# Market Orientation and Innovativeness: The Role of Management Leadership

Tung-Zong (Donald) Chang<sup>1+</sup>

<sup>1</sup>Metropolitan State College of Denver

**Abstract.** The present study investigates how management behavior and a market orientation affect the innovativeness. A survey of experienced managers with knowledge in R&D and overall marketing operations yields important results to support such relationships. The results indicate that while both management behavior and a market orientation have a significant effect on innovative behavior, the effect of market orientation was surprisingly strong. Further examination reveals that the participative management style and goal-oriented management style are more important in cultivating an innovative culture than the supportive and directive management styles. And transformational leadership is an important contributor to innovativeness, while transactional leadership has a lesser, though significant, effect on innovative behavior.

**Keywords:** market orientation, innovativeness, management leadership

#### 1. Introduction

Effective innovations have been considered the key for continuing success. Firms, both high-tech and traditional, have been encouraged to nurture a corporate environment that fosters progressive R&D activities. New ideas are solicited and rewarded. Careful screening and selection processes are built. Technology and non-technology firms could prosper because of innovations, or perish due to the lack of them. The importance of innovations is not only evident in the technology section, new and improved products are imperative in sustaining earning growth and enhancing market competitiveness for many established firms in consumer product and food market also. Companies, such as Proctor and Gamble, General Mills, Pepsi, etc., are known for their adaptability in keeping up with changing consumer tastes and needs by introducing new and improved products regularly. For many technology firms, innovations have become the key for survival. Without effective innovations, a firm could quickly lose its competitive advantages and be forced out of the market in a very short time. On the other hand, a successful innovation can effectively alter a firm's fortune. For example, Apple Inc. has found itself transforming into a quasi-entertainment company due to its thriving success with its music download business, a somewhat unexpected byproduct of its successful iPod product line. The purpose of the present study is to investigate how management behavior and a market orientation affect the innovative behavior and offer important implications and applications.

#### 2. Literature Review

Research and development activities are instrumental in yielding innovative products and services to maintain and build competitive advantages in a dynamic market environment. The top management team plays an important role in building an environment that is favorable for effective and efficient R&D activities. Managers have the ultimate impact on how subordinates behave and respond to various managerial and corporate stimuli. As a firm's innovative culture reflects subordinates' genuine perceptions of the management desired state of being, the top management team must exert influence via tangible actions and perceptible cues. Therefore the management team has to communicate effectively with the subordinate that innovative activities leading to value-added innovations are to be commended and sufficiently rewarded.

\_

E-mail address: changd@mscd.edu.

<sup>&</sup>lt;sup>+</sup> Corresponding author.

#### 2.1. Innovative Behavior

Innovativeness is part of corporate culture that shows a firm's ability in generating ideas and developing new products that are essential in maintaining long-term competitiveness and profitability. Past literature has linked innovativeness to organizational performance by suggesting that an innovative firm is more likely to succeed by gaining a competitive edge [2] [3]. An innovative firm that can consistently offer distinctive and meaningful products and services is more capable of meeting the shifting needs of consumers. Adapting to the ever-changing tastes and preferences, it generates highly innovative and better products on a continuous basis.

Innovativeness provides competitive advantages by enhancing fresh and useful perspectives of one's offerings. Marketing is responsible for an important aspect of an organization's R&D effort by studying new and changing needs, setting R&D goals, and identifying opportunities for further product improvements. These responsibilities require close collaboration across functional groups within the entire organization. R&D opportunities continuously evolve as customer needs change, competitive offerings proliferate, new and improved technological solutions become available, corporate financial resources enhance, and governmental and environmental constraints shift. An innovative organization is likely to recognize such opportunities and develop its product portfolios in meeting the changing needs of customers with newly found capabilities [4].

### 2.2. Management Leadership

Senior managers are responsible for building an innovative and creative environment so that continuous R&D efforts can be properly maintained. In the previous Intel story, while Mr. Grove was appalled by the lack of desired stimulation from his executive team, he failed to recognize that CEOs have the ultimate responsibilities in building and sustaining such corporate culture. An effective leader is expected to nurture a working environment that favors R&D activities in generating novel ideas and creating marketable new innovations. The management exerts its influence in the formation of the overall organizational culture through various management behaviors. Such management behavioral patterns help define how employees behave and perform based on their understanding of the acceptable and expected corporate behavior and perceptual norms.

The study of management leadership research has been categorized into the trait approach, the behavioral approach, the situational approach, and the power-influence approach [5] [6]. Among various leadership theories, the path-goal theory has been studied in the previous marketing literature. It suggests that four distinctive management behavior patterns, i.e., participative, supportive, directive, and goal-oriented, could be observed among corporate managers [5] [7]. It is expected that a manager will demonstrate the four management behavior patterns to various degrees.

A manager often encourages participation by allowing the subordinate to influence job decisions to a large degree [8]. This type of management behavior is analogous to participative management, in which subordinates share a significant degree of decision making power with their superiors. A supportive manager creates a facilitative task environment of psychological support, mutual trust and respect, and helpfulness and friendliness [9]. The manager also plays a directive role by providing specific directions to subordinate work activities, organizing and defining the task environment, assigning the necessary functions to be performed, specifying rules, regulations, and procedures to be followed in accomplishing tasks, clarifying expectations, scheduling work to be done, establishing communication networks, and evaluating work group performance [9]. Finally, a goal-oriented manager focuses the overall corporate effort on achieving corporate and individual goals, allocates required resources, and empowers employees to accomplish their goals.

Another approach in leadership research is to investigate leadership based on its transformational and transactional characteristics. The transformation leadership is vital in enabling an organization in adapting to changes in the environments. The transactional leadership is crucial in providing guidelines and framework for routine operations. A transactional leader operates within the existing organizational system and the prevailing culture while paying close attention to deviations that require immediate actions [10] [11]. Transactional leadership is an integral part of leadership as it provides the maintenance from of leadership [12]. Such maintenance leadership behavior is an important ingredient of organizational efficiency and

effectiveness as it strengthens existing organizational strategies and culture. A transactional leader clarifies expectations and gives acknowledgment when goals are achieved, which helps in individuals and groups achieving desired levels of performance [10]. An effective transactional leader also rewards subordinates efforts and commitment while correcting mistakes and deviations. Research has shown support for the relationship between transactional leadership and business performance [13].

Another aspect of leadership is how a transformational leader elevates the subordinate's motivation and performance [10]. By constructing personal and social identification among followers with the mission and goals of the leader and organization, an effective transformational leader build a sense of involvement, cohesiveness, commitment, and empowerment that are required when dealing with challenging tasks [14]. Transformational leadership encourages subordinates to believe in themselves and their ability in achieving assigned goals. Such leadership is crucial in building a can-do culture that can potentially lead to high level of innovativeness. When comparing the relative significance, transformational leadership is likely to be more effective in creating an innovative culture, while transactional leadership is more relevant in maintaining a smooth daily operation.

#### 2.3. Market Orientation

Another important factor influences a firm's level of innovativeness is market orientation, which reflects a firm's awareness, sensitivity and responsiveness to the market. Market orientation is considered an important element of organization culture. Slater and Narver [15] consider management leadership an important component of climate, or the operationalization of culture, which is a critical element of a learning organization. Deshpandé, Farley, and Webster [2] perceive management leadership as a key element that molds corporate culture, whereas Walker and Ruekert [16] argue that a centralized organization, often characterized by its dominating transactional leadership, is not likely to be innovative or quick to adapt to changing market conditions. Based on a survey of 194 manufacturing companies with national and international operations, Lukas [17] found that the choice of strategic types is associated with market orientation." Senior management's emphasis on market orientation is an antecedent of the firm's market orientation element [18]. The management's commitment and the corresponding reward system help to shape the market orientation of a firm. In the long run, a market-oriented firm is expected to produce higher profits through superior quality, which, in turn, leads to higher productivity and stronger customer loyalty [19].

Kohli and Jaworski [18] define market orientation as "the organization-wide generation of market intelligence, dissemination of its intelligence across departments, and organization-wide responsiveness to it." They suggest that market orientation consists of three core themes: customer focus, coordinated marketing, and profitability. Narver and Slater [20] conceptualize market orientation as a unidimensional construct with three behavioral components (customer orientation, competitor orientation, and interfunctional coordination) and two decision criteria (long-term horizon and profit emphasis), though the two decision criteria were rejected by their empirical data. A market-oriented organization matches its customers' needs with its capability. Understanding what customers want and do not want can result in greater efficiency, reduce waste in management and manufacturing, and enhance competitive advantages.

Market orientation has been found to have an important effect on innovativeness. Many innovations are developed in response to dynamic market conditions. To develop an effective new product or service, it is imperative to be aware of the market trend and adapt one's offerings accordingly. Market orientation fosters innovativeness because it involves the generation and dissemination of and the reaction to market intelligence and knowledge in response to market conditions. A customer-oriented firm that closely monitors customers' needs may improve creativity by producing novel and meaningful ideas that enhance organizational innovativeness. Being keen to competition, a competitive-oriented firm closely monitors its own progress against its rivals continuously, which can lead to new ideas that facilitates innovations to stay ahead of competitors. A competitor-oriented culture enhance R&D activities because the firm is ardently aware of the industry trends through the collection of intelligence from competitors and the market, which can result in the generation of novel and meaningful innovations in response to competitors' actions.

Finally, it is well documented that cross-functional integration influences innovativeness and generates superior values for customers through desired levels of interaction and communication, information sharing

and coordination, and joint involvement in conducting required tasks involved in a new product development and launch [21] [22]. Cross-functional integration positively affects the innovativeness of the firm because it facilitates the generation, collection, and dissemination of market intelligence about new and meaningful stimuli across functional areas, thus encouraging creativity [18]. It involves open generation and sharing of new ideas, resolution of problems and disagreements by means of exceptional tools and different frames of reference [3] [21] [23]. In summary, a market orientation is a key to successful innovations through an effective and efficient R&D endeavor.

## 3. Metholodogy

Leadership behavior was examined based on the path-goal theory of leadership with four underlying leadership styles of supportive, participative, directive, and goal-oriented; and the transformational-transactional dichotomy of leadership. Measurement items were developed based on review of past literature with multiple items for each leadership style. Cronbach alpha coefficient and factor analysis were used to gauge the adequacy of scale reliability. Items were deleted and added back as necessary to sanitize scales so that each distinct leadership construct was adequately measured. Items were deleted for low communality, the lack of added explanatory power, unsatisfactory factor structure, and low alpha coefficients. When additional new items were deleted, previous deleted items were temporarily added back to re-examine the results of the factor analysis and alpha coefficient. As a result, each leadership construct was measured with multiple items, varying from 2 items to 5 items, with the corresponding Cronbach alpha coefficients range from 0.70 to 0.83, which are deemed satisfactory [24] and consistent with the results of similar studies [2].

Market orientation items were borrowed from those developed [20], excluding items related to the two decision criteria, which were not supported by Narver and Slater's data. Although items for competitive orientation were included in the survey, it was rejected by both a factor analysis and a low alpha coefficient. The competitive orientation is not specified in Kohli and Jaworski's model either and has been shown to have a negative effect on business performance [25]. We examine market orientation with the two commonly accepted components, customer orientation and inter-functional coordination with a modified eleven-item self-reported perceptual scale [20]. The resulting alpha coefficient values of 0.86 for customer orientation and 0.76 for inter-functional coordination are satisfactory [24].

Finally, innovativeness was measured by items conceptualized and developed by literature review, including those items used in [2], [3], and [4]. After several rounds of elimination and addition based on a series of factor analysis and reliability test using Cronbach alpha coefficients, a six-item scale was retained with an alpha coefficient of 0.84.

The research questions were addressed with a survey conducted on a sample of 767 managers, who had indicated that they had experience in and/or knowledge on R&D activities, innovations, marketing, and management issues, from a major metropolitan area known for its technology-oriented economy. The potential respondents were contacted and screened based on their willingness to participate in the study and their responses to screening questions. A survey packet, including a cover letter, survey questionnaire, and a return envelope, was delivered to each respondent. A total of 265 respondents returned the survey, including 74 invalid, non-qualified, or incomplete surveys for various reasons. The procedure yields 191 valid responses, an effective response rate of 24.9%.

#### 4. Results

First, the effect of management behavior on innovativeness is examined. Two models were tested, one for the path-goal leadership behavior and the other for the dichotomy of transformational/transactional leadership. As expected, the participative leadership style has the strongest effect while the goal-oriented leadership also exhibits a significant effect on innovativeness. The results also clearly indicate that innovativeness is positively affected by both transformational and transactional leadership, whereas transformational leadership has a stronger effect than transactional leadership (p<0.05).

The results show that both customer orientation and inter-functional coordination have a significant effect on innovativeness. Most significantly, the two market orientation constructs explain 50% of the

variation in innovativeness, which indicates a high level of association between market orientation and innovativeness.

The results indicate that each leadership style has a significant effect on customer orientation. However, only goal-oriented style, participative style, and transformational leadership has a significant effect on interfunctional coordination.

## 5. References

- [1] D. Whelan. Only the Paranoid Resurge. Forbes. 2006, April 10, pp. 42-44.
- [2] R. Deshpandé, J. Farley, and F. Webster. Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrad Analysis. *Journal of Marketing*. 1993, 57: 23-37.
- [3] J. Han, N. Kim, and R. Srivastava. Market Orientation and Organizational Performance: Is Innovation a Missing Link? *Journal of Marketing*. 1998, 62(October): 30–45.
- [4] S. Im, and J. Workman. Market Orientation, Creativity, and New Product Performance in High-Technology Firms. *Journal of Marketing*. 2004, 68(April): 114–132.
- [5] J. Higgins. *The Management Challenge: An Introduction to Management*. 2nd Edition, New York: Macmillan Publishing Company, 1994.
- [6] G. Yukl. Leadership in Organizations. Englewood Cliffs, NJ: Prentice-Hall, 1981.
- [7] R. House and T. Mitchell. A Path-Goal Theory of Leadership. *Journal of Contemporary Business*. 1974, 3(Autumn): 81-97.
- [8] R. Teas. Performance-Reward Instrumentalities and the Motivation of Salespeople. *Journal of Retailing*. 1982, 58(Fall): 4-26.
- [9] J. Gibson, J. Ivancevich, and J. Donnelly. *Organization Structure, Processes and Behavior*. Dallas: Business Publishing, Inc., 1988.
- [10] B. Bass. Leadership And Performance Beyond Expectations. New York: Free Press, 1985.
- [11] J. Burns. Leadership. New York: Harper & Row, 1978.
- [12] H. Trice, and J. Beyer. The Cultures Of Work Organizations. Englewood Cliffs. NJ: Prentice-Hall, 1993.
- [13] K. Lowe, K. Kroeck, and N. Sivasubramaniam. Effectiveness Correlates Of Transformational And Transactional Leadership: A Meta-analytic Review. *Leadership Quarterly*. 1996, 7, pp. 385–425.
- [14] B. Shamir, R. House, and M. Arthur. The Motivational Effects Of Charismatic Leadership. *Organizational* Science. 1993, 4, pp. 577–594.
- [15] F. Slater and J. Narver. Market Orientation and Learning Organization. *Journal of Marketing*. 1995, 59, pp. 63-74.
- [16] O. Walker, and R, Ruekert. Marketing's Role in the Implementation of Business Strategies: A Critical Review and Conceptual Framework. *Journal of Marketing*. 1987, 51(July): 15-33.
- [17] B. Lukas. Strategic Type, Market Orientation, And The Balance Between Adaptability And Adaptation. *Journal of Business Research*. 1999, 45(June): 147-56.
- [18] B. Jaworski, and A. Kohli. Market Orientation: Antecedents and Consequences. *Journal of Marketing*. 1993, 57, pp. 53-70.
- [19] V. Zeithaml, A. Parasuraman, and L. Berry. Delivering Quality Service. New York: The Free Press, 1990.
- [20] J. Narver, and S. Slater. The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*. 1990, 55, pp. 20-35.
- [21] A. Griffin and J. Hauser. Integrating R&D and marketing: a review and analysis of the literature. *Journal of Product Innovation Management*. 1996, 13(3): 191-215.
- [22] J. Xie, X. Song, and A. Stringfellow. Interfunctional Conflict, Conflict Resolution Styles, and New Product Success: A Four-Culture Comparison. *Management Science*. 1998, 44(12): 192–206.
- [23] J. Andrews and D. Smith. In Search of the Marketing Imagination: Factors Affecting the Creativity of Marketing Programs for Mature Products. *Journal of Marketing Research*. 1996, 33(2): 174-187.
- [24] J. Nunnally. Psychometric Theory. New York: McGraw-Hill, 1967.
- [25] J. Armstrong and F. Collopy. Competitor Orientation: Effect of Objectives and Information on Managerial Decisions and Profitability. *Journal of Marketing Research*. 1996, 60: 188-199.