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SR-Based Strategy Design as a New Approach

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Abstract: There are two main issues I designing corporate strategy. The first issue is related to the approaches employed, either content approach or process approach. The second issue is the fact that well known strategy design models focus building competitive advantages in the industry and market. The change in environment that shifts the definition of industry and the emergent issues on the importance of integrated risk management and sustainability are still not incorporated in those strategy design models. Instead, the emergent issues are treated as the complementary on designing corporate strategy. This study attempts to propose a strategy design approach that accommodate those issues, i.e., combining content and process approaches and, at the same time, integrating industry shift and the emergent issues into the model called sustainability and Risk-based strategy design or SR-based strategy design. This design model consists of four main stages.

Key words: Strategy design, sustainability, integrated risk management, economic, social and environment objectives

INTRODUCTION

A corporate strategy is an important component of the corporate governance. A well designed strategy leads not only to a good corporate governance, because "good is not good enough". Achieving the level of "good" in corporate governance is just at minimum requirement and, therefore, investors and board of directors should not be satisfied with the achievement of merely "good corporate governance. A well designed strategy should lead to a strong corporate governance.

Besides strategy, risk management also important to bring a corporate into a strong governance level. There are four pillars of corporate governance, i.e., determination of purpose, holding of account, governance culture and compliance (Crauford, 2007). Determination of purpose means that the executive directors have to propose corporate strategy, operations and objectives and to obtain the approval from non executive directors (or board of commissioners in terms of two tier system). Holding of account means that non executive directors have to assure that executive directors take the fiduciary duty in order to avoid critical risks that can bring the corporate into collapse. The pillar of "governance culture" stresses the role of the board of directors (both the board of directors and the board of commissioners in terms of two tier system) to conduct self assessment on how far they have implemented corporate governance and to put continuous improvement on the quality of the corporate governance. The fourth pillar, i.e., compliance, requires the board of directors to maintain corporate solvency, sound financial condition, to comply to regulations and laws, by implementing high quality integrated risk management.

As long as the corporate manages the four pillars properly, the corporate is on the right track to achieve its objectives. Cadbury (2008) argues that a strong corporate governance is able to lead and to control the corporate so as to reach the balance between economic and social objectives, individual and community objectives, efficiently employs corporate resources and, at the same time, demand the accountability of the stewardship on the resources in order to fulfill the interest of individuals, corporate and society. A strong corporate governance is also able to clarify those who are involved in influencing the institutional process, such as who approve the external auditor, which regulators that have significant influence to the corporate and who are important parties involved in the value chain from production to sales. Mathiesen (2002) propose the incentive mechanism like contract organization design and regulation to enhance the effectiveness of corporate governance.

In practice, designing strategy is a separate activity from managing risk. Therefore, the processes from developing strategy options, evaluating the options, until developing the implementation program on the chosen strategy do not take into account Integrated Risk Management (IRM, also known as Enterprise Risk Management (ERM)) process. Similarly, the implementation of IRM does not much take strategy risk into account, i.e., the concern on what risks that may

obstruct the quality and the implementation of the chosen strategy to achieve objectives. Most companies give much attentionon financial and operational risks either at strategic or technical aspects. Academicians and practitioners currently realize that strategy and IRM are the backbone of the companies to grow and win the competition. The other two pillars, i.e., holding ofaccount and governance culture, take the role of assuring the strategy and IRM are in place and work properly.

The above argument suggests that strategy and risks need to be designed in tandem. Basically, strategy design is the core of a company to improve and maintain its competitive advantages (Teece *et al*., 1997). Competitive advantages are formed through a series of activities in order the company to be able to position itself as unique as possible from its competitors (Porter, 2008). On the other side, risk provides at least four functions to a company, i.e., compliance, reporting, operational and strategic functions. The compliance is the lowest level of the contribution of risk management because it is just to comply with regulations imposed by government. Reporting is just on the interest of the board of directors concerning the risk status. Operational function is related merely related to the use of risk status for tactical matters such as improving efficiency and safety. Strategic function is considered as the highest level of contribution of risk management, yet most companies do not explore and exploit in the sense that risk management help companies improve their competitiveness and competitive position. This is the function of IRM that is expected in designing corporate strategy (Miller, 1992; Das and Teng, 1998; Berg, 2010).

Another crucial issue is related to sustainability that must be considered when a company designs its competitive strategy. Similar to the behavior of companies to strategy and risk as mentioned above, most strategy practitioners and academicians do not combine both strategy and sustainability issues into a one mechanism. Companies design competitive strategy and sustainability strategy separately. Research studys on what sustainability strategy and how to design it are many.

However, they seem to be the additional strategy to their competitive strategy in the forms of charity, operational efficiency activities or related to strategic issues such as external and internal pressures (Sinclair-Desgagne, 2004; Vargas-Hernandez and Velasquez-Alvarez, 2013). One of reasons why, sustainability strategy comes after competitive strategy is because conventional strategic objectives, i.e., in terms of financial or economic objectives, frequently are under conflict with sustainability objectives, i.e., in terms of social and environment objectives (Hansmann *et al*., 2012). Under this situation, companies tend to put the conventional strategic objectives and competitive strategy as the priority. The concern of Salzmann *et al*. (2004), Petrini and Pozzebon (2010) and Galpin and Whittington (2012) to integrate sustainability issues into strategy need to be considered when companies design sustainable, competitive strategy design.

The current situation is there no model of designing strategy that incorporates IRM and sustainability management into one model to be implemented by practitioners, mainly the board of directors of companies. If this is available, they may improve their confidence on the future of their companies and on the better quality of corporate governance. This is the reason of writing this study the question to be answered by this study is "what is the mechanism or step-by-step mechanism on designing competitive strategy by incorporating risk and sustainability?". The mechanism which is called Sustainability and Risk based strategy design (or SR-based strategy design) is provided at the end of this study. This study is arranged as followed. The first section is introduction, followed by the review of main strategy design currently available. The third section is the SR-based strategy design. This paper is closed by conclusion.

The review of the current strategy: In essence, there are two important aspects that are not taken into consideration in designing competitive strategy that are currently available. As aforementioned, the first neglected issue is risk or IRM in the process from developing, evaluating, to deciding corporate strategy. The second is the exclusion of the demand for the balance between economic objectives, on one side and the requirements of environment objectives and social objectives, on the other side, to fulfill company's status as a good citizen. These two aspects are the basis of future, strong strategy in order not only to win and sustain against competition but also to sustain and grow together with environment and society as tow important stakeholders in the days to come.

Strategy design that is currently employed by practitioners is developed by Porter in 1980s. Mintzberg *et al*. (1998) categorized Porter model as positioning school. Porter (2008) stresses the principle of a company's position in the market against its competitors and industry map. By understanding its position against the five forces in the industry, i.e., competition against existing competitors, bargaining power of customers, the threats of new entrants, the threats of substitutes and bargaining power of suppliers, the company may be able to identify its key success factors or KSFs. The next step that needs to be done by the company is to evaluate the

extent the company acquires the KSFs compared to its competitors. KSFs acquired by a company that are better and stronger than its competitors are called strengths while those that are worse or weaker that its competitors are called weaknesses. Based on its strengths and weaknesses, the company has to choose a generic strategy that is most appropriate. The choices are cost leadership strategy, differentiation strategy and focus strategy.

Porter's strategy design is based on industry structure (Slater and Olson, 2002; Porter, 2008). Industry structure has an important role in choosing strategic actions. The actions are frequently meant to move the company position in the industry, i.e., against the industry pressures coming from the five forces (Teece *et al*., 1997). As long as, the company is able to put itself properly within the industry structure and to design the right strategy to influence the five components of industry, the company has a good chance to sustain against its competitors and as a result, to gain the economic rent and profit.

The advantage of strategy design developed by Porter is the clarity and simplicity. The categorization of industry structure into five components helps practitioners employ the model. Furthermore, Porter also provides the details of items of each component of industry to be analyzed. Hence, practitioners may focus on those items and collect relevant data related to the items. For example, the threats of new entrants are identified by analyzing the items of supply-side economies of scale, demand-side benefit of scope, customer switching costs, capital requirements, incumbency advantage independent of size, unequal access to distribution channel and restrictive government policy. By focusing on the data related to those items and analyzing the data based on indicators suggested by Porter, practitioners will obtain the KSFs. Also, by focusing on the data of competitors on comparing the quality of KSFs of the company against its competitors, strengths and weaknesses are also obtained.

Despite its easiness to implement and popular among practitioners and academicians, Porter's positioning strategy design has several limitations. Porter (2008) argues that the ability of defining the industry is very important. The border of industry cannot be too narrow as well as too wide. However, defining the border of industry is a difficult job. The challenge of defining an industry is becoming more complicated due to the trend of conglomeration, i.e., a company has several business units that have various products, diverse competitors. Even, a single product may not be a kind of conventional product, i.e., one product with one main function. Instead, one product may be an amalgamation of several products with diverse function. This trend becomes possible due to mainly the role of information and communication technology. For example, communication and camera industries are originally two different industries. Now a days, some mobile phone products combine both industries into a single industry while other mobile phone products choose to combine different industries such as communication and entertainment industries. Under these circumstances defining industry is problematic.

The second limitation is related to the industry structure itself. Speed (1989) argues that there is no clear foundation on how Porter finally comes into the conclusion of the five components of industry structure. Grundy (2006) supports Speed's argument by stating that putting too much on the industry structure and excludingmacro factors as the basis of analysis in designing strategy is too narrow. Based on the consideration of the importance of macro factors, Porter's model is borrowed by other models, which are named by Mintzberg *et al.* (1998) as planning school and design school. These schools or models employ macro analysis together with Porter industry analysis in SWOT analysis (Carlopio, 2009). However, both models employ macro as well industry analyses merely focus on the survival of companies through competition. There is no clear issue on sustainability such as the consideration on social and environment matters, sustainability development goals or SDGs as the main issues. Dalken (2014) raises other issues, i.e., the importance to consider three issues that are currently developing. The issues are digitalization, globalization and deregulation.

While Porter and other strategy designers emphasize on the contents to be considered in designing acompetitive strategy, Carlopio (2009) proposes a process approach, i.e., the process of creating strategy. Carlopio proposes two main activities in strategy design. The first activity is to conduct research in order to gain a deep understanding about consumers through divergent, creative thinking process. The output of the research activity is used to develop strategy alternatives that create value added to the company. The second activity is to evaluate strategy alternatives. The chosen alternative is developed further into prototypes. It is tested and modified if necessary. Therefore, Carlopio argues that designing strategy is not conducted in linear steps. Instead, it is conducted through creative, iterative and innovative approach.

Carlopio (2011) enhances further his strategy design by developing strategy innovation model. The model considers the importance of redefining the basis of competition and creates a new industry as the basis of developing a new, uncontested, radical, nonlinear and

innovative strategy. He argues that "in an increasingly nonlinear world, only nonlinear strategy will create substantial new wealth. This statement is in accordance with the principles of the blue ocean strategy (Kim and Mauborgne, 2004). Carlopio's strategy design consists of five main steps, i.e., general understanding on objectives and problems, Research on exploring problems and collecting information for developing ideas and deep understanding on consumers/users, competition, organization, market, government regulations, etc. Development of conceptual ideas and prototypes creatively, evaluating ideas and prototypes, Deciding and implementing strategy.

Carlopio's strategy model is different from strategy models summarized by Mintzberg *et al.* (1998) because according to Carlopio, it has the future orientation and reinvention. The model does not focus on the past and current conditions and also does not implement incremental model (adjustment of the past strategy). In this sense, Carlopio provides a new perspective on designing strategy. However, it seems that Carlopio needs to provide more detailed guidelines like Porter in which the components are completed with detailed items to be considered and analyzed. Another issue that Carlopio emphasizes on is that the definition of sustainability is limited on the strategy that provides last long advantage against competitors. The issues outside competition against competitors that may cause the company cannot survive are still missing from Carlopio's view. In this sense, Carlopio's scope of issues considered in strategy design is similar to Porter's approach.

Teece *et al.* (1997) develops strategy design on the basis of capability, which is called capability based strategy. Teece's approach is completely different from Porter's and Carlopio's approach. Porter and Carlopio base their strategy design on the external factors, such as industry factors market factor and other macro factors as the starting points. Teece starts the strategy design from the understanding of internal resources, competences and capabilities. Teece proposes that competition based strategy follows three main steps, i.e.:

- Choose an attractive industry
- Choose the strategy to enter and compete in the industry
- Acquire asset that is necessary to compete in the market

Capability-based strategy proposed by Teece, on the other side, follows three steps too, i.e., identify the unique resources owned and controlled by the company; identify the appropriate market that is suitable to the capabilities and generates maximum profit; evaluate the best way of maximizing the use of resources effectively.

Referring to resources based strategy development, Teece *et al.* (1997) proposes the dynamic capability approach of strategy design. He suggests to consider a dynamic change of environment which is similar to the idea suggested by Carlopio. Dynamic and fast change of environment is cause by fast technology development. Therefore, the company needs to have the character of being dynamic, i.e., the ability to renew its competences in order to respond to the fast change of environment, fast change of technology and unpredictable competition and market in the future.

However, many resources acquired by company are sticky or cannot be changed immediately because of three factors:

- New competencies cannot be developed immediately
- Many assets are not saleable, such as reputation
- even though a company can by an asset, the company may not be able to use or exploit it

Therefore, many companies cannot respond quickly to the change of environment. Based on this consideration Teece *et al.* (1997) develops a dynamic capability strategy approach with the principles that the company needs to be able to integrate, develop and restructure its competences to respond to the fast changing environment.

Dynamic capabilities derive from unique resources, i.e., the resources, that cannot be imitated by competitors and that are used to conduct distinctive activities. The activities that are conducted routinely and constantly generate distinctive competences. If the company is able to adjust resources-activities-distinctive competencies to the changing environment, the company truly acquires the dynamic capabilities. Furthermore, dynamic capabilities have to have strategic characteristics. These characteristics mean three things, i.e.:

- Usability in relation to the ability to fulfill the needs of the users and as a result, generate revenues for the company
- Uniqueness indicated by the power of the company to set the price without the fear of the prices of competing products by its competitors
- Difficult to be replicated so that the profit are unlikely to be able to be taken by competitors. Teece categorizes the dynamic capabilities into process, position and path

The concepts of dynamic capabilities by Teece *et al.* (1997) and strategy design proposed by Carlipio (2009, 2011) are considered as the appropriate approaches under

the current dynamic conditions. They combine the considerations of dynamic conditions and asset advancement. Asset conditions include the stickiness of a conditions. Dynamic conditions include regulations regegulations and deregulations, the trend of open markets and technology ssets that cannot easily change while capabilities must be dynamic. Teece provide the menu of designing strategy on the basis of dynamic capabilities. Besides the menu still needs to be completed, the dynamic capability model proposed by Teece still does not provide the recipe on how the strategy to be designed. On the other side, Carlopio provides the recipe or step-by-step of designing strategy but he does not provide the menu or ingredients.

Therefore, there is an interesting need to collaborate both approaches by adding some ingredients in the recipe. There are two crucial ingredients to beadded. The first ingredient is sustainability. The term of sustainability may be different with this term used by Porter that stresses the meaning of sustainability as the ability of competition of the company for a long period within the industry structure. Instead, the term of sustainability in the model developed in this study, stresses on the importance of fulfilling the requirements from stakeholders who concern with environmental and social issues, not merely competition issues. The second ingredient is based on the belief that a strategy design model help the company sustain, grow and implement the strategy properly if the strategy implements the prudential principle by putting risk management in the strategy process.

MATERIALS AND METHODS

Research: Principally, SR-based strategy design employs the analytical-creative-innovative thinking process, as suggested by Carlopio (2009, 2011). The following pictures do not explicitly show the thinking process to make this study concise. In addition, this study also does not show the iterative process, meaning that the process after reaching a certain stage may result an output (outputs) that can be used to evaluate whether the output or outputs fit-in with the output or outputs from its previous stages. If not, the process may be repeated. SR-based strategy design consists of four main stages:

- POC strategy option development
- Risk adjusted strategy options
- Sustainability based strategy selection
- RS-based strategy deployment

Stage 1; POC strategy option development: In this stage, the analytical-creative process is applied to evaluate and develop three ingredients as the fundamental factors of the strategy, i.e., P that stands for propositions, O, opportunities and C, capabilities. Propositions are important not only for the consumers or users but also for other stakeholders. Besides, the propositions are to fulfill the demand of not only consumers or users but also other parties, especially external stakeholders, mainly those who are concerned with social and environment issues. For this reason, the propositions may be called business propositions. For example, if the company offers green, environmental friendly products as a proposition, the company addresses this proposition to all consumers or users, environmental-related stakeholders and community-related stakeholders. This proposition certainly attracts the attention of the board of directors in order to create the proper strategy and the operations and also investors in relation to company or share valuation.

The company needs to identify distinctive issues related to social and environment to solve and, at the same time, to explore and to gain the greatest competitive benefits (Petrini and Pozzebon, 2010). To do this, the company explores the sustainability issues from public interest, change in regulation, pressure from stakeholders and the concern of building reputation. To the extent the company design strategy to address sustainability issues depend on what level of achievement the company wants to reach, whether at the risk management perspective level, i.e., to protect corporate reputation, integrated stage, i.e., to include social and environment responsibilities into business model to gain competitive advantages, or citizenship stage, i.e., to integrate social issues into firm's responsibility (Galpin and Whittington, 2012).

In relation to consumers, the company classically identifies markets based on the segmentation and the company based on the segments determines the targets and its positioning. However, the fast changing environment, the openness of market through Asean economic society of EAC and other markets around the world, deregulation and reregulation, the role of information and communication technology and digitalization, the company needs to review its strategic group. A strategic group is a population of companies in common that make them compete each other and operate in the same or at least, similar market. Strategic group may change from time to time because of those factors. Industries may overlap or even merge. In this sense, business propositions also need to be reviewed periodically.

A strategic group is not defined conventionally by putting only companies that currently produce the same

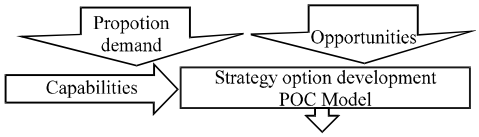

Fig. 1: The POC strategy option development

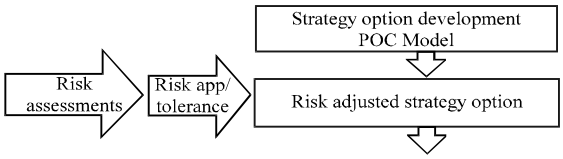

Fig. 2: Risk adjusted strategy options

or similar products and compete in the market. Instead, defining a strategic group needs to consider companies that produce substituting products complementary products and products that potentially have a linkage to the current products. The linkage may derive from technology, function and social trends. In current reality, linkage-based products that originally come from different industries potentially have a good chance to develop than among substitutes.

Capabilities as the second ingredient at the first stage, very much depends on the assets acquired by the company and on the ability of the company to conduct activities by employing those assets. The company has to acquire basic assets, i.e., the types, quantity and quality assets necessary to play or compete in the industry. More than that, the company has to acquire specific or distinctive assets in order for the company to develop distinctive competencies and capabilities (Fig. 1).

Opportunities derive from external environment and external stakeholders. External environment consists of physical, political, social, economical, governmental, technological and global environment. What the company needs to do is to identify relevant aspects of each component of environment, to make the projections of each aspect and to determine what opportunities available to the company. External stakeholders are individuals or institutions who are concerned with the company and have certain resources or power to be shared with the company. What the company needs to do is to identify each stakeholder on the aspects of level of interest to the company, their voting power of decision making of the company, political power affecting the strategic direction of the company and resources power to be contributed to the company.

Analytical and creative process is needed in this stage to derive each ingredient, i.e., propositions, opportunities, capabilities and their aspects. There is also a need to apply iterative process to generate strategy options. The development of the options comes to the end, at least temporarily before applying the iterative process from the next stage, when the company has combine as best as possible all P, O and C to generate alternative strategies. In addition, the company need to make sure that the process of generating P, O and C has been done on the bases on the best information the company acquires. To do this, brainstorming, focus group discussion and deep interview with various experts may apply.

Stage 2; risk adjusted strategy options: Alternative strategies developed in stage 1 not only generate the ways of achieving strategic objectives or goals but also generate risks. It is natural that every objective and activity is hand in hand with risks. By definition, risk is likelihood that unexpected events may occur and generate impacts causing the results deviate from the objectives. It is impossible for the company to avoid or eliminate all risks. Instead, the rational action by the company is to make sure that all risks must be below risk appetites and risk tolerance as the borderline to decide go or no go to any alternative (Fig. 2).

What the company needs to do is to conduct risk assessment. Some activities in the risk assessment include risk identification, risk measurement and risk evaluation. In the risk identification, the company involves senior management because they are the persons who have deep and wide understanding of the company and its strategic aspects. It is also important to involve external stakeholders or parties in risk identification step because they may acquire information on strategic issues that are not acquired by senior management. Furthermore, most companies currently focus on downside risks, i.e., risks that generate negative effects if the risk comes into reality. Upside risks are also important to be considered. Upside risks are risks related to the conditions that the company is not prepared and not capable to seize and exploit unexpected events in order to gain benefits or to reach strategic objectives.

All risks must be measured on at least two dimensions, the likelihood and severity. Likelihood or the quality of risk is related to the extent the risk events is likely to happen. Most companies currently do not have proper database to measure likelihood and severity or impact quantitatively. Strategy risks are the most difficult to measure quantitatively, compared to financial, operational and external risks. Strategy risks are the less frequent to be managed by companies compared to the other risk categories. This is why, strategy risks are measured so far qualitatively. Under this approach, the choice of who are involved in strategy risk measurement becomes crucial.

Risk status is the combination between the likelihood or quality of risk and the severity or quantity of risk. Based on the risk status of every single risk, the company evaluates the risks by comparing to the risk appetites and risk tolerance. It is the duty of the board of directors to determine risk appetites and tolerance. Risk appetites and tolerance are the borderline between accepted and not accepted type and level of risk. They are related to the extent how dare the board may accept risks that may influence the performance of the company. The change of the board member may lead to the change of appetites and tolerance. Therefore, the strategy needs to be reviewed accordingly.

Strategy risks that exceed the appetites and tolerance, the company needs to develop risk responses. The purpose of risk responses is to equip the board and their staff with appropriate actions in order to reduce risk status to the acceptable level. Risk responses become part and added to the strategy options in order to assure that those strategy options are adequate and safe if the options are chosen and employed by the company. it is possible that the company does not have risk response alternative to certain risks with high status in order to reduce them to the acceptable level. Under this condition, the board or strategy designer mayreview the strategy options, give feedback to Stage 1, repeat Stage 1 or at the worst case, abandon the option.

Stage 3; SR based strategy selection: At this stage, strategy options that have been adjusted to risk responses are tested whether those options or alternatives are able to fulfill the corporate sustainability objectives. In the nutshell, the strategy or strategies chosen are those who provide strong competitive advantages in order to generate maximum benefits and the benefits must grow and sustain, so that the stakeholders requirement are fulfilled. The corporate sustainability and risk based strategy is meant to maximize competitiveness in order to reach maximum benefits without sacrificing the interests of future generation. The more progressive meaning of SR-based strategy is effort of designing competitive advantages to compete in the market with the purpose of maximizing benefits for the existing stakeholders and, at the same time, develop the capacity for future generations to gain benefits (Fig. 3).

It is not an easy job to develop ESE objectives because they are conflicting each other in many cases. In the effort of maximizing economic performance, the company may harm society and environment and then become economic problem (Hansmann *et al*., 2012; Vargas-Hernandez and Velasquez-Alvarez, 2013). In addition, there is still doubt whether economic performance influence social and environment performance or the other way around (Salzmann *et al*., 2004). Therefore, it is safe to put all economic, social and environment issues together in designing strategy as the values and behavior of the company with the expectations and needs of stakeholders, not just customers and shareholders. The strategy has to express the continuing commitment of the company to behave ethically and contribute to economic development while improving the quality of life of the workforce, their families, local community and society at large, to build capacity for continuing livelihood and to operate the business that meets or exceeds the ethical, legal and commercial and public expectation that society has of business. In this case, social and environment strategy as part of the corporate strategy will be positively related to financial performance due to positive image to customers and better customer satisfaction produces more financial benefits (Fontaine, 2013).

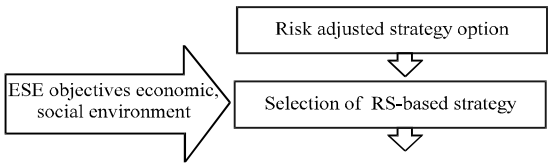

Fig. 3: The SR-based strategy selection

Referring to the sustainability development goals or SGDs, the company has to set and balance the ESE objectives, i.e., economic, social and environment objectives. Economic objectives are related to the concern of investors as principal to gain the investment benefits in terms of dividend and capital gain, the concern of the board as corporate agents and employees to gain wealth and financial security and career. At the end, investors consider the success of the company based on the principles of value maximization, i.e., the growth of stock values. As the stock value is the reflection of the expected and present value of future financial benefits, the company has to maintain its financial performance and its growth and, at the same time, to keep the company at the acceptable level of risk.

Social objectives are related to the good citizenship status of the company, i.e., to contribute to the wealth of society. At least, the company has to provide social benefits that are more than social costs or does not create social costs if possible. One of the social benefits is the implementation of CSR, corporate social responsibility, effectively. The meaning of effective CSR very much depends on the design of CSR because the types of CSR

vary and are like a continuum from charity or philanthropic CSR at one end to strategy-link CSR at the other end. Some social benefits relevant to SGDs include:

- Poverty alleviation
- Hunger eradication by securing food and nutrition availability and developing sustainability agriculture
- Health promotion
- Equality of education and lifelong learning opportunities
- Equality of gender and women empowerment
- Equality of decent work for all

Environment benefits are related to the ability to preserve and enhance the quality of resources for the future generations. The benefits related to SDGs that need to be considered by the company include:

- The availability of clean water and sanitation
- The availability to access cheap, reachable and sustainable energy
- Being involved in developing sustainability industrialization
- Developing living environment that is secured, comfortable and environmental friendly
- Being involved in the effort of climate change problems
- Preserving and employing sea and its contents sustainably

Stage 4: SR-based strategy deployment: This stage is very crucial. The poor strategy deployment will result in the failure of the strategy itself. Poor deployment may mean that the details of the strategy and its implementation programs are not complete, difficult to understand, not in accordance with the competence of the employees, not responsive to the external and internal changes, lack of control at the implementation, lack of measurement on the achievement of the strategy. There are many things can be explored at this stage. However, this study focuses on the main points of what to be done on this stage.

RESULTS AND DISCUSSION

There are four components of deployment: strategic initiatives, IRM implementation, business model architecture and strategic control tools (Fig. 4). The first component is strategic initiatives. These are the main action plans as the deployment of the strategy into the implementable actions. In other words, strategic

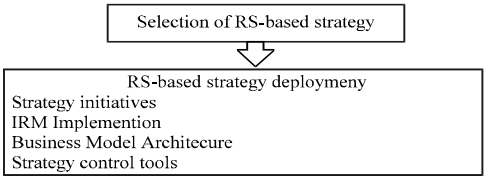

Fig. 4: SR-based strategy selectionis deployement

initiatives are a group of projects and programs, within certain durations, outside daily operation activities, to support the achievement of strategic objectives, targets or performances.

The second component is the implementation of the Integrated Risk Management (IRM). IRM attempts to improve strategic decisions that influence strategic objectives of the company by reducing different risks to a pre-selected domain to an acceptable levels based on risk appetites and tolerance. All plans must encompass some forms of risk management. The company may choose a certain risk management standard or guideline that available (Berg, 2010). Some companies design their own risk management framework based on Plan, Do, Check and Action (PDCA) of the IRM framework. Companies may have various attention of different types of risks, depending on the external and internal factors, asset and capabilities acquired, technology used (Froot *et al*., 1993; Das and Teng, 1998; Sinclair-Desgagne, 2004; Garcia-Canal and Guillen, 2008; Pironti, 2008;Aumann and Dreze, 2009; Guinchard, 2011).

There are at least four things to be taken into account in the IRM implementation. Firstly, he board of directors has to agree upon the risk appetites and tolerance as the borderline for the company to decide what risks to be accepted and not to be accepted. And for the accepted risks, the company employs risk tolerance to evaluate which risks have higher status that need to be responded and which risk have low, acceptable status. If the company follows the stages of designing SR-based strategy, the risk appetites and tolerance should have been prepared at the second stage. Secondly, IRM needs to be implemented wholly from the understanding of the organization and its units, their objectives, their readiness to implementing IRM, risk assessment, risk responses, monitoring and reporting (Miller, 1992; Garcia-Canal and Guillen, 2008; Berg, 2010). Thirdly, the board of directors has to assure that risk management is an integral part of decision making process in every unit of the company and hence, every single decision is based on the prudential principle. Fourthly, the board of directors needs to make sure that the performance of each unit is measured not

only based on business performance but also risk management performance or risk-based performance management.

The third component of SR-based strategy deployment is the availability of business model architecture. It is about the combination of business model and CIT architecture. This combination is expected provide a powerful and dynamic tool for the company. It is not only to provide a picture how the company arrange the activities from supply to the markets and its impact on costs and revenues but also to provide what kinds of technology, application and database needed to support the operational management, customer relationship management and innovation management.

The fourth component of SR-based strategy deployment is the strategy control tool. It is a model to assure the company to achieve its strategic objectives by balancing; financial and non financial performance; economic, social and environment performance and sort terms and long term performance. There are some tools available now a days, such as balanced score card and Malcolm Baldridge.

CONCLUSION

On one side, SR-based strategy design is expected to enrich the model alternatives of d signing strategy. The positive side of this model is the implementation of sustainability and prudential principles that give attention not only to the continuity of the company because of its ability to compete against its competitors in the industry but also to the role of the company in fulfilling the demands of various stakeholders as expressed in the three categories, i.e., economic, social and environment demands. Furthermore, the implementation of prudential principle applied from the first beginning of designing strategy is expected to enhance the company's confidence in achieving its objectives because all risks are anticipated and responded from the beginning.

However, SR-based strategy need to be further discussed and described into more details to make it easy to implement by practitioners. This design needs to be further criticized by researchers in order to improve the quality of this design model. More importantly, this mode needs also to be tested in various types of industries, markets and sizes to improve its suitability of the design model.

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