 1988; Robinson & Min, 2002). Later entrants may be better positioned to succeed in new, emerging markets and overcome the initial first-mover advantage (Glazer, 1985; Lieberman & Montgomery, 1988, 1998; Lilien & Yoon, 1990; Golder & Tellis, 1993; Li & Calantone, 1998; Han, Kim & Kim, 2001). A first mover also may not be able to sustain an early lead if its product's performance is inadequate, or if it is unable to quickly ramp up to volume production (Tellis & Golder, 1996; Cohen, Eliashberg & Ho, 1996; Datar, Jordan, Kekre, Rajiv & Srinivasan, 1997; Han et al., 2001). In an attempt to be first to market, first movers can speed up the new product development (NPD) process too much, for example by skipping important market research steps (Crawford, 1992). (For a comprehensive analysis of first-mover advantages and disadvantages, see Lieberman and Montgomery, (1988, 1998)). Later entrants may take advantage of first mover mistakes such as these. But waiting too late will very likely limit the available market opportunities. One in-depth case analysis of several industries found that the third or fourth movers into the market tended to be the top performers (Lieberman & Montgomery, 1998); entering earlier or later than this posed competitive problems.

It is difficult to find a consensus among all the research articles on order of entry effects, since they vary greatly in the definition and operationalization of first mover, and also in the methodology used (case-based versus empirical survey; see discussion of this issue in Song et al., 1999). The consensus is that moving first is not necessarily normative behavior for all firms, but that early market entry (i.e., either being first in, or one of the first in) results in long-term competitive advantage over later entrants (Lilien & Yoon, 1990). For the remainder of this study, our focus is on early entrants, defined here as being the first competitor in the market, or among the very first competitors in (we will provide an operational definition later).

### 1.2. Early market entry and mental models

In this study, we define early market entry to mean being either the first, or among the first, to enter a new market with a new product. A manager deciding whether to enter a market early (to profit from first mover advantages) or later (to minimize first mover risks) makes this decision within the context of a very complex business environment. In order to make sense of this complex environment surrounding them, managers tend to form simplified internal cognitive representations, or mental models (Alba & Hasher, 1983; Staggers & Norcio, 1993; Cooke, 1994). That is, using their experience with and understanding of the environment, managers focus on certain pieces of environmental information that they judge to be critical, and make decisions and measure their performance based on