The Relationship Between Operations Strategy and Competitive Strategy In Improving Firm Performance: A Literatur Review

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ABSTRACT: The purpose of this research is to explain model types of relationship between operations strategy and competitive strategy in improving firm performance and supported by fundamental theory. This relationship is based on the theory I/O and RBV theory that perform the different perspective about the best way to reach and maintain the competitive advantage. The result of this review is to find that operations strategy must be consistent by competitive strategy in improving the performance in the company based on the market-led (I/O) and the resource based-views (RBV). Specifically, the competitive strategy becomes the instigator of operations strategy based on I/O theory while operations strategy becomes the instigator of competitive strategy based on RBV theory.

KEYWORDS: operations strategy, competitive strategy, performance

I. INTRODUCTION

The occupation of operations strategy in competitive strategy is stated by Skinner (1978) that operations strategy is different with competitive strategy because the operations strategy is one of functional component which its implementation needs fit with the competitive strategy. Mintzberg (1978) mentioned the important reason of fit because the competitive strategy was the way of company to select the competitive position, while operations strategy was the way to reach and defend the competitive position that was chosen by company. Each important company to find the basic supremacy to compete and the positional supremacy (superior customer value or lower relative cost) that will be reached because each positional supremacy need suitability of competitive strategy with the basic of functional competence in organization where one is production aspect (Day and Werssley, 1986). The relevancy of competitive strategy to operations strategy shows that operations strategy has a few characteristics based on competitive strategy (business), they are (1) the strong pressure to the strategy of leading charge, so the characteristic of operations strategy is the strong pressure in decreasing and controlling the cost, highly technic skill, the strong pressure in losing supplies, highly production standard, material way, and highly machine; (2) the strong pressure in differentiation, so the characteristics of operations strategy is the strong pressure in product and service to be premium valuable. The complexity of product in high level, the last product variation, technic skill in high level, the flexibility of scheduling process in high level (Kotha and Orne, 1989)

Empirically, Gupta and Lonial (1998), Williams et al. (1995), Ward and Duray (2000), Amoako-Gyampah and Acquaah (2008) did research about the influence of competitive strategy directly and non-directly in Firm Performance, where the operations strategy as the mediation variable. The result of the research shows that the operations strategy as the main key of competitive strategy in improving the Firm Performance. Rhee and Mehra (2006). Oltra and Flor (2010) explain that competitive strategy can strengthen (moderating effect) the relationship of competitive strategy in improving the Firm Performance. Operations strategy must be caught and consistent with the competitive strategy (Hill, 1984, Swamidaass and Newell, 1987, Kotha and Orne, 1989). The need to connect the operations strategy and competitive strategy are so important (Corbett and van Wassenhove, 1993) because the peak management must decide whether operations strategy drive the competitive strategy or vice versa when deciding the relationship between competitive strategy and operations strategy (Stonebraker and Leong, 1994: 39). The operations strategy becomes the instigator to competitive strategy (Swink and Way, 1995; Hayes and Pisano, 1996). Where the implementation of operations strategy is built by the strenght and the weakness of operations resource to respond big opportunities (Hayes, 1985; Cleveland et al., 1989, Vickery, 1991). This perspective is RBV theoretical approach which explains that each company is collection of unique resource and the capability becomes the operations basic strategy to support the competitive strategy as the main resource return of company (Hill and Jones, 2007; Hitt et al., 2011). The difference of performance in company in RBV perspective especially caused by uniqueness factor of resource and capability of the company, not due to the characteristic of industrial structure. As for the relationship of

competitive strategy becomes the instigator of operations strategy which are I/O theoretical perspective is market structureas the basic competitive strategy to be adjusted with operations strategy in improving the performance of the company (Ward and Duray, 2000, Amoako-Gyampah and Acquaah, 2008). The purpose of this research is to study deeply the relationship between operations strategy and competitive strategy in improving the firm performance based on I/O theoretical perspective and RBV theory. Studying the discussion from "top-down" or "bottom-up" perspective is the 'external orientation' or 'internal orientation' which the operations strategy as the functional strategy and operations strategy as the business instigator (Slack, 2005). Both perspectives are called '*outside*' and '*inside-out*' in operations strategy role (Slack and Lewis, 2002). The first perspective is formulated by the well-known work of Hill (1984), while the second perspective is formulated in appearance base by Hayes and Wheelwright (1984); Hayes (1985), Hayes and Pisano (1996).

II. FUNDAMENTAL THEORIES

An operations strategy role in improving the performance

An operations strategy becomes the competitive weapon to reach the goal of the company (Samidas and Newell, 1987). As the reason is operations activity presents the biggest part is making the product or service happened in operation, so the production/ operation has big value as competitive weapon in whole strategy of the company (David, 2009, Heizer and Render, 2009). As Stevenson (1999 :7) stated that in company, operation was the core function because there was no reason to build the company, unless resulting something to be offered to the consumer or market. Without the activity and operations function, the other functions like marketing, financial affairs, and human resource wre not meant. This means that all functions or the pillar are integration that must exist and integrated for the company. In this study, the research approach of operations strategy is known as manufacturing strategy contingency paradigm (Oltra and Flor, 2010).

Hayes and Wheelwright (1984) defined the operations strategy as removal pattern of deciding consistent operation. The more consistent the decision, the more support level to competitive strategy. As Slack and Lewis (2011) defined that the operations strategy as deciding pattern that forms long-term capability and kind of operation that contributed to the whole strategy through marketing requirements integration with operations resource. Operations management deciding involves: 1) designing product and service, 2) quality management, 3) desining process and capacity, 4) selecting location, 5) planning of layout, 6) human resource and work designing, 7) management of supplies chain, 8) supply, planning, basic commodity and just-in-time (JIT), 9) scheduling middle-term and short-term, 10) caring (Heizer and Render, 2009). According to Chase et al. (2004) stated that operations strategy was related to deciding the police and widely planning for using production resource from the company to give the best support to competitive strategy of the company in longterm. Operations strategy was the planning that explains how to produce and distribute the product. Operations strategy is as collective deciding pattern that deal based on formulation and using manufacture resource. According to Skinner (1969) has stated that operations strategy could strenghten or weaken the competitive ability of the company. Operations strategy gives the support to competitive strategy as the contribution in improving competitiveness of the company in lon-term (Hayes and Wheelwright, 1984). Operations strategy of the company comprehensively must be integrated by company strategy. Thus, operations strategy is formulated to decide the policies and plannings of resource using to support competitive strategy of the company in longterm (Krajewski et al., 2007).

Heizer and Render (2009) stated that the implementation of operations strategy that was succeed not only being consistent with the consumer demand, but also considering life cycle of product. Operations strategy can not be designed in emptiness, but it must be related vertically with consumer and horizontally with the other parts in the company (Chase *et al.*, 2004). According to Chase *et al.* (2004) has stated that operations strategy was formulated based on strategic mission that was deviation from strategic vision. Thus, to formulate operations strategy, need to identify its strategic vision, that is continued by strategic mission. Identification of strategic vision concerning marketing target is to identify the customer needs. Therefore, the operation activity is demanded to orientate the market which before producing the certain product is needed to know first what the market needs. On the other hand, the existing of company ability is to identify and accomodate its product with the market need, will lenghten life cyce of product so that the company continuity can grow. Operations strategy is viewed as the way of production resource management to produce and distribute the product based on the market need as the best support in competitive strategy (Chase et al., 2004; Ward et al., 1995; Badri et al., 1999; Ward and Durray, 2000; Oltra and Flor, 2010). Formulation of operations strategy has many kinds of dimension and competence requirements or competitiveness prevailed using of the term 'competitive priority' to descibes the competitiveness as like the researchers used (Hayes and Schmenner, 1978; Wheelwright, 1984; Roth and Van der Velde, 1991; Leong et al., 1990; Ward et al., 1995).

But the other term is also used for describing the same concepts like operations strategy taxonomy (Badri et al., 2000), core content and content variables (Adam and Swamidas, 1989), competition dimension (Fitzsimmons et al., 1991), measuring external performance (Fine and Hax, 1985], manufacture task (Skinner, 1969; Bery et al., 1991; Richardson et al., 1985), order winners and order qualifiers (Hill, 1989), organization priority and generic ability (Ferdows and De Meyer, 1990), and production competence (Vickery et al., 1993; Cleveland et al., 1989; Vickery, 1991). Although it is different terminologically, there are wide agreement that manufacture competitive priority can be stated in understanding four basic components : low cost, quality, sending work and flexibility (Hayes and Wheelwright, 1984; Van Dierdonck and Miller, 1980; Wheelwright, 1984; Fine and Hax, 1985; Chase et al., 2004; Heineke and David, 2005; Krajewski et al., 2007, Heizer and Render, 2008). According to Skinner (1969) stated that the company could not be superior in the whole operations strategy equally because it caused "trade-off" that meant strategic importance exchange in deciding which main priority that had been done. Operations strategy can succeed if it is based on the clear purpose that has been decided by operations work goal priority (such as cost, quality, sending speed, or flexibility). But Ferdows and De Meyer (1990) note that operations ability will increase each others. So that the supremacy of operation is built in cumulative model that is called 'sandcone'. There are ideal sequence where operations ability must be developed. The first point or sandcone base is the supremacy in quality, then building supremacy in trustworthiness, therefore flexibility ability, lastly supremacy in cost. Emphasizing of quality must be built to continue the dependableness building. Likewise the act of quality and dependableness need to continue for flexibility building. Last, the efforts to decrease the cost and continuing effort to improve the quality, dependableness and flexibility. The operations ability that is developed by this way tend to hold out than individual ability that is developed by sacrificing others.

2.2. The Role of Competitive Strategy in Improving the Performance

Porter (1980) states that the purpose of competitive strategy in industry is to find bargaining position to be able protect oneself from the competitive pressure or to influence those pressure positively. Competitive strategy has relationship with industrial position in the company, relatively with its competitor. The companies with industrial position that have well established and advantageous are able to handle five competitive strengths (Hitt et al., 2011). Company strategy must able to answer business fundamental questions: whether company must concentrate in only business or build diversification with wide business group; whether operating with the customer segment or moving in certain niche market; whether building the advantage of competitiveness that is based low cost or product uniqueness, how to respond the consumer preference change, how wide geographically the market area that will be included and how the company will grow in long-term. Every business must plan the strategy to reach its purpose. The strategy is started by the concept how to use the resource of the company effectively in dynamic area. Business area involves a few factors out of company that are able to give an opportunity or threat. If the business area gives big opportunity, so the strategy of the company must be adapted so the purpose can be reached. On the other hand, if the business area shows the threat, the strategy must be synchronized, so there is no imbalance in performance achievement. Besides the external factor in business area, the other factor that must be attention by the leader is internal factor of the company itself. Internal factor of the company must be identified to decrease and losing the weakness and developing the strength of the company in order to obtain competitive advantage. By knowing the strength and the weakness of the company, it can be analyzed by strategic advantage, so the company effectively takes advantage an opportunity and handle the threat in the company.

Competitive strategy is the planned act or not planned in order to be able more superior from its rival to strengthen the market position that is supported by mastering strategic resource and operations strategy. Thus, it is important to do observation on industrial area and doing analysis about the strategic resource owned in order to the strategy is appropriate with business area, so the implementation of strategy increases the positions and competitive advantage owned and resulting superior performance. Porter (1980)has opinion that competitive advantage in industry is decided by its scope, that is wide target market of business unit. Before deciding the choice one of both strategy(cost leadership or differentiation), business unit has to account product variation tension that will be produced, distribution used, kind of customer that will be serviced, geographic area, one type industrial group that becomes the place to rival. If the cost strategy is low and differentiation is designed to wide target market, so its strategy is called cost leadership and differentiation. If the target market is narrow or limit, so the strategy is called 'cost focus' and 'focused differentiation'. The company that creates competitive advantage from the cost advantage or differentiation advantage are usually obtaining profitability above average in its industry. While the company that has no cost advantage or differentiation will have 'stuck in the middle' that is usually obtaining profitability under average (Porter, 1980; 1985).

2.3. The relationship between operations strategy and competitive strategy in improving performance: Industrial/Organizational Theory (I/O)

Structure-Conduct-Performance (SCP) paradigm is I/O approach that is developed by Mason in 1949 and Bain in 1959. Since 1960-1980, I/O perspective is guessed as main determinant from strategic action of the company (Porter, 1980). According to Porter (1980) I/O theory as competitive strategy framework that explains the influence of market structure to Firm Performance. This framework explains that the company is viewed as the collection of strategic activity that has the purpose to adapt the industrial area by searching interest position in market arena. Firm Performance is the function from industry and company effect (market position) (Porter, 1991; Grant, 1997). According to Porter, industrial structure influences the performance continuity of the company, while the position reflects the company ability to determine competitive advantage. After obtaining interest position, the company can use market power (Teece *et al.*, 1997) so that the company gets the advantage. This advantage comes from company ability to maintain itself against the rival (defensive effect), or affecting the rival (offensive effect) (Porter, 1980, 1985, 1991). Moreover, Porter (1980) said that strategy can be seen as defense against the industrial power or finding protected position.

Perspective I/O theory shows that market structure as the basis strategy rival to adjust with operations strategy in improving Firm Performance (Ward and Duray, 2000, Amoako-Gyampah and Acquaah, 2008). Operations strategy is decided logically from competitive strategy. Slack et al., (2004) said that decision of competitive strategy is one manner to decide operations strategy. Such as if competitive strategy offers low price, so operations task must emphasize the decrease and cost controlling, high technic skill, strong pressure of losing supply, high level of production standard, material sect, and high level machine in operation. If competitive strategy offers differentiation strategy, so the operations task must emphasize production of product and service valuable premium, complexity of high product, various of end product, high technic skill, the flexibility of scheduling high product in operation (Kotha and Orne, 1989; Slack et al., 2004). Conceptual model that is offered by Ward and Duray (2000) that domain dynamic influences competitive strategy and manufacture strategy (operations strategy). Competitive strategy becomes the relationship mediation between domain dynamic to manufacture strategy (Venkatraman, 1989). Those model mean that competitive strategy directly influences manufacture strategy. Therefore those model show that relationship of environment, competitive strategy, and manufacture strategy are related to the performance. Thesemodel imply that there is direct relationship between strategy and performance. This concept is the concept development by Hill (1994) which includes the environment of market, competitive strategy, and manufacture strategy in conceptual model, but these model are empirically not examined.

Figure 1. The relationship of environment, competitive strategy, operations/manufacturing strategy, and performance



Source : Ward and Duray (2000)

Perspective of I/O external orientation in operations strategy is started by identifying the market needs that is exist then adjust the operations resource through the implementation of operations strategy (Adam and Swamidass, 1989; Anderson *et al.*, 1989; Platts and Gregory 1990). This perspective classifies and identifies the requirements to the market as the basis competitive strategy to be adjusted with operations strategy (functional strategy) in improving the work ability (Ward and Duray, 2000; Amoako-Gyampah and Acquaah, 2008). The relationship between competitive strategy to the performance in the company is mediated by operations strategy (Williams *et al.*, 1995; Gupta and Lonial, 1998; Ward and Duray, 2000; Amoako-Gyampah and Acquaah, 2008) in big business by *top-down* approach and other research analyze the relationship between operations strategy to the performance and competitive strategy as moderating variable (Rhee and Mehrra, 2006; Oltra and Flor, 2010).

2.4. The Relationship between Operations Strategy and Competitive Strategy in Improving the Performance : *Resources–Based View* (RBV) Theory

RBV approach is started by Penrose (1959) that do research how management internal process can influence behavior of the company. Penrose (1959) developed the *Growth of the Firm* theory that could connect between strategic management and organization economy. Penrose (1959a: 54) stated that the company can make economic value, not because of having better resource, but having special ability in managing its resource (Mahoney and Pandian, 1992). Besides that, Penrose explained that learning process created new knowledge and formed organization growth basis by combinating existed resource (Eisenhardt and Santos,2000). *The Growth of the Firm* theory in 1980 was developed by Wernerfelt (1984), Rumelt (1984), Barney (1986).

Prahalad and Hamel (1990) becomes new approach concept the *Resource–Based View* (RBV) then becomes one dominant approach to analyze continously comptitive advantage (Bridoux, 2004). An assumption from RBV approach is clarified by Barney *et al.*, (1991: 112) namely: 1) the companies in industries have strategic resource that are heterogenous (resource heterogenity); and 2) the resource is difficult to immitate so it is difficult to move perfectly to another companies (resource immobility). This case is also delivered by Hitt *et al.* (2011: 15) RBV model assumed that each organization has collection of resource and unque ability that is basis for strategy and main source of restitusion above average.

Wernerfelt (1984) developed continous competitive advantage theory is based on the resource, so completing Porter (1980) Theory about the competitive advantage is based on product market position. This approach assumed that portofolio from the resource that has been controlled by the company. The contribution of theory development is based on the resource given by Wernerfelt is resource profil competitive among the companies can courage the company to obtain the competitive advantage by implementing competitive strategy. Rumelt (1984) stated that the company is the collection of productive resource and economic value of resource. Resource ability that is not easy to immitate is depend on protected resource by isolating mechanism. Isolating mechanism is an important task of the company actively to do concrete act in protecting strategic resource produced by managerial activity in last period, present, and future. Barney (1986) introduces the concept of strategic market factor where the company obtains or develops strategic resource needed to apply competitive strategy. If the actor of strategic market is the perfect rival, although the company implies the strategy is succed to make product market by competing imperfectly (monopoly or oligopoly), so this trategy is not the main advatages. It means that strategy resource base is capable to produce competitive advantage or not depends on the market condition of strategy factor, if the market is perfect rival will give the advantage. Because the market is not always in perfect rival, so there are two ways in companies to obtain or develop the resource needed as basis to apply competitive strategy through fortune and opportunity. An opportunity can be reach by information portofolio about the value of resource that will come and obtained or developed from factor of strategic market. Therefore, Prahalad and Hamel (1990) introduces competence approach that is defined as the skill and technology collection that perhaps the company to provide certain advantage for the consumers. The core competence is sourcedby capability and the resource of the company.

The main attention in RBV approach is resource and capability. Competitive advantage will be obtained by organization that has asset or specific capability. Profitability of the company is decided by type, quantity, resource, and capability that have existed. Nevertheless, managing strategically is based on resource based that involves how to develop and use the resource and the specific capability to form core competencies that becomes basis of competitive advantage of the company to obtain Above average returns (Prahalad and Hamel, 1990). The company is capable to identify the resource and capability that becomes core competencies will be capable more efficient and effective in doing business (Teece et al., 1997). It means that identification of the strength and weakness of the resource, the company can make priority scale and selecting which resource that can be optimized to produce the productivity and efficiency. RBV perspective shows that the implementation of operations strategy is built by strength and weakness of resource operations then finding the market opportunity that is appropriate with competitive strategy (Hayes, 1985; Vickery, 1991; Hill and Jones, 2007). Oriented internal model adapts the market requirement with internal ability through operations strategy in making competitive advantage (Hayes and Pisano, 1996; Slack, 2005). Operations ability describes what can do the operation is better than competitor (Hayes and Pisano, 1996) in the case of cost, quality, sending, flexibility, and innovation (potential) (Wheelwright, 1984) to support competitive strategy in the market (Hill and Jones, 2007; Ward et al., 1996). Conceptual model is offered by Hill and Jones (2007) and Amit and Schoemaker (1993) can explain the role of strategy (operation and competed) to reach superior profit.





Source : Model Adaptation of Amit and Schoemaker (1993); Hill and Jones (2007)

Functional strategy "adding details to business strategy" (Thompson & Strickland, 1990) and its main role is to support competitive strategy overall (Hayes, 1985; Schroeder, 1989; Hayes and Pisano, 1996; Hayes *et al.*, 2005; Brown and Balckmon, 2005). The relationship of causality behaves to operations strategy that becomes the source of competitive advantage (Hayes, 1985; Hayes and Wheelwright, 1984; Skinner, 1978) shows that operations strategy can have significant influence in competitive strategy (Hayes, 1985; Ward *et al.*, 1996).

III. CONCLUSION

The relationship between operations strategy and competitive strategy are based on I/O approach show that the occupation of operations strategy as the functional strategy that is still focused in appropriateness (Swink and way, 1995; Ward and Duray, 2000; Slack, 2005; Amoako-Gyampah and Acquaah, 2007), while the support of operations strategy in competitive strategy (Hayes, 1985; Schoeder, 1993; Hayes and Pisano, 1996; Hayes *et al.*, 2005; Brown and Balckmon, 2005; Schroeder *et al.*, 2011) is based on RBV approach (Hunger and Wheelen, 1996; Slack and Lewis, 2002) with considering that operations strategy as instigator of competitive strategy (Slack, 2005).

Skinner (1978) clarifies that operations strategy is different with competitive strategy because operations strategy is the only one of functional component that its implementation need fit relationship. So that operations strategy is called as a functional substrategy. Besides that, Mintzberg (1978) clarifies the importance of relationship appropriateness between business strategy and operations strategy because business strategy is the way for the company to decide the competitive position of the company, but operations strategy is the way to reach and maintain competitive position that the company want. Business strategy defined how the certain businesses are competed. Each business need to find the basic of rival itself based on market segment and certain product that is decided to include. Porter (1980) identified three generic business strategy has the relationship with operations strategy (functional strategy). It needs to emphasize that it is important to define business strategy before formulating operations strategy. But the business that has been running, the operation ability could make business strategy becomes the clear choice. Thus the operations strategy could influence business strategies and vice versa (Hayes, 1985; Schroeder, 1989; Ward *et al.*, 1996).

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