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Differentiated strategy, business performance, and intellectual capital: *Evidence small medium enterprise from Indonesia*

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Abstract. Small and Medium Enterprises (SMEs) have a very important position in Indonesian economics. Implementation of the differentiated strategy has been impacted on improving the business performance of SMEs where the role of intellectual capital strongly supports the success of the implementation of the differentiated strategy. This study applied quantitative research which used survey method. This research examines the relationship between differentiated strategy to the performance of SMEs with mediated by intellectual capital. The results of this study show that intellectual capital mediates the relationship between differentiation strategies and business performance of SMEs. This study theoretically proves the importance of contextual variables in contingency theory. The practical results of this study contribute to raising awareness of business unit managers or other equivalent positions, especially managers in East Java to understand the importance of the role of intellectual capital, this is because intellectual capital meets the criteria as a unique source of the company that is able to create competitive advantage and increase the firm's value.

1. Introduction

Based on data from Badan Pusat Statistik, the production of large and medium manufacturing industries in East Java in the second quarter of 2016 (y on y) grew by 1.71 percent compared with production in the same quarter of 2015, while the production of large and medium National manufacturing industries in the second quarter of 2016 (y on y) also grew by 5.54 percent. This production growth shows that East Java's production growth (y on y) is 3.83 percent lower than national production growth. In the development of the manufacturing industry, there is a very high fluctuation.

Manufacturing business performance in East Java fluctuated in several sectors. Such fluctuations move upward which impacts on improved business performance, but fluctuations that move down will certainly have an impact on business performance that is not profitable. Therefore, a fit strategy for manufacturing companies in East Java is needed. The strategy is a driver that directs the company's activities in positioning companies and products or services in the competition in an effort to improve company performance. Companies in maintaining their presence in the midst of intense business competition will choose and apply strategies that fit with the company's character and environmental conditions. The right company in choosing a strategy will be able to outperform its competitors in growth and profitability and be able to survive in the business life cycle in the long run. One of the efforts made is the selection of strategies applied adapted to the core competencies that are owned and the external conditions of the company. Core competence and environmental external conditions are used to achieve competitive advantage. There is a theoretical gap in achieving competitive advantage

in business performance. Theory of Industrial Organization (I/O) emphasizes that to achieve organizational or corporate performance must pay attention and study the factors and the external environment [1]. According to Resource-Based Theory (RBT), stressed to achieve organizational performance is largely determined by the characteristics and internal factors of the company [2]. To cover the gap theory of Industrial organization and resource-based theory in this research used Contingency Theory.

The differentiated strategy is a strategy that prioritizes innovation process both product innovation and process innovation. Innovation plays an important role as one of the key success factors for a company to achieve a sustainable competitive advantage. Increasing competition, unceasing turbulence, the pace of globalization, the pace of technological development, change and uncertainty have led to the introduction of innovations in various fields. The role of innovation is an important factor in gaining competitive advantage.

SMEs have an important role in the formation of strategies for economic development and recovery in many countries. The development of SMEs provides an opportunity to reduce unemployment rates. In Indonesia, especially in East Java, the development of SMEs in the reform era has gained a great deal of attention from the government, the concern is quite reasonable because of the increasing role of small and medium entrepreneurs in developing the economy. The role of small and medium entrepreneurs in economic development can be seen from the characteristics of the entrepreneurs, the labor-intensive production process is able to absorb labor as well as to increase income and able to survive in times of economic crisis. Increased revenue from SMEs is dominated by SMEs that export their products.

2. Theoretical review

2.1 The industry-organization (I/O) paradigm, in relationship between differentiated strategy and business performance

Several studies empirical pertaining to the model I/O have been done by researchers. Environmental factors external had an important role in business conditions, because of an environmental factor is determined a strategy to be used [3]. The relationship between environmental changes by planning strategies are really powerful [4], large amounts to anticipate change and disarray. [5] suggested that complexity and changes in the neighbourhood of an industry might affect the intensity of strategic planning, but in research conducted by Hopkins & Amp; [6] concluded that strategic planning does not affect financial performance, but financial performance-enhancing strategy planning. I/O approach done by [7], about the environmental impact of industry on tourism in Malaysian business. The industry becomes a very important point in reaching business performance.

2.2 Resource-based theory in relation to strategy and business performance

Empirical studies related to Resources-Based Theory, have been done by [2], the result is a sustainable competitive advantage only if competitors' attempts fail to imitate those advantages. RBT explains that competitive advantage can only arise in situations of corporate heterogeneity and resource immobility. [2] also stated that in RBT, companies can not expect to buy or take on the sustainable competitive advantage that other organizations have because they are a scarce, immeasurable, and irreplaceable resource. The RBT states that internal resources are more important for companies than external factors in achieving and maintaining competitive advantage [8].

According to [9] organizational performance is determined by internal resources, namely physical resources, human resources and organizational resources, which includes corporate structure, planning process, and corporate strategy. The RBT draws attention to managerial strategies and practical strategies for the development of new competitive advantage and wealth creation [10-12]. This opinion is supported by [10] who argues that if it can manage resources and capabilities strategically and structurally, the competitive advantage will increase. With resource-based theory and attention focused on the process of creating competitive advantage, this view is a fundamental principle which

determines the difference in the creation of wealth. RBT is the starting point used to identify and explain differences in well-being. The competitive advantage of the company flows by taking into account its resources. Further, [10] argues that more valuable, scarce, imperfectly imitable and non-substitutable resources than competitors are an important source of increasing competitive advantage. Therefore, some of the previous researchers suggested that the competitive advantage built on internal resources.

2.3 Contingency theory in relation to strategy and business performance

Based on the theory of contingencies there are other situational factors that interact with each other in a certain condition. Beginning with this contingency approach, it is likely that decentralization will also lead to differences in management accounting information needs. Management accounting design, strategic approach uncertainly interesting enough to be examined in testing the reliability of management accounting system influential not at any condition based on other determinant variables interact with the conditions encountered. [13] says that the development of an organization is influenced by differences in environmental features. Furthermore, the hypothesis states that the success of an organization depends on uncertainty, internal factors, feedback with other organizations, and the external interaction of the organization.

From theoretical and methodological reviews, basically, a contingency approach is a response to a universalistic approach, which argues that the relationship between organizational design and outcomes variables is consistent with all conditions. While the contingency approach assumes that the relationship is conditional. Contingency theory intuitively helps reconcile the existence of empirical discovery conflicts based on universalistic theoretical models. Management Accounting Studies based on contingency approach have focused on 2 (two) dimensions, they are (1) information characteristic and management accounting system and (2) use of management accounting technique.

Contingency approach in organizational design research can explain the influence of unexpected empirical evidence in the development of theory using a universalistic approach. [7] criticizes the simple linear model that has been the basis of most previous research. With a simple linear model or a universalistic model, it appears that the related research approach focuses on the selection of contextual variables (contingencies) that may directly affect organizational design. Organizational design variables are tested for their influence on the type of information system and then the type of information system in the test of its effect on the output variables.

In a simple linear model or a universalistic model, it is still directed in the effort of selecting contextual variables to test its effect on organizational variables but has not attempted to test the interaction effects between contextual and organizational variables on output variables such as organizational performance, individual performance, attitude motivation, and managerial satisfaction.

3. Development of hypothesis

Implementing a differentiated strategy requires the role of competent intellectual capital as it affects the company's performance. The existence of innovation in the implementation of the differentiated strategy will increase the productivity of the entity. The hypothesis in this research are:

- Differentiation strategies affect business performance directly
- Differentiation strategies have an effect on intellectual capital directly
- Intellectual capital affects business performance directly
- Differentiation strategies affect the performance mediated by intellectual capital.

4. Methodology

4.1 Research approach and design

This study is a quantitative research. This study was designed to examine the effect of differentiated strategy implementation on performance mediated by the intellectual capital requirement. Therefore

this research includes verification research (hypothesis testing study). Independent variable in this research is differentiated strategy and the dependent variable is company performance and mediation variable in this research is intellectual capital.

4.2 Data collection

This research uses survey method. To collect the data, the questionnaire was sent to the respondent selected as a sample determined by a particular procedure. Furthermore, after the data obtained then performed the analysis and test the hypothesis and the result is empirical findings.

Data analysis was performed using Structural Equation Modeling (SEM) based on the variant, using PLS tool. The use of SEM-based variants because this research is exploratory or extension of existing theories. This study expands the contextual variables in contingency theory.The population is an individual or unit or element that has certain characteristics set by the researcher. The population in this study is the business unit of medium and large manufacturing companies in East Java. The business unit is the part of the company that is treated as a profit center. The unit of analysis of this study is a business unit, if assumed from one company taken one business unit, then the population of this study amounted to 389 business units.

4.3 Operational variables

The differentiated strategy is developed by Porter that focuses on innovation. *Intellectual Capital.* Intellectual Capital is defined as intellectual material (knowledge, information, intellectual property, experience) that can be used to create wealth. *Business Performance* is defined as a consequence of an economic decision taken from an economic action.

4.4 Hypothesis test

- Differential strategy affect the business performance, seen from the value of the coefficient of 0.229 with a p-value less than 5%.
- Differential strategy influence on intellectual capital, seen from the coefficient value of 0.649 with a p-value less than 5%.
- Intellectual capital effect on business performance, seen from the value of the coefficient of 0.366 with a p-value less than 5%.
- Differential strategy affects the business performance mediated by intellectual capital.

The coefficient value generated equal to 23.8% which means the magnitude of indirect influence Differential strategy on business performance through intellectual capital of 23.8%.

4.5 Testing of moderation variables

Before added IC variable, this research proves that SD has significant effect to KB, seen from a coefficient value equal to 0,497 and p-value less than 5%. After added IC variable, this research proves that:

- SD has significant effect to KB, seen from a coefficient value equal to 0,229 and p-value less than 5%.
- SD significant effect on IC, seen from a coefficient value equal to 0,649 and p-value less than 5%.
- IC significant effect to KB, seen from a coefficient value equal to 0,366 and p-value less than 5%.

Based on the description above, it can be concluded that the IC variable proved as partial mediation variable.

5. Discussion

As it was already explained in the discussion, intellectual capital is the driver of corporate value in increasing the company's competitive advantage. Manufacturing companies in East Java are facing the development of technology-driven business environments. If it was in the past economics, the economy is heavily dependent on resources such as land, natural resources, equipment, and capital to create value, then in the millennium economy, the economy is heavily dependent on the knowledge that has more value than physical assets for the organization. Human resources (HR) involved in every activity, the company will do less physical jobs and more work by using the capital of the brain, which we call the intellectual capital.

Changing the strategic orientation in knowledge asset requires an understanding that the creation of a company's competitive advantage depends largely on a company's ability to create, use and transfer, and utilize intangible assets that are rare, non-tradable and extremely difficult to replicate. In today's dynamic business environment changing conditions, resource-based valuation of assets emerges in response to the management of forms of intellectual property. Through the assessment of intellectual capital, companies can manage and develop their owned assets so as to benefit the efforts of achieving sustainable competitive advantage.

Related to the explanation above, the role of intellectual capital in the company of manufacturing companies in East Java in the implementation of the differentiated strategy is very important. The condition of manufacturing companies in East Java is currently experiencing a significant increase that requires the role of intellectual capital is qualified. The relationship of differentiated strategy with intellectual capital shows the statistically significant relationship. This is because the implementation strategy requires the role of intellectual capital that has competence. Human capital, structural capital, and customer capital are needed in the implementation of an innovation strategy that is implemented continuously. In accordance with the opinion of [14] who argued that the success of the company is strongly influenced by the company's routine efforts to maximize the values of the company's intellectual capital. Intellectual capital provides a diversity of different organizational values such as increased profits, acquisitions of innovations from other companies, consumer loyalty, cost reduction, and productivity improvements in innovation and implementation of information technology.

Innovation is a process within an organization to utilize the skills and resources to develop new products and/or services or to build new production and operational systems so that the company is able to answer customer needs. The discussion of the positive effect of innovation on performance strategy based on Resources-Based Theory is innovation is a critical factor for companies to compete effectively in domestic and global markets and is considered one of the most important components of organizational strategy [15,16]. This is also in line with the results of research [17] who discovered the importance of human resource management when building innovation strategies for product and process innovation. Knowledge management supports innovative performance if simultaneous approaches from soft human resource management practices and hard information technology practices are implemented together so that they can synergize well.

The strategy that the company implements will determine the need for intellectual capital in order to achieve good performance. In globalization era, product innovation and information technology and processes, as well as intense business competition in this century, forced companies to change the way they do business. To win the competition, companies must quickly change their strategy from a labor-based business to knowledge-based business, so that the main characteristics of the company become science-based companies. A resource can be said to have a competitive advantage if it meets the following criteria (a) The resource enables the company to capture business opportunities and overcome challenges, (b) The resource is unique and difficult to obtain in the market and is owned by only a few players Business only, (c) Such resources can be utilized by the company to provide benefits to the company. Resource-Based Theory concluded that the resources owned by the company affect the performance of the company that will ultimately increase the value of the company. One of the company's resources of intangible assets expressed is intellectual capital.

The relationship between intellectual capital and customer performance showed statistically insignificant results. This indicates no intellectual capital relationship with customer performance. Customer performance that includes product attributes, customer relationships, and brand image has no impact on intellectual capital needs.

6. Conclusion

Based on research findings and study limitations, the following suggestions can be given for future research improvements as well as for the results of this study to inform the manufacturing companies in East Java about the importance of continuous innovation and information technology in the implementation of strategy for the company has competitive advantage and it is competitive in facing globalization.

References

[1] Porter M E 1980 *Competitive strategy Techniques for analyzing industries and competitors* (New York)
[2] Bamey J B 1991 Firm Resources and Sustained Competitive Advantage *J. Manage.* **17** 99–120
[3] Covin J G and Covin T 1990 Competitive Aggressiveness, Environmental Context, and Small Firm Performance *Entrep. Theory Pract.* **14** 35–50
[4] Ansoft H I 1991 Critique Henry Mintzberg, The Design School : Reconsidering the Basic Premise of Strategies Management *Strateg. Manag. J.* **12** 449–61
[5] Bird A 1990 On Strategic Planning *Bankers Mag.* 66–9
[6] Hopkins and Hopkins 1997 Strategic Planning Financial Performance Relationship in Bank: A Causal Examination *Strategy. Manag. J.* **18** 635–52
[7] Otley D T 1980 The Contingency Theory of Management Accounting: Achievement and Prognosis *Accounting, Organ. Soc.* **5** 413–28
[8] Brahmana S S 2007 Resources-Based View: The Effect of Product Innovation on Market Orientation and Performance Relationship *DeReMa J. Manaj.* **2** 94–110
[9] David F R 2005 *Strategic Management: Concepts and Cases* (Prentice Hall)
[10] Ireland R D, A Hitt M and G Sirmon D 2003 A Model of Strategic Entrepreneurship: The Construct and Its Dimensions *J. Manage.* **29** 963–89
[11] Phiem R and Butler J 2001 Tautology in The Resource Based View and The Implications of Externally Determined Resource Value: Further Comments *Acad. Manag. Rev.* **26** 57–66
[12] Teece D J, Pisano G and Shuen A 1997 Dynamic Capabilities and Strategic Management. *Strateg. Manag. J.* **18** 509–33
[13] Hirst M K 1987 The Effects of Setting Budget Goals and Task Uncertainty on Performance: A Theoretical Analysis *Accounting Review* pp 774–84
[14] Harrison S and P H Sullivan Sr 2000 Profiting from Intellectual Capital: Learning from Leading Companies *Ind. Commer. Train.* **32** 139–48
[15] Davila T 2000 An empirical study on the drivers of management control systems' design in new product development *Accounting, Organ. Soc.* **25** 383–409
[16] Hitt M A, D Ireland R, M Camp S and L Sexton D 2001 Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation *Strategy. Manag. J.* **22** 479–91
[17] Gloet M and Terziovski M 2004 Exploring The Relationship Between Knowledge Management Practices and Innovation Performance *J. Manuf. Technol. Manag.* **15** 402–9