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# The Relationship between Strategic Agility and Resource Base View of the Firm Performance in Manufacturing Industry: The Research Framework

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**Abstract**. Competition in various companies encourages practitioners, entrepreneurs and academics to examine the dynamic of business strategy. The spirited study of this business strategy was driven by its forceful environment. Dynamic moving environments require each company to be adaptive as quickly as possible. This adaptation encourages the company to have a certain advantage in facing competition. The winners of the market make the company can demonstrate a fast, flexible response, effective coordination and understanding of internal and external competencies. Similarly, in the manufacturing industry, the dynamic lifestyle of consumers encourages the company to adapt to creating its own excellence. The purpose of this article propose a research framework of the relationship between strategic agility and resource base view to the firm performance of manufacturing industry.

#### 1. Introduction

A fundamental objective in the field of strategic management is that a company can achieve and maintain a competitive edge [1] [2]. Critical management emphasizes long-term performance. Many companies can set short-term targets for high performance, but few can sustain for a longer period of time [3]. The company must first understand what major decisions are, and what strategy is all about the objectives, before it is possible to qualify strategically the importance of strategic planning value [4]. The strategy design function should be understood as part of the Organization's general strategy. The design does not take individual roles and communication disconnected from the company's resources [2]. Strategy should make strict sync between various activities within the company. Therefore, the success of the design strategy depends on the integration of different activities into a logical entity. It is more important than the success of any part of the organization [5]. The strategic role of the design level of the strategy consists of in implementing the company's strategy can be utilized as a source of competitive advantage, and as a good return catalyst for the change of scope and direction of the Organization [6]. Although some companies have used their mission to develop strategies that make a significant competitive advantage, immeasurable missions can decrease the company's performance [7].

Resource capability by reflecting organizational ability to achieve new and innovative forms to gain a competitive edge in market position [8]. While the ability of strategy is always built on one or more resources, a company can have strategic sources that are unrelated to the capability. In other

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words, the fashion behavior of the company relies on the company's internal assets to have and their effective combination [9]. However, these internal assets can be strategic in nature (i.e. they are relevant to the strategic goals of the company) without being connected to one or more of the capabilities. This is usually the case when the share ownership of resources that cause a change in competitions or when resources directly translated into organizational performance measures [10]. In addition, strategic resources may be important to more than one strategic ability that comes into the existence of the dynamic of the Company [11]. Conversely, the ability of the resource will occur poor changes if not anticipated carefully. Dynamic resource capabilities are the capacity of the organization intentionally creating, expanding, or modifying the resource base [12] [13].

Resources in any form can be regarded as strengths or weaknesses. Corporate resources such as trademarks, knowledge, skilled labour, trade relations, machinery, methods, capital and so forth can be referred to as assets [14]. Resource capability terminology is built and developed based on the initial review of production factors, internal sources, organizational competence, core competencies, and products. The next review is based on the external environment, namely business, market, technological development and the risk of replication [15]. Some of the dynamic resource capabilities allow the company to enter new and expanded business long through internal growth, acquisitions, and strategic alliances. Other capabilities help companies to create new products and production processes. Resource-based monitoring is a substitution of the assumption that the company has a heterogeneous strategic resource that cannot be moved easily between companies [16].

The concept of dynamic capabilities includes capacity to identify needs or opportunities for change, formulate answers for needs or opportunities, and apply actions. Dynamic capabilities do not all serve all three functions. Conversely, different dynamic capabilities serve a variety of purposes [17]. Dynamic capabilities involve processes in which systematic and repeated experiences are articulated and may be codified [18]. Companies seek articulation and develop practices that can help the ability to change. The question arises how to develop later dynamic capabilities. To find the answer to that question, we first need to explore the concepts of exercise and practice have done the company [9].

#### 2. Literature Review

#### 2.1 Manufacturer and Agility

The concept of agility began in 1991, which is when the executive group of thirteen companies in the United States devised a strategy based on the emerging global competition environment. Thus, the concept of manufacturing company is nimble. The concept of agility is a characteristic that enables the organization to thrive in an environment of inconstant and unpredictable changes [19]. The Agilty Model was first developed in the manufacturing strategy. Agile Manufacturing (AM) is a new concept in manufacturing that is intended to enhance the competitiveness of the company. The process of manufacturing based on AM characterized by the process of integration between suppliers, manufacturers and customers to enhance product design, manufacturing, marketing, and service support [20]. Manufacturing agility is one of the weapons to achieve a competitive advantage. The concept of agility evolves into the strategic level. Strategic Agility is the ability to produce the right product in the right place at the right time at the right price. Strategic Agility can only be achieved with competitive power in a combined set of generic capabilities, namely quality, delivery, flexibility, and price leadership. Armed with various abilities, producers will be better prepared to face the changes ahead by using one or more ability to proceed or replicate rapidly on global competition [21]. The competitive dimension is identified by cost, quality, flexibility, delivery, and innovation [22]. At the strategic level, the first challenge faced is exploring all the opportunities and threats in an uncertain and rapidly changing state. The second challenge of strategic agility is the steady production state change becomes unstable resulting in adaptation as quickly as possible [23]. Many elements contribute to the AM including customer-based production, trademark strength, core competencies, employee ability to change, and an adaptable infrastructure. All resources are organized and coordinated into a group of integrated resources resulting in the toughness of the company's core capabilities [24].

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#### 2.2. Resource Base View, Strategic Agility, and firm performance

The resource-based view is a real capability in strategy drafting. The resource-based approach considers the limitations of growth and motivation to predict the direction of diversification and superior performance [25]. The barriers of maintaining a resource-based performance position lie in a static treat against the capability. Maintaining a position of ability is seen as a mechanism that can give benefits to other resource holders. If critical production resources are controlled by a monopolistic group, it will reduce the return for resource users [14]. The resource-based view (RBV) states that resources as tangible and intangible assets are controlled by the company in drafting a strategy [7]. In the business-level strategy, RBV contributes to the initial achievement of the company's development. The basic cornerstone of conceptual resource-based analysis is utilized through diversification. Companies can achieve a sustained competitive advantage originating from resources while the simultaneous resources cannot be easily replicated by competitors, cannot fulfill the same functions, and are not transferable [26].

Business agility is the ability to feel highly uncertain external and internal changes, and respond to them in a reactive or proactive, based on the innovation of internal operational processes, involving customers in exploration and exploitation, and utilizing the capabilities of partners in the Business Network [27]. The resources owned on RBV are certainly a strength in running an agile business strategy. Strategic Agility is the ability to produce the right products and services in the right place at the right time at the right price. By definition, strategic agility can only be achieved with competitive power in a combined set of generic capabilities, namely quality, delivery, flexibility, and price leadership [26]. Strategic Agility has become a contradiction for real life and is difficult to complete for corporate leaders and their executive teams if the old paradigm is still being run. A strong strategic commitment can help the company gain momentum towards an ambitious goal, paradoxically it can also cause the company to develop inertia or become erroneous in the event of technological disruption, changing market conditions, or unexpected competitors [28]. New competitors will be growing companies quickly and rapidly changing. The main characteristic of this successful company is the ability to move fast in every respect. The agile company maintains leadership by continually introducing an improvement to collective ability. They immediately achieved opportunities with a quick response to unexpected threats [19]. Strategic planning affects the company's performance. The required resources are allocated for strategic ability [22].

#### 3. Research Frame Work

The main goal in this study is to get a framework between strategic agility based on the dimensions of RBV having a connection to the performance of manufacturing companies. Strategic agility is the states of the ability to absorb threats and opportunities to improve company performance. These capabilities are obtained by managing competitive resources [29]. Basically, competitive resource capabilities based on RBV include value, Rarity, limit-ability and organization. Surely if the four dimensions of RBV are executed, it will produce a continuous competitive advantage [26]. We see that RBV be a supplement to run strategic agility. So the question to the respondent combines the dimensions on RBV and Strategic agility. Surely the relationship will be tested against the company's performance. We see that the performance is used as a reference to the firm performance of manufacturing, namely the development of assets and employees. Both measures of performance are considered to represent the development of the company because the manufacturing company can see its development from increased production capacity. This research framework can be seen in Figure 1. The relationship can be expressed negative or positive depending on the results of analysis.

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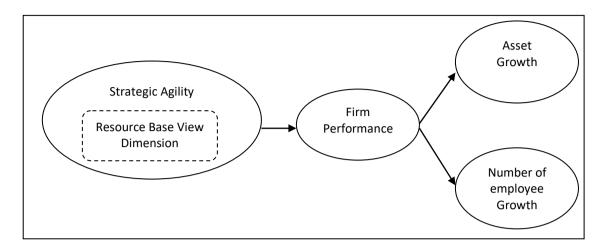


Figure 1. The research framework

#### 4. Conclusion

The proposed model in this study contained a combination and integration between the variable dimensions of strategic agility and RBV. The second scope of these dimensions indicates a relationship that can affect the company's performance. Reference framework model formation in this article is the manufacturing industry. The performance of manufacturing companies focused on the growth of assets and labor. To indicate a growth in production is raising capacity. Thus, if the production capacity increases, the resulting potential of the product increases as well. Obviously, the quantity of products produced is directly proportional to the potential increase in product sales.

Advanced research can be done on determining measuring instruments involving strategic agility dimensions and RBV. This arrangement can be discussed further mainly in the collaboration of both variables or even dimensions to be connected to the performance of the company. The framework can be used to research the authentication of any other analysis. Obviously, adjustments are also made to the size of the company's performance improvement.

#### References

- [1] S. Ghosal, "Global Strategic: an organizing framework," *Strateg. Manag. J.*, vol. 8, no. 5, pp. 425–440, 1987.
- [2] H. Mintzberg, B. Ahlstrand, and J. Lampel, "Strategy safari: The complete guide through the wilds of strategic management (2nd ed.)," *Financ. Times Prentence Hall*, p. 441, 2009.
- [3] T. L. Wheelen, J. D. Hunger, A. N. Hoffman, and C. E. Bamford, *Strategic Management and Business Policy Globalization, Innovation and Sustainability.* 2018.
- [4] R. Hall, "The Strategic Analysis of Intangible Issues," *Strateg. Manag. J.*, vol. 13, no. 2, pp. 135–144, 1992.
- [5] C. O. A. Ayodeji Emmanuel Oke and M. M. Raphiri, "Management Decision Linkage between dynamics capability and knowledge management factors: A structural equation model Rodrigo," *Eur. J. Mark.*, vol. 24, no. 5, pp. 41–49, 2015.
- [6] F. Joziasse, "Corporate Strategy: Bringing Design Management into the Fold," *Des. Manag. J.*, vol. 11, no. 4, pp. 36–41, 2000.
- [7] J. B. Barney and W. S. Hesterly, *Strategic Management and Competitive Advantage: Concepts and Cases*. 2015.
- [8] D. J. Teece, G. Pisano, and A. Shuen, "Dynamic capabilities and strategic management," *Strateg. Manag. J.*, vol. 18, no. 7, pp. 509–533, 1997.
- [9] D. E. M. Mulders, P. A. J. Berends, and A. Georges L. Romme, "Dynamic capability and staff induction practices in small firms," *Soc. Bus. Rev.*, vol. 5, no. 2, pp. 155–169, 2010.

Journal of Physics: Conference Series

**1764** (2021) 012148 doi:10.1088/1742-6596/1764/1/012148

- [10] M. Easterby-Smith, M. A. Lyles, and M. A. Peteraf, "Dynamic capabilities: Current debates and future directions," *Br. J. Manag.*, vol. 20, no. SUPP. 1, 2009.
- [11] A. Größler, "A dynamic view on strategic resources and capabilities applied to an example from the manufacturing strategy literature," *J. Manuf. Technol. Manag.*, vol. 18, no. 3, pp. 250–266, 2007.
- [12] K. M. Eisenhardt and A. J. Martin, "Dynamic capabilities: what are they?," *Strateg. Manag. J.*, vol. 21, pp. 1105–1121, 2000.
- [13] V. Ambrosini, C. Bowman, and N. Collier, "Dynamic capabilities: An exploration of how firms renew their resource base," *Br. J. Manag.*, vol. 20, no. SUPP. 1, pp. 1–41, 2009.
- [14] B. Wernerfelt, "The re-source-based view of the firm," J. Manag. Inq., vol. 5, no. 1, pp. 171–180, 1984.
- [15] D. J. Teece, "Dynamic Capabilities," Strateg. Manag. J., vol. 118:7, pp. 509–533, 1997.
- [16] J. Barney, "Firm Reources ad Sustained Competitive Advantage," *Journal of Management*, vol. 17, no. 1. pp. 99–120, 1991.
- [17] K. R. Andrews, 5 The Concept of Corporate Strategy, vol. 2. 1997.
- [18] C. E. H. S. F. W. Mitchell and M. A. P. H. S. D. J. T. S. G. Winter, "Dynamic capabilities: Understanding Strategic Change In Organizations," *Blackwell Publ.*, no. November, p. 2009, 2007.
- [19] Rick Dove, "The 21s Century Manufacturing Enterprise Strategy or What Is All This Talk About Agility?," *Japan Manag. Assoc. Res.*, pp. 1–8, 1992.
- [20] A. Gunasekaran, "Agile manufacturing: a framework for research and development," *Int. J. Prod. Econ.*, vol. 62, no. 1, pp. 87–105, 1999.
- [21] A. V. Roth, "Achieving strategic agility through Economies of Knowledge," *Plan. Rev.*, vol. 24, no. 3, pp. 30–36, 1996.
- [22] S. E. Fawcett, R. Calantone, and S. R. Smith, "Delivery capability and firm performance in international operations," *Int. J. Prod. Econ.*, vol. 51, no. 3, pp. 191–204, 1997.
- [23] B. M. Soule, "From vision to reality: Strategic agility in complex times," *Am. J. Infect. Control*, vol. 30, no. 2, pp. 107–119, 2002.
- [24] P. Weill, M. Subramani, and M. Broadbent, "IT Infrastructure for Strategic Agility," *Soc. Sci. Res.*, vol. 329, 2002.
- [25] J. T. Mahoney and J. R. Pandian, "The Resource Base View within Corversation of Strategic Management," vol. 13, no. April 1991, pp. 363–380, 1992.
- [26] R. L. Priem and J. E. Butler, "Is The Resource-Based 'View' a Useful Perspective for Strategic Management Research?," *Acad. af Manag. Rev.*, vol. 26, no. 1, pp. 22–40, 2001.
- [27] M. van Oosterhout, E. Waarts, E. van Heck, and J. van Hillegersber, "Business Agility: Need, Readiness and Alignment with IT Strategies," *KTH Ind. Eng. Manag. Ind. Manag. SE-100* 44 Stock., vol. 44, no. 0, pp. 52–69, 2007.
- [28] Y. Doz and M. Kosonen, "The Dynamics of Strategic Agility: Nokia's Rollercoaster," *Calif. Manage. Rev.*, vol. 50, no. 3, pp. 95–118, 2008.
- [29] Y. L. Doz and M. Kosonen, "Embedding strategic agility: A leadership agenda for accelerating business model renewal," *Long Range Plann.*, vol. 43, no. 2–3, pp. 370–382, 2010.
- [30] Dwipriyoko, E., Bon, ATB, & Sukono, F. (2019). Enterprise Architecture Planning as New Generation Cooperatives Research Methods. In Journal of Physics: Conference Series (Vol. 1179, No. 1, p. 012094). IOP Publishing.
- [31] Dwipriyoko, E., Widjayani (2020). Partial Business Process Re-engineering in New Generation Cooperatives Enterprise Architecture Implementation. In Journal of Physics: Conference Series (Vol. 1477, ). IOP Publishing.
- [32] Widjajani, Nurjaman,R. (2020). The Framework of Strategic Agility in Small and Medium Enterprise. In Journal of Physics: Conference Series (Vol. 1477, ). IOP Publishing.
- [33] Gumilar, AC., Afrian, NFS., Pramiarsih, EE., Widjadjani, (2020). The Effect of Mathematics Learning With Improve Method to the Mathematical Representation Ability of Junior High

PVJ ISComSET 2020

Journal of Physics: Conference Series

**1764** (2021) 012148 doi:10.1088/1742-6596/1764/1/012148

- School Students. In Journal of Physics: Conference Series (Vol. 1477, ). IOP Publishing.
- [34] Sutarman, E., Widjajani, Dwipriyoko, E. (2020). Effect of Additive Chemicals on Soil Characteristics. In Journal of Physics: Conference Series (Vol. 1477, ). IOP Publishing.
- [35] Ridha,MR., Pramiarsih,EE., Widjajani, (2020). The Use Of Geogebra Software In Learning Geometry Transformation To Improve Students' Mathematical Understanding Ability In Journal of Physics: Conference Series (Vol. 1477, ). IOP Publishing.