

**DISRUPTIVE INNOVATION, ENTREPRENEURIAL MARKETING,
AND COMPETITIVE ADVANTAGES**

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Abstract

This paper originally contributes to the current literature by proposing a conceptual model which integrates modified and extended entrepreneurial marketing behaviors to enhance firms' competitive advantages with the disruptive innovation processes. Four specific entrepreneurial marketing behaviors; rapid feedback to uncertain events in innovative processes, creating focused efforts to achieve goals, cross-disciplinary-team practices, and continuous market engagement establishment, are proposed to enhance the disruptive innovation and then result in the firm competitive advantages. Moderators; size of firm, radical innovation level, employee resistance level, degree of innovativeness, degree of proactiveness, degree of risk taking, and level of limited affordable loss, susceptibly affecting on the relationships between the integration of disruptive innovation process with entrepreneurial marketing behaviors and competitive advantages are proposed in the model. Specific indicators of competitive advantage are also identified. Academic and practitioner implication, and future research recommendations are provided.

Keywords: Disruptive innovation, Entrepreneurial marketing, Competitive advantage

1. Introduction

Currently and considerably, disruptive innovation has been concerned and focused by studies of both scholar and practitioner (e.g. Christensen et al., 2015; Koury, 2015). As disruptive innovation can provide beneficial effects in terms of firms' competitive advantages and performance (Blauth et al., 2014; Engel, 2011; Hacklin et al., 2005; Minoja et al., 2010), there have been studies investigating various dimensions related to this becoming jargon for proactive organizations. For instance, Carayannopoulos (2009) studies what and how specific conditions leverage newness and smallness of firms for commercializing disruptive product innovation. Freeman and Engel (2007) examine how startup entrepreneurial firms and mature corporates can effectively and efficiently execute innovation. The authors find that entrepreneurial behaviors especially for decision making and operations can utilize the innovation opportunity very successfully, while the mature corporates implicitly enhance innovation processes by combining the entrepreneurial behaviors.

The disruptive innovation, initiated in 1995, is defined as a breakthrough technology changing the performance metrics along which the firm competes (Pinkse et al., 2014). In particular, the disruptive innovation renders the attributes satisfying the current needs of mainstream markets. Explicitly, a startup firm particularly as a small or medium one can obtain advantages from the disruptive innovation while an established firm gets disadvantages. However, not every firm conducting the disruptive innovation can succeed. Not every successful firm does apply the disruptive innovation (Christensen et al., 2015). Mallick et al. (2013) support this aforementioned statement by providing evidence that a disruptive product innovation can provide a negative performance outcome.

Hills et al. (2008) define entrepreneurial marketing firm as the interfacing between entrepreneurship and marketing. With respect to this developed form of organization, the specific focus of studies in the entrepreneurial marketing area composes of small and medium marketing, growth oriented marketing, and high growth intentions. Thourmrungrroje and Racela (2013) point out the failure of an entrepreneurial firm in its new product development processes. Thus, there is an inspiration to study what behaviors or characteristics of the entrepreneurial marketing firm are suitable for innovation processes. Based on the Stevensen and Jarillo's (1990) definition of entrepreneurship, it can be inferred that an established firm can apply the entrepreneurial marketing in the firm's business management in terms of opportunity persuasion. Moreover, Miles and Darroach (2006) point out clearly that large firms can improve their radical innovation by applying entrepreneurial marketing. Nevertheless, little research has integrated the disruptive innovation theory with entrepreneurial marketing approaches by particular which both small-and-medium and large organizations can apply (Matsuno et al., 2014). Furthermore, competitive advantage that has been used as the measurement of the disruptive innovation process's outcome still has been in an inconclusive agreement. For example, Mallick et al. (2013) use firms' market and financial performances to represent the firms' competitive advantage. However, Miles and Darroch (2006) propose the competitive position, resource exploitation, and risk and opportunity management capability as competitive advantage. That is, this article intends to identify the most appropriate indicators for competitive advantage under its level of relevancy with disruptive innovation process and entrepreneurial marketing behavior or characteristics for the future empirical research.

Before stating the research gaps and study intentions, the author would provide an information with respect to the selective results of qualitative exploratory survey conducted by the author in the early of June 2016. The qualitative exploratory survey occupies an in-depth interview as the research tool collecting opinions and perceptions of thirteen executive managements relevant to the issues of innovation, disruptive innovation, entrepreneurship, entrepreneurial marketing, and key success factors for disruptive innovation implementation incorporated with the entrepreneurial marketing behaviors. The in-depth interview survey follows the Miles and Darroch's (2006) guideline for qualitative analysis techniques. In other words, the initial step uses open-ended questions followed by probing questions through interview and discussions. The results of exploratory survey, briefly shown in the Appendix from Table 1. to Table 4., provide preliminary understandings regarding the inferior knowledge and different perceptions of the firms' executives toward the key aspects, disruptive innovation and entrepreneurial marketing. The interview results confirm the importance of this study because of the presented failure propensity of firms in implementing the disruptive innovation process incorporated with the entrepreneurial marketing characteristics.

Thirteen respondents have age ranges from 29 to 61 years old (Table 1.). About two-third respondents are male and almost all take the high executive positions, e.g. CEO, Executive Vice President, Managing Director, Director, etc. However their company size is considerably different ranged from the revenue per year at 1.2 million baht to 500,000 million baht and from the net profit per year at 500,000 baht to 25,000 million baht. Therefore, the position titles may not present the level of organizationally controlling position compared to the size of company. Moreover, the respondents' business type and time length in position are considerably different. That is, these respondents can be appropriate sample for the exploratory survey in terms of a variety of their profiles covering small and large firms, different business contexts, and respondents' experience, respectively.

Anonymous presentations show that there is no much difference for the knowledge relevant to the general innovation (Table 2.). However, respondent M presents a unique meaning of innovation which is mixed up with the disruptive innovation definition. For the respondents' knowledge about disruptive innovation, the results display a variety of their understanding. Mostly, the respondents perceive the disruptive innovation as the general innovation or incremental innovation (e.g. respondents A, B, C, L and M). Only respondents D and E are likely to provide the meaning of disruptive innovation consistent with the Christensen's et al. (2015) definition for which the disruptive innovation supports small or medium firms to conduct a radical innovation forcing the incremental innovation to be inferior. The small or medium firms can provide the markets by innovative products or services with lower prices for upgrading to challenge the mainstream markets. Interestingly, respondent D is a representative of large firm while the respondent E is from a small firm. Therefore, it can be concluded that the disruptive innovation should be applied for both small and large firms.

In particular, as the author presents the definition of disruptive innovation to all respondents and asks the suitability of this concept to their firm. All of them, except for the respondent F, totally agree that the disruptive innovation fits to their firm and additionally they have tried to apply this innovation with the firm (e.g. respondents A, E and M). This conclusion supports the argument that it is not necessary only for small or medium firms enjoying the outcome of disruptive innovation. Large firms, represented by respondents A, B, C, D and M, are willing to apply this radical or disruptive innovation with their firm too.

According to the knowledge relevant to entrepreneurship, respondents A, D, E, I and K are likely to provide meanings close to the entrepreneurship's definition (Table 3.) compared to the definition in the literature review section. However, respondents B, C, H and L are likely to explain the meaning of entrepreneurship by the definition of entrepreneurial marketing. For the rests, respondents F, G, J and M provide the inconclusive meanings, being difficult for specific classification. Surprisingly, when the author tests the respondents' understanding with respect to the entrepreneurial marketing, there is only one case (respondent A) providing a close meaning of entrepreneurial marketing compared to the details in the literature review section. Even though, the respondent A presents his understanding that is consistent with the literature, his explanation shows only two dimensions; proactiveness and risk taking as the firms pursue entrepreneurial marketing activities rather than three important characteristics; innovativeness, proactiveness, and risk taking. Respondents C, J and K display their knowledge by catching up key words, 'marketing' that is reflected by pursuing marketing and 'entrepreneurial orientation' that is reflected by owner or entrepreneur. However, their explanation has no clear in terms of the construct's item specification. Moreover, the respondents E, G and L point out that entrepreneurial marketing is likely to focus on only firms' profit rather than customers' benefits. Based on these results, it can be interpreted that they misunderstand the concept of entrepreneurial marketing and especially of the traditional marketing one. Respondents B, D, F, H, I and M present their understanding as the traditional marketing concept. Therefore, it can be suspected that both small and large firms participating in this exploratory survey can hardly integrate entrepreneurial marketing to disruptive innovation successfully when they misunderstand or have insufficient knowledge.

With respect to perceived key characteristics of entrepreneurial marketing, only respondents A, D and K are likely to show appropriate explanations of these terms (Table 3.). All respondents provide important key success factors for implementing the disruptive innovation such as having innovativeness, looking for new opportunity, risk taking, resource

management, policy commitment, and communication capability. Based on this information, the author would analytically integrated these factors with the literature reviews to provide a conceptual model that specifies the dimensions of entrepreneurial behaviors for enhancing disruptive innovation implementation.

Based on the characteristics of entrepreneurially oriented firms, Table 4. shows that all respondents have partial agreements with the relevant dimensions of these characteristics; innovativeness, proactiveness, and risk taking. In particular, the respondents discuss in specific aspects, such as opening or promoting people in R&D to be innovative reflecting the innovativeness perspective (e.g. respondents A, H and K), looking for opportunity reflecting the proactiveness perspective (e.g. respondents A, G, H and M), and accepting risks or having readiness for risks reflecting the risk taking perspective (e.g. respondents B, D, G, L and M).

As the results of qualitative exploratory survey, the aforementioned information displays inferior knowledge and some misunderstandings of firms for disruptive innovation and entrepreneurial marketing represented by the respondents' opinions and perceptions. Again, there is little research investigating a direct integration of entrepreneurial marketing to the disruptive innovation (Matsuno et al., 2014). Thus, this article aims to fill the gaps by providing a conceptual model identifying relevant and important characteristics of the entrepreneurial marketing that the disruptive innovation can integrate with to enhance firms' competitive advantages and proposing propositions for future empirical research. As a result, the conceptualized model and developed propositions in this article can contribute to the previous literatures by enhancing understandings how the application and/or integration of the disruptive innovation with the entrepreneurial marketing can be successful for both small-and-medium firms and large firms.

A structure of this article can be displayed as follows. The next section will provide an exploratory review of selective literatures to derive propositions and develop a conceptual model. In particular, the crucial aspects, disruptive innovation, entrepreneurial marketing, and competitive advantage will be discussed in details. Derivations of key propositions relevant to the integration of disruptive innovation with entrepreneurial marketing are shown. Then, theoretical and practitioner implications will be discussed. Further research directions also are displayed. Important aspects are concluded in the last section.

2. Literature review

The exploratory selective literature reviews on disruptive innovation, entrepreneurial marketing, and competitive advantage are provided to develop an integrated conceptualizing model and propositions for future research.

2.1 Disruptive Innovation

Since its initial development in 1995, the disruptive innovation theory has been applied in real business environments and studied by various academics. However, Christensen et al. (2015) point out that there have been misunderstanding and misleading for both business applications and academic studies. In particular, the disruptive innovation originally drives companies without large resources to serve low-end markets that established company overlooks because of the markets' low profit margins. Additionally, Pinkse et al. (2014) cite the definition of disruptive innovation that it is a technology changing the competition bases through a change of performance metrics along which firm competes. As a result, the disruptive innovation disappoints attributes that gratify the current needs of mainstream markets. This traditional definition seems to suggest that the disruptive

innovation only fits to a small or medium company which has inadequate resources. Hacklin et al. (2005) also support this statement by expressing that incumbent firms generally fail to get advantages from disruptive innovation while new market entrants or startup firms, which generally are small and medium company, obtain benefits from their innovation application. Yet, Engel (2011) argues that incumbent firms can successfully adapt the disruptive innovation to their competitive market management and can get competitive advantages. That is, it can be inferred that there would be a condition under which the disruptive innovation can also be conducted by large firms rather than only small and medium firms can do. This inference is consistent with the study of Miles and Darroch (2006).

In addition, Christensen et al. (2015) convinced that the disruptive innovation is appropriate for inferior companies focusing on the low-end and newly created markets rather than the existing growth markets. In other words, the disruptive innovation intends to drive the price down at least in the beginning stage of theory application into practice. However, general firms have improved and grown up continuously by higher standards of products and services, especially for newly created markets. Likewise in the low-end markets, firms would increase value delivered to customers for being in a better market position. Then, these firms can achieve serving the mainstream market and be able to challenge the market leader. Thus, the disruptive innovation theory should be applicable to large firms, at least for the ones that expand their new markets.

Koury (2015) provides an interesting issue of disruptive innovation theory that most firms will be forced by disruptive market conditions. This provision is consistent with Carayannopoulos' s (2009) warning aspect that the large or strong incumbents can be challenged by small and medium firms as the latter's disruptive innovation initiatives. In other words, firms ought to proactively kick off their disruptive innovation by themselves rather than reactively be forced by markets. Important examples of disruptive market forces, used by Koury (2015) similar to Christensen's et al. (2015) and Engel's (2011), are Apple and Uber which changed music and taxi industries respectively. That is, both small-and-medium and large firms need to pay attention to the disruptive innovation aspect and search an appropriate approach for the adaptation of this concept to their firms' practices. Otherwise, these firms perhaps face survival crisis and/or competitive disadvantages.

Disruptive innovation has important characteristics, incremental to radical changes, by which the regular practices of firms are generally affected in terms of their strategic and operational changes. Carayannopoulos (2009) points out that an incremental innovation requires a little change with respect to a firm's existing knowledge and established designs. Accordingly, the incremental changes augment and strengthen the existing knowledge of firms that link to conventional customers. There may consequently be an improvement of markets and business performance as regular incumbents have conducted their strategic and operational decisions because of current profitability (Christensen et al., 2015). However, the incremental innovation hardly drives a uniqueness for the firm, the firm's specific product or corporate brands. Therefore, a small and medium firm that intends to steer upmarket position by its uniqueness is unlikely to apply the incremental innovation.

Oppositely, a radical innovation is a threateningly forcing change for existing knowledge and market equities (Thoumrungroje & Racela, 2013). Large and strong incumbent firms generally overlook this disruptive innovation type since the existing high profit margins of current markets are preferable. In addition, an adaptation of the radical innovation perhaps increases firms' costs. However, the small and medium firms that intend to develop their market position in mainstream markets focus on the radical innovation.

Therefore, there has been a risk for large firms or strong incumbents if they have not searched an approach to adapt the radical disruptive innovation. Indeed, Hacklin et al. (2005) identify obviously that the incremental innovation is not a part of the disruptive innovation. Consequently, to achieve the major objective of this article in terms of the integration of disruptive innovation with the firm, the author proposes the radical innovation as the focused approach of disruptive innovation.

Hacklin et al. (2005) also discuss how to succeed in conducting the disruptive innovation. It is agreed that firms should be concerned a dynamic condition of innovation, indeed for both disruptive and sustaining innovations. The crucial conclusion remarked by the authors is that there is a need of cumulative and evolutionary practices of core capabilities in accordance with a market driven perspective. In addition, an integration of goal oriented management regarding disruptive innovation with corporate strategy is very important. In other words, if any firm would like to succeed by the disruptive innovation adaptation, should the firm have strategic and operational approaches concerning market- and goal-driven management practices?

According to the above questioning conclusion, there is a requirement to investigate what characteristics and/or factors that both small-and-medium and large firms should have for executing the disruptive innovation to achieve competitive advantages. Blauth et al. (2014) discussed a very useful relevant aspect in terms of entrepreneurial decision making which the decision is not confined by a startup firm only. The important characteristic of this decision making is that 'opportunity is created rather than observed', for which it is inferred that if a firm can create a change of chances regarding market- and goal-driven management practice, then the firm has a high tendency to achieve competitive advantage through disruptive innovation application.

However, it is definitely normal that there is resistance from relevant people in organizations (Koury, 2015), especially for large incumbents in which both executives and line employees have settled up their performances, working environments, and compensation. Particularly, the radical innovation which is disruptive requires an organization's strategic and operational adjustments, which could be costly and risky. Thus, it is not unusual to have resistance in the organization. In other words, there would be a necessity of investigation of firm specific behaviors and characteristic suitable for disruptive innovation especially for overcoming the resistance. Specifically for this paper, the author intends to study what the firm's entrepreneurial marketing behaviors and/or characteristics are appropriate to enhance the disruptive innovation applications.

2.2 Entrepreneurial Marketing

Entrepreneur and/ or entrepreneurship has been very familiar to Thai and Thai organizations, and also Asian organizations, since the gigantic crisis in Asia started from Thailand in 1997, namely 'Tom Yum Goong' crisis. Many established companies and/or large firms bankrupted during the crisis. Subsequently, there were many executives, managers, and operational employees who were fired, and then these unemployed people made their own startup company as small and medium firms. Thus, initially, the entrepreneur generally refers to the startup or small and medium firms. However, Stevensen and Jarillo (1990, p.23) define entrepreneurship as "a process by which individuals-either on their own or inside organizations-pursue opportunities without regard to the resources they currently control". It can be implied that any firm, the small and medium or established ones, can have entrepreneurship as long as they have entrepreneurial behaviors or characteristics and pursue

opportunities regardless the existing available resources. In other words, the keywords for entrepreneurship are not confined for the startup or small and medium firms but the opportunity oriented ones. This inference consequently supports the aim of this paper's contribution to apply the entrepreneurial marketing for established firms to drive the disruptive innovation effectively and efficiently.

Hills and Hultman (2013) exclaim that entrepreneurial marketing, particularly in the area interfacing between entrepreneurship and marketing, still has been an important and interesting aspect for investigation and comprehension acquisition to achieve fulfil knowledge and superior solutions for academics and market practitioners respectively. In other words, there still have been research gaps for theoretical development and management improvement. Thourmrunroje and Racela (2013), for instance, discuss the possible failure of an entrepreneurial firm which can be generally exposed in new product development when the firm lacks a customer or market-driven orientation. That is, the entrepreneurial marketing can enhance the competitive advantage of firm in terms of innovation executions. Therefore, academics and practitioners should focus on studying important behaviors or characteristics that entrepreneurial marketing firms should have or develop for effective and efficient business-goal achievement especially for the innovation formation and execution in current competitive market environment.

Initially, research on entrepreneurial marketing specifically focuses on at least three important areas: small and medium marketing, growth oriented marketing, and high growth intentions (Hills et al., 2008). In particular, the small and medium marketing is generally controlled by owner or manager concerning customers as a central emphasis. For example, Sam Walton, the founder of Wal-Mart, established and had managed his retailing business by keeping close contacts with the Wal-Mart's customers and low price value under his controlling manner (Slater, 2003). Walton had visited his customers as many as he could to assure that he understood his customers' needs and could assort the goods or services to fit their needs. However, entrepreneurial marketing can be implicitly formulated and executed in extremely competitive markets by dynamic high growth entrepreneurs in a startup firm or small-and-medium firm or even established large firm (Hills & Hultman, 2013). As in the Wal-Mart case, John Walton, a son of Sam Walton, who became the executive of Wal-Mart after Sam Walton passed away, has managed and built the company's remarkable success under the remained philosophies of entrepreneurial marketing that Sam Walton established. In specific, the Walton family announces deliberately that they have intentionally involved with the company and insisted that the sustained Sam Walton's way for Wal-Mart must be endlessly preserved (Slater, 2003). Noticeably, when John Walton has driven the Wal-Mart's strategic direction and operational practices, the firm is not the small-and-medium one anymore. That is, it can be inferred that Wal-Mart, which was a startup entrepreneurial company in the particular time and then became the established firm, has been successful under the entrepreneurial marketing approach until now. Consequently, this article eligibly proposes the conceptual model of integrating disruptive innovation with the entrepreneurial marketing which can be applied to both small-and-medium and large firms.

According to the recent study of Blauth et al. (2014), it is considerably clear that entrepreneurship can be a characteristic which is possibly owned by employees rather than only the owner. The authors found that an entrepreneurial decision making practice could enhance employees' creativity in new product development. In other words, the entrepreneurship particularly in marketing decision making or entrepreneurial marketing is likely to be a suitable manner for executing innovation successfully. An important question is

what the crucial characteristics of entrepreneurial marketing are as key success factors in the specific innovation formation and execution processes, especially for the disruptive innovation.

2.3 Competitive Advantage

The statement detailed as "..., *the ability to sustain innovation over time becomes instrumental for firms seeking to create and maintain a competitive advantage*" (Miles & Darroch, 2006, p. 486) implies that competitive advantage is an asset or equity searched by firms. Nevertheless, there are different meanings of the competitive advantage. For instance, Minoja et al. (2010) provide the definition of competitive advantage as the condition that firms have a higher level of economic rents compared to average competitors. In other words, competitive advantage is the situation that firms have the extraordinary amount of outputs when the same amount of input resources is consumed by regular competitors. According to the Minoja's et al. (2010) definition, the competitive advantage is accounted as successful resource exploitation which is consistent with the one of four dimensions proposed by Shane and Venkataraman (2000). Meanwhile, de Zubielqui et al. (2014) are similarly concerned a higher rate of economic rent representing the competitive advantage of firms, in specific the authors point out that market position is the measurement of economic rent.

Shane and Venkataraman (2000) identifies competitive advantage, particularly related to the concept of entrepreneurial oriented firms, into four dimensions; firms' entrepreneurial opportunity recognition and creation, entrepreneurial opportunity evaluation, successful resource exploitation, and superior market - position creation. Miles and Darroch (2006) propose the definition of competitive advantage mostly relevant to entrepreneurial marketing applications by considering three principles, such as strengthen competitive position based on innovation and customer value creation, effective and efficient resource exploitation, and risk and opportunity management capability. Although the Miles and Darroch's (2006) definition does not clearly take the disruptive innovation into account, the scope of this meaning is related to two important aspects, entrepreneurial marketing and innovation. Mallick et al. (2013) link competitive advantage to firm performance as the results of continuous product development by proposing that these two aspects are the same. In particular, the authors measure the competitive advantage through market share, sales growth, earning growth, and profit margin. Therefore, to achieve the current article's objective focusing on the development of conceptual model and proposition provision for disruptive innovation integrated with entrepreneurial marketing, this study integrates the aforementioned definitions and defines the competitive advantage as firms' market position, resource exploitation performance, risk-and-opportunity management competence, market share, sales growth, earning growth, and profit margin.

2.4 Propositions

There is few research implicitly integrating disruptive innovation with entrepreneurial marketing to enhance firms' competitive advantages (e.g. Miles & Darroch, 2006). That is, there is a need to develop a conceptual model to be the framework for future academic and practitioner studies. To fill the research gaps, this article derives and proposes propositions and then a conceptual model as follows.

2.4.1 Rapid Feedback to Uncertain Events in Innovation Processes

Uncertainty is very normal in the new product development especially in disruptive innovation processes (Pinkse et al., 2014). In specific, the disruptive innovation in terms of the radical innovation regularly forces a firm to drive a new technological breakthrough and threaten existing markets (Thourmrunroje & Racela, 2013). Hacklin et al. (2005) point out

that the disruptive innovation is dynamic because the aims of entrepreneurial orientation are to catch up dynamic customer preferences across diverse market segments. Coomber (2014) postulates the lifestyle and behaviors of Atte Miettinen, founder of Pryte which helped smartphone users reasonably using mobile data and was acquired by Facebook earlier of 2014. As a disruptive entrepreneur who has had a disruptive creativity and implicitly taken high uncertainty, Miettinen has developed his five technology startup firms. In particular, the key success factor that Miettinen realizes is a profound understanding of the dynamics of markets. Miettinen's experiences show that there is a remarkable uncertainty in the processes of disruptive innovation and a need of specific entrepreneurial manners. Matsuno et al. (2014) and Thourunroje and Racela (2013) point out that for radical innovation the entrepreneurial orientated firms should have three important characteristics; innovativeness, proactiveness, and risk taking.

Thourunroje and Racela (2013) also provide important details for each of above characteristics of the entrepreneurially oriented firms as follows. Innovativeness refers to a firm's propensity to participate in novel idea, experimentation, and creative processes. Proactiveness represents a firm's market opportunities focuses and acquisitions which are generally executed through predictions and active actions on future customer requirements. Risk taking refers to a firm's readiness to commit important resources to opportunities having a chance of failure. With respect to the first dimension, innovativeness, it can be inferred that relevant persons in the disruptive innovation processes particularly employees incorporated with creativity must deal with uncertainty. In particular, the radical innovations require organization leader and/ or relevant employees to have creativity connected with the high level uncertainty (Blauth et al., 2014).

Engel (2011) discusses important characteristics coping with the uncertainty in the disruptive innovation processes. The disruptive innovation does not depend on technical breakthroughs, however, the creative business platform is very crucial to facilitate the effective innovation development and commercialization. The author specifies that rapid feedback is one of the important characteristics for entrepreneurially oriented firms to drive innovations. Considering the Sarasvathy's (2001) explanations regarding entrepreneurial decision making by an effectuation theory, it is found that opportunities challenging a firm are created rather than observed, which results in a link with creativity. Hills and Hultman (2013) also support the effectuation theory in explaining the characteristics of the entrepreneurial marketing firms. That is, the entrepreneurial decisions seem to be driven by prevailing individual creative skills. This creative characteristic is consistent with the innovativeness manner specified by Matsuno et al. (2014), and Thourunroje and Racela (2013). Hills and Hultman (2013) propose that based on the effectuate characteristic, the entrepreneurial marketing firms have tended to have behaviors as growth-oriented, opportunity-oriented, highly interactive, highly market immersed and customer value oriented. Therefore, for dealing with the uncertainty manners of disruptive innovations, the entrepreneurial marketing firms intend to follow available means from their creative decision making rather than goal orientation (Blauth et al., 2014). Specifically, when any means in the disruptive innovation processes is available, the entrepreneurial marketing firms intend to response quickly because the firms undervalue the forecasted facts as very uncertain and prefer their own creative skills over market-goal relationship analysis. With the rapid feedback or response to uncertain events as the available means in the innovation processes, firms do believe there will be an enhancement of their competitive advantage under the conditions of firms' entrepreneurial orientation; innovativeness, proactiveness, and risk taking (Engel 2011). Thus, this article can develop a proposition for further investigation as

Proposition 1. Disruptive innovation enhances firms' competitive advantages, when the firms apply the entrepreneurial marketing behaviors in terms of rapid feedback to the uncertain events in innovation processes and under the firms' innovativeness, proactiveness, and risk taking situations.

2.4.2 Creating Focused Efforts to Achieve Goals

As the risk-taking characteristics of entrepreneurial orientation discussed by Matsuno et al. (2014) and Thourunroje and Racela (2013), the uncertainty again is a regular manner in the disruptive innovation processes. In particular, for disruptive innovation processes, there are high possibilities of information shortage which perhaps would induce uncertainty (Blauth et al., 2014). Therefore, there is a difficulty to forecast the expected returns or possible losses. Similarly, the effectuation theory convinces that the entrepreneurial marketing should rely on a principle of affordable loss and an acceptance of unexpected innovation results. That is, entrepreneurial marketing firms hardly prepare an accurate prediction of future circumstances. Consequently, it is difficult or has less possibility to predict how much loss can happen when the disruptive innovation does not succeed. Entrepreneurial marketing firms should accept the loss that the firms can afford rather than attempt to calculate the exact loss and define the loss limitation. The set-up loss limitation perhaps confines the creativity and limits or kills the innovation performance in the highly competitive market. Hills and Hultman (2013) support the affordable loss principle by providing the entrepreneurial marketing firms' orientation. In particular, the authors convince that entrepreneurial marketing firms should accept an affordable loss to achieve goals as growth- and opportunity-oriented, and customer value oriented. Engel (2011) also agrees with the affordable loss principle as the entrepreneurial marketing firms' characteristics to enhance the disruptive innovation processes by initiating the idea of 'fail fast'. It is worth being failure in the early stage and acceptable to pay loss at this state rather than pay large amount of money later. However, instead of passively accepting the affordable loss, with the creativity skills of the entrepreneurial marketing, consistent with the proactiveness proposed by Matsuno et al. (2014), the entrepreneurial marketing firms should create particular efforts to achieve the firms' goal even if there is a given affordable loss in mind (Engel, 2011). Thus, this study proposes the proposition regarding the characteristics of the entrepreneurial marketing firms, creating focused efforts, within the conditions of affordable loss as

Proposition 2. Disruptive innovation enhances firms' competitive advantages, when the firms apply the entrepreneurial marketing behaviors in terms of creating focused efforts to achieve goals under the affordable loss conditions.

2.4.3 Cross - Disciplinary-Team Practices

With regard to the Saravathy's (2001) effectuation theory and the Blauth's et al. (2014) conclusions for the entrepreneurial decision making, it is found that the partnership concern is another important characteristic of entrepreneurial marketing firms. This partnership orientation refers to the attitude that firms have towards outsiders. As the outsiders are perceived as potential partners who can contribute to the disruptive innovation processes by sharing information, sharing knowledge, collaborating extended resources, and broadening the firm's expertise for mutual benefits (Blauth et al., 2014). However, Engel (2011) proposes that cross-disciplinary teams are very important for firms to innovate and change rapidly. Top cross-knowledge-and-experience teams can contribute to the disruptive innovation processes very well in terms of sharing knowledge and experiences by which the top teams can recognize what has gone in a wrong direction. Furthermore, the cross-disciplinary team can work together to drive actions very quickly as the team's members who

may generally be delegated from different functions. As a result, the entrepreneurial marketing firms having the cross-disciplinary team can practice responding to the uncertainty in the disruptive innovation effectively and efficiently. In particular, this article intends to extend the perspectives of the effectuation theory by including all relevant stakeholders, such as employees, into the cross-disciplinary team rather than limiting only the partnership concerns for outsiders. Based on this cross-disciplinary team building, the level of employee resistance should be reduced. With relatively more effective and efficient practices of the cross-disciplinary team, the disruptive innovation processes can be driven better. Thus, this paper proposes the proposition as

Proposition 3. Disruptive innovation enhances firms' competitive advantages, when the firms apply the entrepreneurial marketing approaches in terms of cross-disciplinary-team practices under the employee resistance level.

2.4.4 Continuous Market Engagement Establishment

Generally, disruptive innovations are not developed by technological areas only. The entrepreneurial marketing firms manage a continuous market engagement process for keeping close contacts with customers. With these engagement activities, firms can have update information, recognize and anticipate product innovation performance matrices, create disruptions (Engel 2011). Miles and Darroch (2006) conclude under the aspect of 'customer intensity' that firms need to insight their current and future customers and have examined constantly whether current products still have been suitable for the customers. Furthermore, firms necessitate to investigate what customers' new needs must be satisfied and create new product - market - technology areas.

Indeed, the Wal-Mart case in the reign of Sam Walton shows the benefits of market engagement directly to the Wal-Mart's disruptive innovations' successfulness. Also, the Starbucks case has postulated the competitive advantage and performance from the market engagement particularly that the Starbucks can overcome skeptical messages from various media (Michelli, 2007). Furthermore, the Starbucks conducted the disruptive innovation along with the market engagement when the Starbucks was proposing itself into the market as a new and small firm. Until now, the Starbucks still has pursued the market engagement continuously to achieve its innovation performance and competitive advantage. Thus, this article proposes the proposition with respect to the entrepreneurial marketing characteristics enhancing the disruptive innovations, resulted in competitive advantage, through the continuous market engagement establishment as

Proposition 4. Disruptive innovation enhances firms' competitive advantages, when the firms apply the entrepreneurial marketing approaches in terms of continuous market engagement establishment.

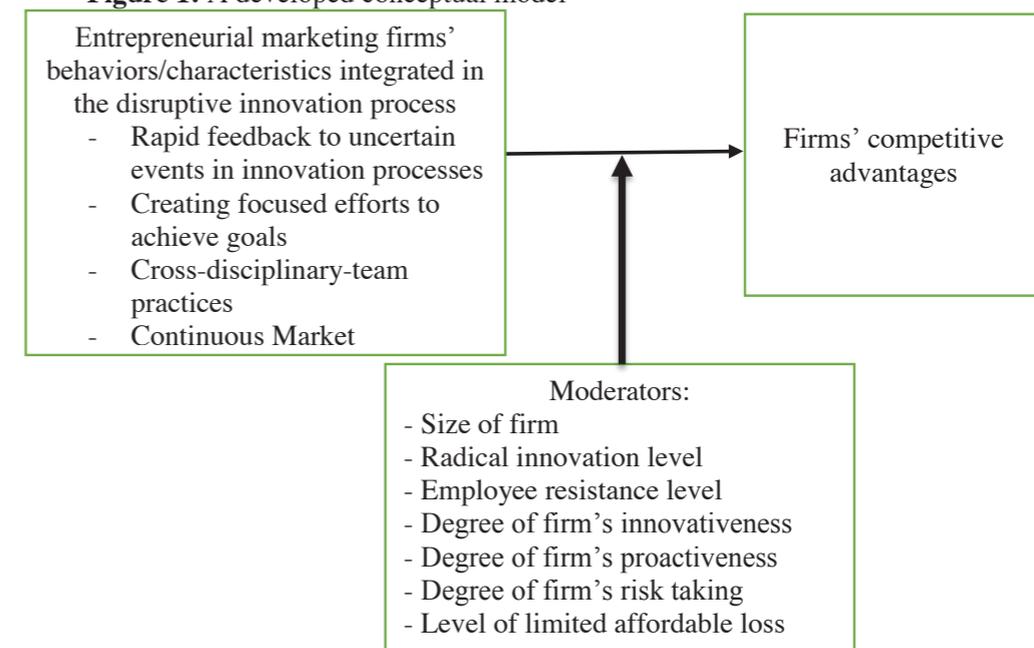
3. Theoretical Implications

As this study aims to provide a conceptual model and propositions for integrating disruptive innovation with the entrepreneurial marketing to enhance firms' competitive advantages, the selective literatures in the areas of disruptive innovation, entrepreneurship, entrepreneurial orientation, entrepreneurial marketing, and competitive advantage are reviewed. In specific, this paper adapts the four dimensional characteristics or behaviors of entrepreneurial decision making; means driven, affordable loss principle, partnership orientation, and acknowledge unexpected results of innovations proposed by Sarasvathy (2001) to be the framework of the entrepreneurial marketing firm's behaviors. The main reason of the adaptation is that Hills and Hultman (2013) who are the gurus in the entrepreneurial marketing accept the effectuation theory by using the dimensions to explain

the characteristics of entrepreneurial marketing firms. Furthermore, this paper pursues the Engel's (2011) proposed approaches to accelerate corporate innovation as the constructive theme to modify the four effectuation dimensions, since the Engel's (2011) guidelines can enhance the knowledge and understanding about the entrepreneurial marketing particularly that they can be applied for established firms as well. In addition, the Engel's (2011) entrepreneurial behaviors are consistent with the effectuation theory and the behavioral guidelines extend the limited scope of four dimensions.

Regarding the conceptual model (Figure 1.) and the proposed propositions, this article contributes to the current literatures by two important aspects. First, this study directly integrates the disruptive innovation aspect with the entrepreneurial marketing to find the crucial behaviors or characteristics of entrepreneurial marketing firms for enhancing the firms' competitive advantages with respect to the disruptive innovation process. For this contribution, Matsuno et al. (2014) point out there is little research doing this integration scheme. Therefore, this study originally opens the research forum for academics regarding the disruptive innovation process and characteristics, the entrepreneurial marketing behaviors or characteristics, and these dual aspects' congruency for enhancing the firms' competitive advantages. Second, with respect to the four developed propositions, this article draws the picture of important and specific behaviors or characteristics of the entrepreneurial marketing firms such as rapid feedback to uncertain events in innovation processes, creating focused efforts to achieve goals, cross-disciplinary-team practices, and continuous market engagement establishment, which are extended from current literatures of the disruptive innovation and entrepreneurial marketing. The proposed propositions could be developed to be hypotheses and put into empirical research to prove the effects of these behavioral dimensions. In addition, as the issues of small or medium firms and large firms whether these firms can enjoy the disruptive innovation outcomes. Also, according to the qualitative exploratory survey, there is the aspect of different knowledge and understanding of firms which may have relationships with the size of firm. That is, this article proposes the firm size into the conceptual model as a moderator. Likewise, both literatures and the qualitative exploratory survey results represent the different level of radical innovation of each firm that may have impact on the model. The radical innovation level is proposed into as the moderator too. According to these proposed conceptual model, this article can contribute to the current literature in various dimensions as are discussed above.

Figure 1: A developed conceptual model



4. Management Implications

With regard to the selective literature reviews and the results of qualitative exploratory survey, this study can provide recommendations for practitioners as follows. First, to enhance competitive advantages as a result of disruptive innovations, firms should design organization's structure and system which can quickly respond to the uncertain events regarding the disruptive innovation. Established firms perhaps adjust themselves to have more mean-driven orientation as the entrepreneurial firm, rather than struck with the traditional analysis models. Conventional analysis models may delay the firms' response to the very uncertain situation of innovations. As a result, firms cannot adjust operational practices to cope with the dynamic conditions on time.

Second, practitioners particularly in the established firms which ever have used budget as the framework of risk taking may need to allow a loss from the innovation processes because this allowance can induce the breakthrough creative changes providing a higher profit later. The limitation of loss may prohibit the creativity which can overcome the high competitive markets. Thus, firm should adapt the behaviors or characteristics of entrepreneurial marketing in terms of creating effects that are consistent with and/or focused on to achieve the competitive goals. Third, the entrepreneurial marketing firms should develop a structure and/or program that can enhance a participation and involvement of key stakeholders joining together as a team especially for the members from different backgrounds and skills. The stakeholders can compose of internal employees and external partners by which the firms can obtain knowledge, information, expertise sharing. Contributions from the cross-disciplinary-team practices can enhance firms in execution of the disruptive innovation since the collaborating knowledge and skills can jointly guide the firm to develop innovative challenges effectively and efficiently.

Finally, the entrepreneurial marketing firms need to establish a continuous market engagement system. This activity can contribute to the firms to insight customers and obtain support from customers as the powerful relationships. As a result, the entrepreneurial marketing which has the market engagement can develop a disruptive product and service to challenge the mainstream market leaders very well.

5. Future Research Recommendations

As this paper originally develops the integrations of disruptive innovation with entrepreneurial marketing by adapting relevant studying areas; disruptive innovation, entrepreneurship, entrepreneurial orientation, entrepreneurial marketing, and competitive advantage, there is a need to push the proposed propositions into an empirical research. In particular, the developments of each construct and measure are required. Furthermore, the conceptual model and propositions are developed mostly from the Western literatures. There may be deviation and incompatible aspects with respect to the cultural diversity. Thus, there may be a need to extend the literature studies to other cultural domains. Similarly, most of previous empirical research have examined under the Western data sets. Therefore, there may be a requirement to conduct empirical studies using various geographical samples. Furthermore, the developed conceptual model and proposed propositions do not identify the characteristics consistent with particular business contexts for which there may be some deviations. Consequently, in the empirical survey, it may be necessary to incorporate this context aspect as a moderating variable in the model.

6. Conclusions

This article aims to develop the integration of disruptive innovation with entrepreneurial marketing to enhance competitive advantages by conducting exploratory literature research. To achieve this intention, a qualitative exploratory survey is conducted to provide a background knowledge for the author and also to support relevant constructs and/or moderators that should be included in the model. Then, relevant literatures are reviewed in the areas of disruptive innovation, entrepreneurship, entrepreneurial orientation, entrepreneurial marketing, and competitive advantage, and then a conceptual model is developed and four propositions are proposed for future empirical research. In particular, this paper originally contributes to the current literatures by proposing modified and extended entrepreneurial marketing behaviors with which the firms' competitive advantages are expected as a result when there is a conduct of disruptive innovation. Four specific entrepreneurial marketing behaviors under various anticipated moderators are proposed to enhance the disruptive innovation, then result in the firms' competitive advantages, composing of rapid feedback to uncertain events in innovative processes, creating focused efforts to achieve goals, cross-disciplinary-team practices, and continuous market engagement establishment. For academic implications, further research is suggested such as identifications of each construct, measurement developments, cause-effect hypothesis testing, incorporation of cultural and context effects, and investigations for the moderating and mediating effects of relevant constructs. For management implications, practitioners should be concerned the four specific behaviors of the entrepreneurial marketing as proposed in this paper for conducting the disruptive innovation successfully.

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Appendices

Table 1: Respondent Profiles in the Qualitative Exploratory Survey

Respondent	Gender	Age (years)	Position in company	Time length in position (years)	Business Type	Nationality of major control	Revenue per year (Million Baht)	Net profit per year (Million Baht)
A	M	61	DMD	10	Pharmaceutical and Vaccine	Thai	12,000	1,300
B	M	56	MD	20+	IT Distribution	Thai	18,000	200
C	F	56	SBDM	3	Pharmaceutical and Medical Equipment	USA	2,000+	NS
D	M	56	GM	3.3	Automobile Parts Manufacturing	Japanese	4,500	350
E	M	58	CEO	1.5	Drilling Pipe	Thai	500	65
F	M	54	MD	5	Pledge	Thai	10	0.7
G	M	36	BM	3	Retailing	Thai	300	40
H	M	52	MD	20	Science and Medical Equipment	Thai	200	15
I	F	29	MD	1.5	Production Factors for Garden Fruits	Thai	1.2	0.5
J	M	NS	MD	4	Chemical Fertilizer	Thai	15	5
K	F	58	EVP	5	Banking	Thai	NS	200
L	F	54	MD	16	Medical Lab	Thai	400	25
M	M	50	D	19	Motorcycle Business	Japanese	500,000	25,000

Notes: M = male, F = Female, CEO = Chief Executive Officer, MD = Managing Director, DMD = Deputy Managing Director, EVP = Executive Vice President, D = Director, GM = General Manager, BM = Branch Manager, SBDM = Service Business Development Manager, NS = Not specify

Table 2: Knowledge and Opinion about General Innovation and Disruptive Innovation in the Qualitative Exploratory Survey

Respondent	Knowledge about General Innovation	Knowledge about Disruptive Innovation	Opinion when definition of Disruptive Innovation is provided
A	<i>New product concept, technology, usage, package, shape, and style that significantly differ from today and create benefit or value to user</i>	<i>It is completely different from the existing one, that the new concept, new way of thought and new way of producing, new way of usage can satisfy the unmet demand. Unmet demand is already known or not yet recognized.</i>	<i>In my business, there is the needs of breakthrough technology in delivering new medicines or vaccine. Our firm uses these technologies in creating or enhancing our competitiveness and value driver through new products introduced to the markets.</i>
B	<i>New thing or new way enhances current operations</i>	<i>New thing or new way that is better than the past one and can substitute the past one.</i>	<i>Disruptive innovation is a need for us. Also, we should execute and lead other firms. For example, let employees have key information for their decision makings.</i>
C	<i>New way or improved way which is different from the previous one and more appropriate. It must be proved that it is an effective and efficient approach.</i>	<i>It is a new technology that definitely different from the previous approaches. This new thing or new way can make the previous one obsolete.</i>	<i>Disruptive innovation is suitable to our firm.</i>
D	<i>It is a new technology, thinking, production process or working process or new idea for making things better.</i>	<i>Not sure about it. It is the innovation for doing thing much simpler with moderate quality required and a lot cheaper price.</i>	<i>Japanese manufacturers always use the KAIZEN process to find improvements that sometimes lead to some innovations. We always face challenges from copy cats. We have to think outside the old box to create new products with lower price but reasonable quality.</i>
E	<i>It is technology, thinking methods, production process, and creative process which are created and developed differently from the previous ones. It makes life better or up to date.</i>	<i>Breakthrough technology. Simpler products or services. Lower prices. Make more people affordable.</i>	<i>We are pushing this concept into our company too.</i>
F	<i>Inventions, products, and services which are produced and have benefits.</i>	<i>Products or services are invented and have high effectiveness and efficiency (lower costs) in facilitating people</i>	<i>It may not fit to our firm and we have never applied it to our firm.</i>

Table 2: Continued

Respondent	Knowledge about General Innovation	Knowledge about Disruptive Innovation	Opinions when respondent is provided by the definition of Disruptive Innovation
G	<i>New things</i>	<i>I do not understand this kind of innovation.</i>	<i>I think it may be suitable for our company, however we have never tried to use it.</i>
H	<i>Products or services which create better value to satisfy recognized needs or unrecognized needs.</i>	<i>Breakthrough changes in our thinking, knowledge, operations, and technology.</i>	<i>Our competitive situations, business opportunity, and consumer behaviors force us to use disruptive innovation. I have started this scheme, e.g. setting up structure (creative environment), encouraging employees to learn and propose new ideas.</i>
I	<i>Concept development and new thing creation which add value to the existing things.</i>	<i>Integrating technology and business management to create new things, develop products and services which can change customers' attitude.</i>	<i>It should be suitable for our business. At this moment, we use innovation or technology in our business operations. For example, we facilitate our customer by website trading. Also, social media is applied in our business. Our innovation is the delivery of products to customers' house door.</i>
J	<i>Applying new process or new way to improve current knowledge. The innovation must change our current operation.</i>	<i>It will change the current situations inevitably. It must not be the same as the previous one.</i>	<i>This kind of innovation will impact our business considerably. For example, a knowledge and background provision to customers will absolutely change their perception. The customers will not pay too much attention on price as usual.</i>
K	<i>Creating new things</i>	<i>Creating new things that have never happened before and also are unexpected. These new things will change behavior significantly.</i>	<i>We have tried to empower and enrich our organization to have this innovation as a core competency. We build creative activities and set up rewards, recognitions, budget to support the innovation creation.</i>
L	<i>New things from human creativity. It is new and gives both direct and indirect benefits to human being.</i>	<i>Remarkable changes from previous situations. These changes make the previous ones obsolete.</i>	<i>This innovation is suitable for our company. We need to search new technology for serving customers more comfortably and faster, and satisfying their needs. This innovation will change our operation process and customer behavior with the confidence and the belief of added value.</i>

Table 2: Continued

Respondent	Knowledge about General Innovation	Knowledge about Disruptive Innovation	Opinions when respondent is provided by the definition of Disruptive Innovation
M	<i>Innovation is the new creation of products or services that will improve people's living, productivity and well-being. Innovation is the result of new technological breakthrough or new creation/new application of existing body of knowledge that will create new segment and benefit the mass market.</i>	<i>The term is to introduce new concept of marketing to be attractive to marketers, or to introduce new marketing tactics in response to changes of customer trends.</i>	<i>The disruptive innovation is the desirable way of strategic direction that will enable the organization to have sustainable business growth. Our company is striving to achieve disruptive innovation at all business units. It takes time. Success and failures happened. Technological innovation or introduction can happen with new creation, however, the acceptance of customers are uncontrollable. Also, may be it is the matter of time.</i>

Table 3: Respondents' Knowledge about entrepreneurship and entrepreneurial marketing (EM), perception of EM characteristics, and key success factors for disruptive innovation in the Qualitative Exploratory Survey

Respondent	Understanding about entrepreneurship	Understanding about entrepreneurial marketing	Perceived key characteristics of entrepreneurial marketing	Key success factors for Disruptive Innovation process
A	<i>Spirit or sense of doing business by thinking and acting like the owner of business</i>	<i>Focusing on opportunities and being ready to take risks. Accountable for decision making.</i>	<i>Opportunity seeker. Risk taker. Decisiveness. Accountable and full of responsibility including marketing concepts and experience.</i>	<i>Open welcome and promote new ideas, not strict to rules but focus on results rather than process.</i>
B	<i>Seeking business opportunities. Always assess opportunities and then exploit the opportunity to make benefit and profits for the firm.</i>	<i>Extended scope of marketing. Realizing wider scope of markets and covering all dimensions affecting firm performance.</i>	<i>Employees act as owner or have entrepreneurship. A firm should have the structure and process to drive new things, reduce limitations, and accept risks and mistakes.</i>	<i>Management must accept mistakes and risks in the process. Also management should support the innovation. For higher difference and higher risks, there should be a unique and independent unit operating the innovation.</i>

Table 3: Continued

Respondent	Understanding about entrepreneurship	Understanding about entrepreneurial marketing	Perceived key characteristics of entrepreneurial marketing	Key success factors for Disruptive Innovation process
C	<i>Having ability in opportunities discovery and opportunities exploitation to develop competitive advantage and capability to satisfy customer needs. Also, being able to adjust itself to the changing environment.</i>	<i>Thinking as an owner when doing marketing</i>	<i>Motivating and paying trust.</i>	<i>Management must really focus on the process by supporting and inspiring employees to think and invent disruptive products.</i>
D	<i>Mindset of the entrepreneur can make business successful, profitable and sustainable.</i>	<i>New thinking of marketing to make business successful, profitable, and sustainable.</i>	<i>Knowledge oriented. Proactively accepting changes and moving fast.</i>	<i>Making clear policy by owner and management toward the innovations. Also providing necessary resources to move forward.</i>
E	<i>Having a spirit of entrepreneur in doing business to obtain sustainable continuous growth and profits.</i>	<i>Concerning firms' profits rather than customers' benefits.</i>	<i>Having people ready for changes. Also these staffs should accept learning new things, new technology, new marketing theory, and following new conceptual procedures.</i>	<i>Executive management has commitment with the firm's policy and provides sufficient resources in the innovation process.</i>
F	<i>Having responsibility, creativity, knowledge and skill, and commitment to achieve business's objectives</i>	<i>Using knowledge and various tools of marketing to achieve business's objectives effectively and efficiently.</i>	<i>Need analysis, planning, policy, and marketing tools for being ready to serve customers' needs</i>	<i>Knowledge, openness, not-strict with rules or traditional formats for both management and employees. Having commitment and continuously seeking opportunity and exploiting that opportunity.</i>
G	<i>Having capability and concerning business ethics.</i>	<i>Concerning only firm's profit.</i>	<i>Focusing on business performance. Concerning investment returns and long term performance.</i>	<i>Looking for new opportunity from the current business.</i>

Table 3: Continued

Respondent	Understanding about entrepreneurship	Understanding about entrepreneurial marketing	Perceived key characteristics of entrepreneurial marketing	Key success factors for Disruptive Innovation process
H	<i>Process of opportunity analysis by using business analysis tools and/or their experiences to make decisions from the data and developed plan. Exploiting and doing business with commitments and believes.</i>	<i>Focusing on strategic or marketing plans which create difference and uniqueness concerning the firm's strengths and customer value to get better solutions than the traditional marketing. In particular, continuously access the specific target markets and create innovation.</i>	<i>Startup businesses. Depending on innovation and new or emerging technology for swift growth by using strategic marketing.</i>	<i>Strategic innovation orientation and realistic practices. Customer engagement and the setting up of new strategic value of products and services. Open for difference and ready for application of external ideas, user experience, new opportunity. Having analysis capability, such as trend analysis. Sustaining and having commitment with the marketing plans under the disruptive innovation.</i>
I	<i>Characteristics which entrepreneur should have such as having creative thinking and good leadership</i>	<i>The operational directions, led by marketing strategy, are to create difference or uniqueness for competitive capability and successful markets.</i>	<i>Having marketing strategy, innovation, value added, and uniqueness which affect customers' decision making for buying the firm's products. Accessing target markets faster by integrating technology for doing business.</i>	<i>Customer insight, business model insight, integrating technology for accessing target markets effectively and efficiently. Also, having patient. Unique or different products or services, and taking risks.</i>
J	<i>It is entrepreneur who comprehends the business model from its establishment to current operation.</i>	<i>The management pursues marketing strategy integrated with entrepreneurship by focusing, attending, committing from its establishment to current operation.</i>	<i>Realizing customer problems and value.</i>	<i>Having communication capability that can convey considerable value to customers.</i>

Table 3: Continued

Respondent	Understanding about entrepreneurship	Understanding about entrepreneurial marketing	Perceived key characteristics of entrepreneurial marketing	Key success factors for Disruptive Innovation process
K	<i>Management has accountability as business owner or whatever the management has operated is to achieve the best practices and has responsibility to company and customers.</i>	<i>Thinking, creating, executing, and making decision to achieve the firm's goals as being business owner. Also, it is operation led by marketing.</i>	<i>Creating brand and having proactive operations to lead markets as being owner. Daring to make decision or having proactive risk taking.</i>	<i>Having entrepreneurial decision making. Also, having culture and mindset of brave in terms of thinking, doing, defending, offending, and openness for stakeholders' opinions.</i>
L	<i>Seeking opportunity, having specific markets, having capital and resources. Also having the sustainable growth approaches.</i>	<i>Accounting the marketing concepts as the first priority.</i>	<i>Orientation in markets. Having continuous product or service development. New products or services must satisfy markets. Creating market and promoting value and behaviors that have good relationships with firm.</i>	<i>Having continuous improvement and catching up new technologies. Having vision that encourages the out of box thinking. Having commitment, budget, R&D, good organization cultures, and good governance.</i>
M	<i>Entrepreneurship is the sense of innovation, ownership, leadership, investment justification, resource allocation and ability to have critical thinking to ensure business survival. Entrepreneurship is required competency of any organization that would like to ensure competitiveness in long run.</i>	<i>It defines the qualities of new marketing sense to have entrepreneurial spirit. Desirable qualities are fostered such as strategic thinking, customer insights, organization alignment, business justification, and valued added supply chain management. Together with mind set to response to customers' need, such as organization agility, knowledge management and customer responsiveness.</i>	<i>It is the characteristics of marketing firm that have the sense of entrepreneurship.</i>	<i>Analyze market characteristics and customer behavior carefully. Product design should maximize the ability to meet customer's benefit. Marketing approach should be based on customer view point, not technological viewpoint. Possess ability to have continuous improvement and feedback to product design section as evaluation.</i>

Table 4: Respondents' opinion about the entrepreneurially oriented firms' characteristics and their effects on innovation process

Respondent	Agreement with the characteristics of entrepreneurial oriented firms in terms of innovativeness, proactiveness, and risk taking	How do firms' innovativeness, proactiveness, and risk taking affect the innovation process
A	<i>The major characteristic of an entrepreneur is looking for opportunities to create profit under any possibility.</i>	<i>We promote people in R&D to be innovative and proactive. In the successful implementation cases, senior employees support young ones by bringing their ideas into practices and providing reward in terms of benefit and reputation.</i>
B	<i>In doing new things, we need proactive manner and generally take risks since it is the new way and has never happened before. We cannot use the previous approach to the new things development process.</i>	<i>These characteristics are the key success factors for innovation process.</i>
C	<i>These characteristics represent an innovation concern, a concentrated practice focus and long term goal orientation.</i>	<i>These characteristics drive us to focus on technology and long term goals.</i>
D	<i>Doing business is always risk taking in some degree depending on the owner's policy. No risk no gain. Proactiveness is needed but if you experience some mistakes you have to correct them.</i>	<i>No doubt. Innovativeness, proactiveness and risk taking with a proper mixed ratio are required for our firm to move forward in the competitive world.</i>
E	<i>These manners can drive our organization excitedly and faster. We can change from defensive to offensive. Also, they make us easier to correct mistakes.</i>	<i>These can increase competitive capability in the innovation process.</i>
F	<i>They are normal for entrepreneurially oriented firms.</i>	<i>They are drivers for achieving goals. Innovativeness and proactiveness will drive the innovation process. However, if risk is so high, it may be the barrier for innovation.</i>
G	<i>They make us searching for new opportunities and getting progress. Risk taking is normal because we cannot predict exactly the outcomes of our decision making. So, every operation has risks.</i>	<i>Enhancing high innovation and extreme format of innovation.</i>
H	<i>They are the key factors driving new product markets, creativity, difference, and value added. Need to look for successful opportunities and investments worth making.</i>	<i>Positive effects on innovation. They can increase firms' competitive capability without high costs. These characteristics can enhance the strengths of team in terms of potential and creativity development for continuous operations.</i>
I	<i>Enhancing business development in the current high-competitive situations</i>	<i>Make changes. Develop products and services. Add value to product considerably. For example, based on these characteristics, our company creates the creative packages serving each customer need.</i>

Table 4: Continued

Respondent	Agreement with the characteristics of entrepreneurial oriented firms in terms of innovativeness, proactiveness, and risk taking	How do firm's innovativeness, proactiveness, and risk taking affect innovation process
J	<i>They can make value added products. Customers realize the value of products.</i>	<i>Reducing competitions and providing benefits to customers.</i>
K	<i>Entrepreneurial decision making is the key success factor of disruptive innovation process. Firms must have innovative cultures and mindset, such as readiness for thinking, doing, moving forward and backward.</i>	<i>Firms can always search and discover new opportunities. Also firms can overcome challenges and get the position of leader easily.</i>
L	<i>Develop continuously. Being a leader and faster in markets. Readiness for risk management should be normal for sustainable growth.</i>	<i>Enforcing to carefully and proactively innovate the products wanted by markets. Encouraging to discover, assess, and manage risks.</i>
M	<i>Entrepreneurial firms act as investors in economic system. The firm should be opportunity taking and risk taking. Having market innovation and proactiveness will ensure success in the long run.</i>	<i>They are critical to a firm's success in introduction of innovative products. New product must be unique, user friendly and clearly showing customer benefits. At the same time, the new product should enhance safety and environmental care. The firm should be proactive by analyzing customer changes, anticipating demand and adjusting product design accordingly. The innovative process should be swift to respond to market feedback. At the same time, the firm should strive for continuous improvement in innovative process.</i>