Innovation and Business Strategy at State-Owned Enterprises: 
Evidence From Indonesia

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Abstract—This study scrutinize the business strategy at State-Owned Enterprises (SOEs) in Indonesia that is affected by innovation. Formulation and implementation of SOEs business strategies are theoretically and empirically determined by innovation. The purpose of this study was to determine and analyze the effect of innovation on business strategy of SOEs. This study was conducted using a survey method with a quantitative approach. The units of analysis of this study were 64 SOEs that have applied the Criteria for Performance Excellence since 2012. Data were obtained from survey results through questionnaires distributed directly to the representative of SOEs managements. Data were analyzed using descriptive statistical analysis and SEM-PLS. The results in general reveal that innovation has a positive and significant effect on business strategy. The impact of this study may be continued on a discussion of excellent performance.

Keywords: business strategy, Indonesia, innovation, State-Owned Enterprises

I. INTRODUCTION

The business world in the current era of globalization shows increasingly fierce competition, so that it brings renewal that is very fast and has a broad impact on the economy. The development of excellent programs in order to improve company performance becomes the main thing that must be done by every company in order to have a good performance. Every company will strive to increase its competitive ability to become a company that has superior competitiveness in world class. Companies must be able to adapt to changes and competition that occur in order to survive or succeed sustainably [1]. Companies that are able to adapt to change will tend to survive and exist in times of crisis [2].

The 1945 Constitution mandates that Indonesian economic system actors are State-Owned Enterprises (SOEs), Private Owned Enterprises (POEs) and Cooperatives. The Law Number 19 of 2003 concerning State-Owned Enterprises (SOEs) explains that the SOEs have a strategic role as executors of public services, balancing large private powers, contributing to the development of small businesses or cooperatives, and one of the significant sources of state revenue in the form of various types of taxes and dividends. In order for Indonesia to excel in competing in the global market, its actors of economic such as the private sector, state-owned enterprises and cooperatives must increase their productivity, quality and efficiency [3]. The greater role of SOEs needs to be encouraged to revive the concept of Indonesia Incorporated, namely efforts to raise state-owned enterprises and private partners to encourage the country’s economy [4].

In the Indonesian economic system, SOEs play an important role. The recent problem now is how improvements in SOEs can help emerging markets, such as Indonesia, to overcome various development challenges. Excellent SOEs can offer a large variety of potential as a driver of inclusive economic growth and development in various markets that are increasingly emerging. SOEs in Africa are estimated to contribute 15 percent to Gross Domestic Product (GDP), while in the Middle East and North Africa more than 50 percent. The significant role of SOEs in GDP in Asia, including in Indonesia, China and India is around 6 percent, while in Latin America (Brazil, Mexico and Argentina) it reaches 8 percent [5].

Thus, SOEs are dominant business actors in many developing countries, including in Indonesia. Although the average operational performance is alarming, its role in the economy is still very critical [6]. Through trade and investment integration, SOEs in various countries are increasing competing with the private sector in the global competition market [7]. This means that SOEs are a sector that is taken into account in the global economy. SOEs get the spotlight related to the inequality between supporting full facilities for SOEs in terms of capital, treatment, and sectoral, but on the other hand the hope of the community to obtain large benefits from the existence of SOEs cannot be realized optimally, there are many SOEs that fail to carry out their functions and duties well [8].

The dominance of SOEs working on government priority projects has made economic experts worried that if state companies increasingly dominate economic activities from upstream to downstream, stagnation will occur and there are still unprofessional, inefficient SOEs management [9]. SOEs have not run well because they are considered unprofessional, inefficient and some SOEs are cannibalistic towards other SOEs because they move in the same field and market [10].

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Indonesia’s need for a regional / global competitive corporation is urgent in the midst of the dynamics of a turbulent business environment (disruption era) because SOEs are one of the business people who are still relied on by the state [6].

The government hopes and designs that SOEs become the locomotive of the Indonesian economy. By considering the development of the business world in an increasingly open economic situation, SOEs need to be based on performance appraisal systems and structure that can encourage companies towards increasing efficiency and competitiveness that are not only focused on assessing financial performance but operational aspects and administrative aspects.

The performance measurement of SOEs to date still emphasizes only financial results, while competition in the current era of globalization uses performance measurement methods that are not only based on results but also processes so as to make the measurement of company performance more comprehensive. If it is associated with the company's strategic plan, performance measurement at the Ministry of SOEs is deemed not to show the company's strategic position. The vision of Ministry of SOEs is creating a modern organization in accordance with good governance, increasing the competitiveness of SOEs at the national, regional, and international levels, and increasing the contribution of SOEs to the national economy. The phenomenon of the low performance of SOEs until 2018 is generally related to (1) the amount of capital expenditure; (2) SOEs that enter Global Fortune 500; (3) Contribution of BUMN to the State; (4) SOEs Performance Assessment Score (KPKU); (5) Availability of valid SOEs data through the portal; and (6) BPK Opinion on Financial Reports of the Ministry of SOEs.

The excellent performance and business continuity of SOEs themselves will not be separated from the existence of a business strategy that is the basis for achieving excellent performance. In general, business strategy is the company’s work plan in achieving its vision, by prioritizing the achievement of goals, succeeding in competition, and being able to optimize business performance [11]. Business strategies are related to how a company competes in a particular industry, and that this business strategy is very important in achieving company performance [12].

The implementation of business strategies requires an innovation process carried out by SOEs. They have an interest in increasing their own innovation in developing strategies, products / services, marketing, and technology, so that they are one step ahead of competitors. Innovation is one of the choices of corporations in formulating and implementing business strategies, facing market competition, improving performance and sustainable management. Innovation is the effort of the company through the use of technology and information to develop, produce and market new products for the industry. In other words, innovation is a modification or discovery of ideas for continuous improvement and development to meet customer needs [13]. In short, innovation is the success of implementing creative ideas in an organization.

Based on these phenomena and problems, it can be assumed that SOEs have the opportunity to develop more as a large, strong and agile agent of development because SOEs have a strategic role in supporting the country’s development and economy. This role is manifested in achieving the goals and implementation of SOEs business strategies that are influenced by innovation. Innovations by SOEs have not optimally supported business strategies in SOEs so that their impact on business performance and business sustainability is relatively low. Thus, the purpose of this study is to scrutinize the effect of innovation on business strategy of the SOEs in Indonesia.

II. LITERATURE REVIEW

A. Innovation

Innovation plays an important role not only for large companies, but also for small and medium enterprises [14,15]. Innovation is a new element introduced in the network that can change, even if only for a moment, both the price, the culprit, the elements or nodes in the network [16]. Innovation is an important factor in business activities [17]. Innovation is the creation of new wealth or change and increased existing resources to create new wealth [18].

Innovation is the ability to apply creative solutions to a problem as well as opportunities to improve or to enrich one’s life [19]. Innovation is an effort to create change that aims and focuses on an economic or social potential [20]. Innovation is the introduction and deliberate application in a work, work team or organization of product process ideas or new procedures for the work of a work team or organization with the aim of benefiting work, work teams or that organization [21]. In short, innovation is about the creative change, caused by new applications that have knowledge or application of generated new knowledge.

Innovation is defined as adding something new to an existing product or process. Innovation is the successful exploitation of new ideas [22]. Innovation is the process by which entrepreneurs convert market opportunities into workable, profitable and marketable ideas. Innovation is an application of something creative that has a significant impact on the organization, or society. Innovation is the process of bringing the best ideas into reality, innovative ones. Innovation is the creation of new values, a process that combines ideas and knowledge into new values. Thus, it can be said that innovation is an attempt to change the company to adapt to the environment by involving the use of resources both people, time, and money in creating and developing new products, services, or work methods with the aim of benefiting work, the work team and organization.

Acceptance of innovation by companies and society is very dependent on the characteristics of innovation itself, namely: relative advantages, compatibility, complexity, triability, and observability [23].

Strategic innovation is a fundamental reconceptualization of the business model and reshaping of the existing market to achieve dramatic value improvements for customers and high growth for the company. This definition contains three key elements, namely the first element is the fundamental reconceptualization of the business model, the second key
element is reshaping the existing market and the third key element is dramatic value improvement for customers [24].

Innovation may include the creation of ideas, development of inventions and finally the introduction of new products, processes or services to the market [25]. Innovation can be classified in several forms: innovation in processes, innovation in products or services, innovation in management organizations, and innovation centered on people, culture, structure, processes and technology [22]. It is said that innovation has also three dimensions: product novelty to customers, product uniqueness, and product novelty for the company [26].

This study adopts suitable dimensions of innovation from [22-24,26], namely: Innovation in Processes, Innovations in Structures, Innovative Cultures, and Innovative Resources.

B. Business Strategy

Corporate strategy can be seen as a manager's theory of how to obtain and maintain competitive advantage [27]. Strategy as a theory on how to compete gives managers a map that is used as a guide to direction in the competitive regions. Translating strategies into actions takes place in the company's business model, which details competing tactics and company initiatives. In order to achieve a business model, the company first transforms the theory of how to compete in a plan or blue print of actions and initiatives that support the overall strategy. In the second stage, the organization implements this blueprint through structure, processes, culture and procedures [28].

Strategy is a plan, tactic, pattern, position or perspective [29]. Business strategies focus on improving and improving a company's competitive position or business unit or service product in a particular industrial community or market [30]. Basically the business strategy is very important because based on several studies the influence of business units has a double effect overall on company performance. Business strategies can be competitive by collaborating with one or several companies to become superior and win the competition.

Business strategy is a strategy that states a way a company or business unit will compete in an industry [31]. Porter’s Competitive Strategies focus on lower cost strategy and differentiation strategy. It distinguishes the two markets namely the broad market and narrow Market and on narrow market the competitive advantage must be on cost focus and differentiation focus. In the context of SOEs, the meaning of business strategy is a set of company commitments and actions that are integrated in achieving competitive advantage through exploration of competencies for business competition with certain market shares.

In connection with efforts to create a business strategy, as well as determining the dimensions of research, the dimensions of business strategy in this study are referring to the generic strategy proposed by Michael E. Porter. Determination of these dimensions is not specific to one type of company but generally in the company [32]. This strategy is called “Generic Strategy”, which consists of four types, namely: Cost leadership, Differentiation, Cost Focus, and Differentiation Focus. Furthermore, business strategy theory is developed into: Cost-Based Strategy, Differentiation-Based Strategy, and Value-Based Strategy [33]. It is also said that the company requires the speed strategy and flexibility strategy to capture all business opportunities [34].

Based on a review of the opinions of previous experts and adjusted to the current research in SOEs, the measurements used in the Business Strategy are determined as follows: Cost-Based Strategy, Differentiation-Based Strategy, and Value-Based Strategy.

III. METHOD

This study was a quantitative approach by utilizing questionnaires as the main instrument of data collection. This research was conducted in 64 SOEs that have applied the Criteria for Performance Excellence since 2012. Data were obtained from survey results through questionnaires distributed directly to the representative of SOEs managements. The data were analyzed by descriptive analysis to describe various characteristics of the variables studied. The verification analysis for hypothesis testing of this research was Structural Equation Modeling Partial Least Square (SEM-PLS).

In the model, innovation (X) is the latent exogenous variable that has four manifest variables, i.e. Innovation in Processes (X_1), Innovation in Structures (X_2), Innovative Cultures (X_3), and Innovative Resources (X_4). Meanwhile, Business Strategy (Y) is the latent endogenous variable that has three manifest variables, i.e. Cost-Based Strategy (Y_1), Differentiation-Based Strategy (Y_2), and Value-Based Strategy (Y_3).

IV. RESULTS AND DISCUSSION

The descriptive analysis describes that the average value of innovation at SOEs is categorized as high (with average score = 3.584 of maximum 5.000), and also its dimensions (3.630, 3.508, 3.594, and 3.604 respectively). The average values of the dimensions show that Innovation in Processes has indicated the creativity of SOEs to create new works, the benefits of creativity for SOEs, ability to compete with other enterprises, ability to create new products, adequate production equipment, and availability of time to create new products. The Innovation in Structures has indicated availability of resources, communication between members of the organization, extensive networking, and support for employees to act creatively. The Innovative Cultures has indicated the cultural innovation, risk identification, conflict management, focus on results, and innovative inputs. The Innovative Resources has indicated employee development, job security for employees, and employee creativity.

The descriptive analysis also describes that the average value of business strategy at SOEs is categorized as high (with average score = 3.677 of maximum 5.000), and also its dimensions (3.797, 3.600, and 3.635 respectively). The average values of the dimensions show that Cost-Based Strategy has indicated the resource efficiency strategies, lowest cost strategies, operational efficiency strategies, and competitive pricing strategies at SOEs. The Differentiation-Based Strategy has indicated the product differentiation, product delivery
differentiation, marketing differentiation, facility differentiation, and corporate image differentiation. The Value-Based Strategy has indicated the ability of SOEs to adjust consumer desires, the ability of SOEs to react to competition, and the ability of SOEs to negotiate.

Hypothesis testing is done using SEM-PLS, which consists of two stages. The first stage is evaluating the outer model or measurement model, which includes the value of outer loading (valid if the outer loading > 0.5 and ideally outer loading > 0.7), average variance extracted (AVE) is valid if > 0.5, and composite reliability (CR) is valid if > 0.7, and Cronbach’s Alpha is valid if > 0.7. The measurement model describes the variance of each manifest variable that can be reflected in latent variables. Through the measurement model, it can be seen which manifest variable is more dominant in reflecting latent variables. This test is basically a test of unidimensionality (validity and reliability) of each latent variable using Confirmatory Factor Analysis (CFA).

The second stage is the evaluation of inner models (structural models), which include the latent variable correlations, path coefficients, and R-square ($R^2$) values, which mean diversity or endogenous construct variances that can be explained by exogenous constructs simultaneously. Here, we examine the effect of exogenous latent variable on the endogenous latent variable.

The calculation results for the measurement model of innovation can be described in Figure 1.

![Fig. 1. Measurement model of innovation.](image1)

The calculation results show that all dimensions have a path loading or coefficient > 0.50 which indicates that each dimension is significantly (meaningful) able to reflect the latent variables of Innovation. The t-value for all dimensions fulfills the assumption requirements, namely ≥ 1.96 and the standard factor (standardized loading factor/SLF) of the statement items are all valid. The measurement model of innovation has good reliability (CR = 0.926 ≥ 0.7, VE = 0.758 ≥ 0.40, and CA = 0.870 ≥ 0.7). This means that the dimensions and indicators formulated in the innovation measurement model are valid and reliable.

The calculation results for the measurement model of business strategy can be described in Figure 2.

![Fig. 2. Measurement model of business strategy.](image2)

The calculation results show that all dimensions have a path loading or coefficient > 0.50 which indicates that each dimension is significantly (meaningful) able to reflect the latent variables of Business strategy. The t-value for all dimensions fulfills the assumption requirements, namely ≥ 1.96 and the standard factor (standardized loading factor/SLF) of the statement items are all valid. The measurement model of business strategy has good reliability (CR = 0.908 ≥ 0.7, VE = 0.767 ≥ 0.40, and CA = 0.824 ≥ 0.7). This means that the dimensions and indicators formulated in the business strategy measurement model are valid and reliable.

The Structural Equations in this model is formulated as follows:

$$Y = 0.713 X,$$

with $R^2 = 0.508$ and $\varepsilon = 0.402$ \hspace{1cm} (1)

This equation can be described in Figure 3.

![Fig. 3. Structural model of effect of innovation on business strategy.](image3)

R-square value of 0.508 indicates a significant influence of innovation on business strategy, meaning that 50.8% variance of business strategy at SOEs can be explained by innovation, and 40.2% is influenced by other factors not examined in this model. The value also indicates the importance of innovation to improve the business strategy at 64 SOEs in Indonesia.

Based on the results of hypothesis testing, innovation has a positive and significant influence on the business strategy. This condition shows that the higher the innovation is, the higher the implementation of business strategy of SOEs. The findings of this study are in line with the results of Bos-Brouwers research related to the effect of innovation on business strategy [35].
The innovation at SOEs in Indonesia in general is in high category. This condition shows the position of SOEs to maintain or improve if possible the innovation in terms of Innovation in Processes, Innovations in Structures, Innovative Cultures, and Innovative Resources. The business strategy at SOEs is also in high category. This condition shows the position of SOEs to maintain or improve if possible the business strategy. The innovation has a positive effect on business strategy. It means that the higher the innovation is, the higher the implementation of business strategy.

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