A STRATEGIC AGILITY FRAMEWORK: CRITICAL REVIEW ON COMPETITIVE DYNAMICS OF OIL & GAS SECTOR IN INDONESIA

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ABSTRACT

Strategic response is required to mitigate facing the price volatility to increase competition, stringent regulatory requirements with risk, complexity and uncertainty. The quick responses need to match with the corporate's resources and capabilities to remain competitive and survive in a dynamic environment. Strategic Agility Framework is proposed to build, integrate, structure and reconfigure both internal and external for attaining and maintaining organization in high level performance. The study on upstream oil & gas agility with the comprehensive framework still scarce in field research in oil and gas sectors. Portrayal on the theoretical framework and literature of the antecedents. The framework to major cradles of organizational agility that effectively drive it its way to becoming agile. This research objective is to determine the impact exerted and what the most suitable culture to improve agility of the organization. An advance of research model to examine the effects of the new framework to create responsiveness and improve capability in critical affect to organization performance.

Keywords: strategic agility framework, resource-based theory, dynamic capabilities, dynamic managerial capability, corporate culture, dynamic environment.

INTRODUCTION

The oil price volatility around the world is impacting the upstream oil and gas sectors in Indonesia. Some companies that are active in these sectors keep generating various strategic responses to anticipate the change. Top management of the companies are not only responsive to act, but they also mitigate this critical capability and resource orchestration to remain competitive and survive in a dynamic environment. It's very interesting to study further how the corporate strategy is implemented and well executed in the field to make the operations level more agile to respond and anticipate any dynamic change in the business environment. This article is structured firstly by upstream oil and gas sectors; second is the theoretical background by having some selected journal related. Then the third, introduce the key concepts based on case complexity and contextually in the given cases of selected articles. Next, this article provides an overall framework called strategic agility framework (SAF). The proposed framework to know how to integrate the premises, constructs and contexts for all cases in the. Thus, end the section by depicting substantial remarks and practical implication to managerial level. To give better understanding and overall outline, by figuring the constructs and frameworks, which in turn lead to interconnect and intra-connect those in terms of providing a comprehensive synthesis.

Upstream Oil and Gas Sectors

Since the era of oil discovery, internationalization of the oil and gas market, oil has become a strategic resource for industrialized economies (Bhattacharyya, 2019). As the most traded commodity in the world with 39.7 billion bpd of crude oil and 21.5 billion bpd of oil products in 2015 (BP p.l.c., 2016), oil shapes the world economy and the actions of its market players. The exploration of oil has caused great changes in the international distribution of power and money as one can see in the example of Saudi Arabia (Yergin, 1991). Recently, the oil market was hit by a significant oil price drop. Between June and December 2014, the Brent oil spot prices plunged from above $100/bbl to around $50/bbl (Bloomberg, 2017a). We also observe persistent low oil prices after the drop such that oil prices fluctuate around $50/bbl with some downturn deviations two years after the shock (Oil and Gas 360, 2016). The influence of oil price turndown on national economies has been widely researched. For example, Cuñado et al (2003) forecast the effect of the price of oil shocks on inflation, as well as Bruno and Sachs (1982) studied oil price shocks and output changes in manufacturing, and Papapetrou (2001) provided empirical evidence for an influence on employment.

Research on responses of the oil industry to the oil price drop in 2014 is still developing due to its contemporary nature. It is however evident that the drop has caused great distress for the oil industry, especially for companies operating in the upstream sector. A decrease in revenues has occurred for most major companies, one of them Exxon Mobil Corporation. The company's first quarter revenue dropped from $93.9 billion in 2014 to $42.3 billion in 2016 (Bloomberg, 2017b). In response to the falling prices companies have adopted various strategic changes. For example, in Canada alone the number of direct and indirect workers in the oil and gas industry has decreased by 185,000 in 2015 compared to 2014, presenting a 25.7% drop. In the same timeframe, spending in the oil and gas sector has decreased by $31 billion or 24.8% (Petroleum Labor Market Information, 2015).

They build, integrate, structure and reconfigure both internal and external, is desired for attaining and maintaining organization in high level performance in the external uncertainty and complexity. Most oil and gas companies keep developing the strategic execution through enlightening their resources and capabilities becoming sustainable.

Organizational agility is considered as the following industrial revolution. Agility in the oil and gas companies are measured as production that incorporates the obtainable technology, persons, manufacture strategies and the systems. While agility is a capability and skill of oil and gas companies to thrive and thrive in an uninterruptedly changing and impulsive dynamic environment.

Indonesia upstream oil & gas companies have mainly been influenced by change in legal and regulatory framework that occurred after deregulation in 1994. This led to the increase in the number of new firms into the industry and has since intensified competition especially at the retailing level (Muthama, 2008). In the oil and gas sectors, environmental and industry factors change very rapidly and that is necessitating frequent review of milestones and thorough strategic monitoring (Chege, 2012). The high demand of oil and gas products, price volatility, increased completion and stringent regulatory requirements bring market dynamism in the petroleum industry requiring quick responses in matching the resource and competence portfolio in environmental prospects.

Given the great impact the petroleum industry has on the economy, this article is focused on understanding how oil companies have responded to the oil price shock of 2014 and how this can be explained. We place an emphasis on companies that are present in the upstream sector as those specifically are affected negatively by the oil price shock (Singh, 2015). This consideration leads to our main research question: How did the companies in upstream oil and gas sectors respond to the drop in oil prices in 2014, and why some companies gained during the oil price downturn.

Based on the problems addressed above, this study sought to find how agile leadership and organization in the operations risk, complexity and environment uncertainty in Indonesian, and to establish the relationship between the dynamic capabilities and leadership agility. The other aim of the study is to establish between dynamic capabilities and the agility leadership influence organization performance of the companies in upstream oil & gas sectors in Indonesia. The study is also to control the dynamics capabilities framework and flexibility in the organization of oil and gas companies in Indonesia. The result can determine the strategy as a vision to the firms and agility levels in order to achieve company's agility and to continue competitive particularly after uncertainty of oil prices and dynamic changes.

Several research has been done in areas of organization agility and operational performance to address the issues such as Thao (2012) did a study on enterprise systems and organizational agility aimed at developing and exploring a causal model when organizations operate in a relatively turbulent environment. Another study by Van Stekelenburg (2012) to discover the agility by adding significance of human capital aimed at generating organizational agility. Conversely, despite massive inquiry into the areas of competitive advantage and organizational agility no study local or international has been done to investigate influence of organizational agility by measure of enriched operational performance that can be measured by responsiveness and critical capability, to enhance the environment and improve business competitiveness. of the companies in upstream oil and gas sectors.

Sanchez and Nagi, (2011) highlights the need of an organization to be agile in its operation to handle the uncertainty and unpredictability in a dynamic environment. In the very dynamic upstream oil and gas sectors, there is a need to employ strategies to deal with. A lag in agility capability may lead to the company not achieving its strategic objectives. Further, the companies face challenges of increased risk and reduced operational performance. In order to deal with such challenges; there is a need for an agile organization which is able to align itself with variations in the business atmosphere. To enhance the performance, oil and gas companies must be agile to changes in dynamic environment that might affect the way they do business and thus influencing their operational performances by combine and integrate the variables of leadership, culture, competency, absorptive capacity and dynamic capability which is progressively regarded in the advantage aggressively competitive and fast moving response.

In accordance with the theories, it takes a look at firms' resources and capabilities and conducts an analysis of the competitive surroundings by revealing games that firms played and proceeds by identifying firms' responses during the crisis and analyzing them based on each firm's characteristics. Then, it can explain whether the responses stemmed from either firm's internal resources and capabilities or external games that firms play.

The study would be important to the companies of upstream oil and gas sectors and other stakeholders. The result of this study may be used by these stakeholders in policy formulation that would enhance oil & gas performance to be more agile in a dynamic business environment. Later on, the results of the study later on its recommendation would act as guidelines to formulation of these policies. The study results would be important to all organizations in that it will help describe an edge organization, which is characterized by enhancing absorptive capacity, competency, dynamic capability, culture and leadership to push power to the "edges" of the organization. Also, the top management team of the firms from upstream oil and gas sectors would benefit from this study in the implementation of the recommendations; the organization would remain relevant in its operations through aligning itself with changes in the business environment.

Further, the study will give to the pool of awareness of operational strategies and organizational agility. This study will be important to scholars and academicians, managers, top management, vendors that want to operate in the areas of complexity. Also, the study will identify gaps in literature which future scholars and academicians may seek to fill.

Having this research of agility in upstream oil and gas sectors, would seem to suggest scholars and practices to maintain competitive advantage in dynamic environments and deep uncertainty and complexity, and also to build the new paradigm on organizational agility in Indonesia, specifically oil and gas sectors. This new model will develop new theoretical views that account for a company's strengths and weaknesses, while the second considers the firm's external environment, threats, and opportunities that shape a firm's competitive strategy.

THEORETICAL FRAMEWORK

This theoretical framework is explored from the summary of some selected journals by comparing them to content, contexts, concept, construct, conclusion of each. The research on strategic management acknowledges two main theory streams in the approach to analyze firm performance. The first theoretical view accounts for a company's strengths and weaknesses, while the second considers the firm's external environment, threats, and opportunities that shape a firm's competitive strategy. The two research streams have been viewed as opposing theories in strategic management. Porter (1991) discussed the development of dynamic theory of strategy and highlighted the importance of understanding how and why firms choose the different strategies. The scholar drew attention to the imperative roles of firm-level theories of strategy that analyze firms' internal resources and activities as well as theories that study firms' local business environments. One of the main questions Porter (1991) raised was whether different levels of success arise from the given competitive environment or from the commitments to various resources and activities.

This article aims to shed light on synthesizing and building theoretical foundations of the strategic agility framework (SAF) by orchestrating the resources, capabilities, culture and performance in achieving superior competitive advantage (SCA). This article aims to shed light on synthesizing and building theoretical foundations of resource, compatible with (Teece et al., (1997), in suitably adjusting, incorporating, reconfiguring of external and internal and resources, skill include competences in order to compete the desires of a dynamic situation, Eriksson (2013). Refer to Teece (2007), the dynamic capability concept is therefore multidimensional (Eriksson, 2013).

This article particularly reviewed these seminal papers and came up with the outline of strategic agility frameworks by which firms sustain competitive advantage. We conduct this study with in-depth analysis by reconstructing the resource-based theory, the managerial impact, the dynamic capabilities, the drivers of resource value, the links to value creation in a dynamic environment, the dynamic managerial capability, which in turn particularly lead to superior operation performance. These findings notably contribute to crystallizing a set of resource-based capabilities and competences of enterprise in attaining the competitive advantage. As an implication, this synchronizes theories and frameworks that can be stretched by executives in the case of SAF.

2.1 Agility

Christopher et al (2002), define Agility as a business concept that was invented predominantly in conjunction with industrial systems flexibility. Organization agility has a competence to persist with success in an economic environment of continuous and irregular change by responding rapidly and excellently to change. Organizational agility refers to capability to log prospects and pressures and return by accumulating the needed administrative resources with promptness (Overby et al., 2006).

In the previous literature, there are numerous definitions of agility. Those definitions provide agility as a general concept, for instance; Agility is defined as the ability to change the operation parameter efficiently in response to uncertain that changing market environment (Narasimhan, 2006)

Table 2.1. Definition of Agility

No	Definition	Author (year)
1	Agility means a capability business of widespread that embraces managerial structures, information and communication systems, logistical processes in particular mentalities. A key distinguishing of organization agility is similar with flexibility	Christopher et al (2001)
2	Agility explain about flexibilities with several sorts includes the capability to do unintended, innovative doings in	Narasimhan (2006)

	response to unpredicted changes in market strains or unique client needs	
3	Agility needs to use of market knowledge with a virtual company to advantage from rapidly altering market prospects	Naylor et al. (1999)
4	Agility in manufacturing agendas emphasize performance enhancements in the parts of responsiveness, custom of product, shortened the original product lead time, reduced system switch time and cost, efficient scaling up & down of operations. Manufacturing performs associated with agility emphasize usage of advanced technologies, supplier associations, high skill employee exercise, and customer detecting and sales connections	Narasimhan (2006)
5	Agility is a capability to react to unexpected changes and encounter extensively varied customer desires on price, requirement, quality, amount, and distribution	Prince et al (2003)
6	Agility is an ability to cope with surprising challenges, to survive unparalleled threats of business surroundings, and to have benefit of changes as occasions	Sharifi et al (1999)
7	Agility is the ability to speed up the actions on critical path that initiates with the identification of a marketplace need and dismisses with the distribution of a modified invention	Kumar et al (1995)
8	Agility is identified as comprehensive reaction to the corporate challenges of earning from quickly changing, repeatedly fragmenting, worldwide markets for high-quality, great performance, client configured merchandises and amenities	Goldman et al. (1995)
9	Agility is about the ability to produces and sales successfully wide range with low cost, but high quality product with no longer lead times in fluctuating lot size, which offer improved price to individual clients over customization	Vokurka et al (1998)

10	The ability of an innovativeness to react quickly and magnificently to variation	McGaughey (1998)
11	Agility is an ability of organization to prosper in a constantly varying, volatile business atmosphere	Rigby et al (2000)
12	The capability of enduring by answering quickly and efficiently to varying markets, focused by products designed and services	Gunasekaran (1999)
13	The ability of creativities to cope thru unexpected fluctuations, to survive unparalleled pressures from the business atmosphere, and to take benefit of changes as occasions	Zhang et al (2000)
14	The organization's capability to advance competitive benefit by intelligently, quickly and proactively seizing prospects in responding to threats	Meredith et al (2000)
15	It is the capability to both generate and reply to change in order to return in a turbulent business atmosphere	Highsmith (2004)
16	A set of interwoven changes in advertising, production, design and society	Storey et al. (2005)
17	Ability to proficiently change functioning states in reaction to uncertain and altering demands abode upon it	Narasimhan et al. (2006)

Referring to the above terms from a different perspective, definitions of agility look like the simple observation in a wide variety of definitions and connotations.

2.1 *The Resource-based Theory*

This section is to highlight important derivations of resource-based view that explain how conceptual aspects of the theories are relevant to the industry specific context. This also discusses which resources are important in the upstream sector of the oil and gas sectors.

Resources-based view is a classical conceptual approach which considers a company's resources as the primary basis for competitive advantage, formulated by Barney et al (1986, 1991), Wernerfelt (1984), Peteraf (1993). RBV suggests that resource position barriers (Wernefelt, 1984) can improve to the performance where the resources according to (Barney, 1991) are valuable, rare, imitable, and non-substitutable.

The mainstream of the theory within the analysis of internal factors is the resource-based view (RBV) described by Wernerfelt (1984), Peteraf (1993), Barney (1986, 1991), who argued that a company's sustained performance is due to its unique resource base. In past years, the resource-based view has been further developed to define the separate model of dynamic capabilities. The analysis of the external competitive firm environment is based on various types of market interactions. There are different frameworks and models to describe and study such interactions and their consequences (Day, 1981; Cook, 1994; Porter, 1979, 1980; Porter & Millar, 1985).

The resource-based view (RBV) has been intensively developed over the past decade by strategic scholars. This has become one of the prevalent streams in the field of strategic management research. However, its underlying logic has been contested due to considerable problems which primarily consists of its inadequate concepts, indecisive perspective, as well as its conceptualization.

Barney (1991) also describe resources as all aspects of technology, capabilities, assets, firm, processes, information of the knowledge that is controlled by corporate which enable the consideration of contrivance strategies to improve the effectiveness. According to Barney (1991), the resources consist of capital, human capital and its resources. He defines human capital resources as tangible assets, access to raw materials, the presence of the firm in geographic areas, and a firm's technology. Whereas, abilities can be determined by training, skills and relationships. Organizational capital resources are defined as the systems and processes present in the firm, incorporating formal systems for reporting and controlling, but also informal coordinating systems and relationships. Beyond Barney's three categories, different scholars added various categorizations of resources such as financial, information and relational resources (Hofer & Schendel, 1978; Hunt & Morgan, 1995).

According (Hult, Ketchen & Slater, 2005; Zhou, Yim & Tse, 2005), the capability of RBV can convert a firm's assets into superior performance. Therefore, in relation to this study, these specific capabilities are at the center stage in determining how an organization responds to variations in the environment in which it operates. This to a great extent would enhance operational performance of the firm. The supplementary resource extension is an addition of a core resource to the existing resource base, in the context of our research this could be for example the addition of a new oil reserve. A complementary resource extension constitutes an addition of a supporting resource to the existing resource base and thus plays a collateral role in the resource bundle.

In the case of the oil and gas sectors, vertically integrated petroleum companies are defined by supplementary and complementary resource extensions within upstream and downstream units. Diversification, specialization and integration of a company, depicted by the unique bundle of resources, influence strategic actions available to firms, which, in turn, causes variances in performance.

2.3 Dynamic Capabilities Theory

Dynamic capabilities refer to the concept of ascending from a key shortcoming of RBV of the firm to describe how companies fulfill two seemingly contradictory imperatives (Teece, Pisano, & Shuen,1997). Fundamentally, dynamic capabilities in the levels of dynamic environment, suggesting that executives must always to identify different prospects to redesign their existing capabilities, irrespective of the level of surrounding unpredictability (Pavlou, Sawy, 2011).

Dynamic capabilities have been widely discoursed and are designated as processes that help a company adapt and effort to operate. Teece et al. (1997) describe DC as the ability of the company to build integration, figure, and reconfigure external & internal resources to discourse quickly dynamic environments. As the meaning points out, dynamic capabilities are notable from ordinary capabilities and strategic resources that allow firms to conduct business and are critical to their survival (Prahalad, 1993; Winter, 2003).

Breu et al., 2001, Dryer and Erickssen,2006 highlighted the success of organizational agility emerging in cooperation with the strategic use of individual competency. The strategic use of individual competencies will be achieved with two different approaches. First, is to align individual competencies to the business strategy which emerge from the environmental needs to achieve competitive advantage. Second, option to align individual competencies to dynamic capabilities for organizational agility.

George and Zahra (2002) roughly define organizational practices and processes through which companies assimilate, acquire, exploit knowledge, and change in dynamic organizational capability. In its place, the change path in the dynamic environment externally, the firm's past, current strengths and the other weaknesses that become long-term strategic positioning to be considered instantaneously in order to manage the resources effectively towards improvement of capability. Lo'pez,(2005), observed DC view as a central role to show the understanding of organization complexity in processes allowing corporations to continue competitive as well as adapt to the external quick environment ups and downs.

2.4 Environment Contingency Theory

In order to describe this association between environment and organization, Burns et al considered the environment stability to form organization in the works because of the efficiencies to perform regular achievements. Underneath steady environmental circumstances, administrations can study progressively the activities using resources to minimize costs but maximize the revenue. When surroundings are quickly shifting, however, the benefits of organization are probably lost. The effectiveness of the organization soon brings the group continually stable. The elasticity of organic systems of organization is well adapted to a changing situation. Burns et al describe when the organization to use mechanical against organic systems of organization is an early illustration of theory of contingency. The contingency is the set of environmental issues the group in enquiry expresses.

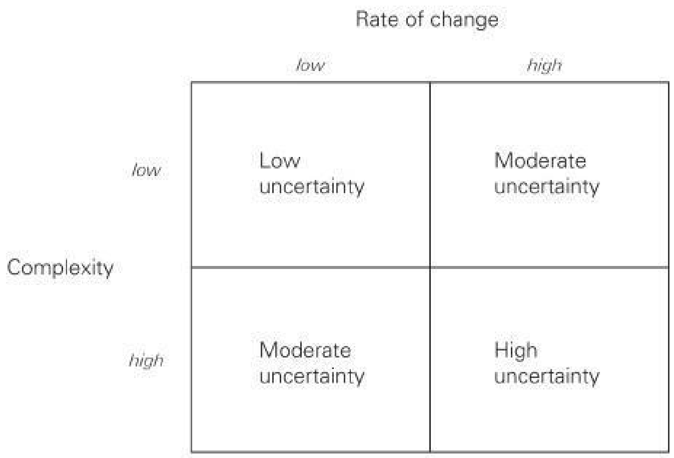

Figure 2.1 Environmental Uncertainty in Organization
Source: Based on Duncan (1972).

In contingency theory, environmental uncertainty is defined as the important variable explanation for specific forms of group success, interaction among complexity and degree of change (see Figure 2.1). The complexity explains the amount and diversity of the basics of the environment, although degree of variation refers to in what way quickly the situation containing the components fluctuating.

2.1 Culture

2.1.1 The dynamics of organizational culture

Dynamic model of culture was firstly constructed based on Schein theory including values, and artifacts. This theory of cultural dynamics focuses on the organizing methods in connecting all of them (see Figure 2.2). Referring to the dynamics of cultural perspective, the assumption produces prospects of slothfulness, which lead to insights of lazy acts. Those perceptions, in combination by other establishing expectations, color views and approaches.

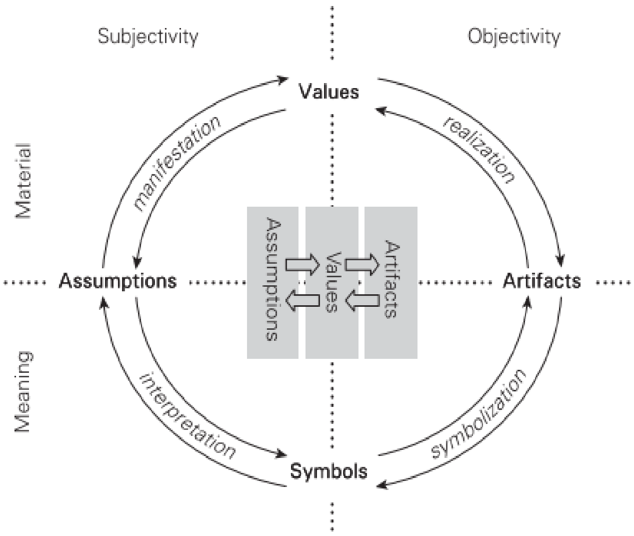

Figure 2.2 Hatch's Cultural Dynamic Model

2.3.2 Competing Culture on Organizational Agility

Cameron and Quinn introduced the concept of organizational culture called the competing values framework (CVF) that most acknowledged and widely applied frameworks within organizational. Refer to this Cameron and Quinn's theory that highlights flexibility, adaptability and dynamism to emphasis on stability. A brief concept of the cultural archetypes is known below (fig 2.3).

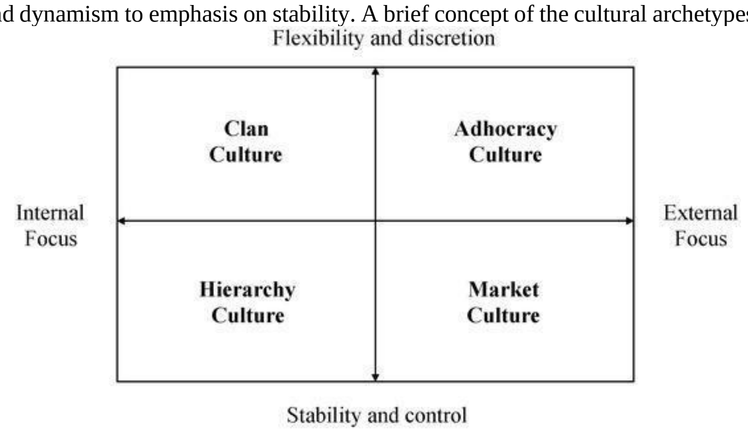

Figure 2.3. Culture Archetypes.

Clan culture is more family-oriented and closeness which is mainly oriented to individuals' level over enhancing performance. The market culture is described as being clearly focused on an accomplishment culture model. The main corporate values align to efficiency, competitiveness and effectiveness. These organizations focus on gaining effectiveness to achieve competitive advantages.

Adhocracy culture is described as more dynamic, original, risk-taking, entrepreneurial, innovative but ready for changes and more flexible. A firm that absorbs this culture type will be becoming more successful as it keeps focusing on growth and continuing innovation. This culture is fostering adaptability, as well flexibility and creativity in an environment of uncertainty and dynamic.

Hierarchy culture is known as a bureaucratic model with top-down direction. This culture focuses on minimizing uncertainty levels but formalizes them. Culture of the corporate according to Blake and Mouton, (1969), revealed the link among organizational culture and excellence.

2.2 Human Resources Management Practices

In realization that employees are the most important resource to an organization, agile organizations seek to employ, train and motivate to retain high caliber employees. Therefore, an agile organization employs human resources management practices to confirm that the organization sails through the turbulent business currents. Schuler and Jackson (2003) defined HRM practices to attract, grow, and maintain employees to effectively execute an organization.

According to Minbaeva (2005), he indicated that it is through the development of human resources that organizations achieve enhanced operational performance in a dynamic environment. According to Minbaeva (2005), HRM practices sets out practices by organization in managing human resources capabilities that are firm specific, produce complex social relations and generate organization knowledge to enhance its operational performance. Tan et al (2010) emphasize that an organization's approach to HRM has an important effect on organization. HRM practices set the tone and situation of the employer-employee connection to encourage the employees becoming agile (Rousseau & Greller, 2001).

The organization must have a good training program to achieve results in the dynamic business environment. According to Bjorkrnan and Budhwar (2007) exercise as HR practice is often constructed when the expert and learner work together to effectively share the knowledge to increase attitudes and skills, therefore the learner can better achieve a current task or job. Cherrington (2003) indicated that reward mechanisms (salary, bonuses etc.) improve employees" commitment to the organization and therefore enhances organizational performance. Therefore, organizations operating in the modern dynamic environment have to ensure that they attract and retain high caliber employees who are motivated to ensure that these organizations attain high operational performance.

2.3 Strategic Agility Framework

George Stigler introduced Organizational agility which is similar to "flexibility". He describes flexibility as the ability to manage environment uncertainties. In the theory of organization, the term agility has a similar but different connotation. Doz et al explain organizational agility defined as a capability to uninterruptedly modify the strategic way in a business to generate value of the firm.

Over the last two decades, organizational agility has been studied across multiple disciplines including strategic management, operations, marketing and information systems. Consequently, the definitions of organizational agility have diversified, leading to a lack of theoretical clarity (Schnackenberg et al. 2011). Three key characteristics distinguish organizational agility in the current discourse from other organizational properties: First, strategic agility is recognizing the speed of idea to change of decision making (Judge & Miller 1991), in 'high-velocity' environments (Eisenhardt 1989). Second, the strategic agility focuses on the ease of organizational change as represented by the constructs of flexibility (Bahrami 1992) or strategic flexibility (Hayes & Pisano 1994).

The concept of strategic agility is related to the concepts of organizational adaptability (reactive mode) and flexibility (proactive mode) (Sherehiy, Karwowski, & Layer, 2007). Weber et al define the strategic agility as an ability to continue to be flexible for maintaining the improvements. Worley et al argue agility is the capability to make the effort timely, effectively to sustain organizational rapid change as a repeatable valuable resource of organization. In other way, strategic agility as the capability and capacity an organization to efficiently, effectively redirect the resources to value creating and capturing up to higher level in the midst of uncertainty environments

The constructs of flexibility and strategic flexibility often implicitly recognize speed as an element therein, their definitions focus more on the ease of change than the speed of change. Characteristics of both speed of change and ease of change have been studied in more detail by researchers that seek to identify antecedents to organizational agility, such as modularity (Sanchez & Mahoney 1996), internal organizational structures leveraging upon contingent workforce and loose couplings (Matusik & Hill 1998), external organizational structures supporting strategic alliances (Young-Ybarra & Wiersema 1999), and increased product variety (Warren et al. 2002).

Increased organizational agility increases the ability to respond proactively to unexpected environmental changes. The commitment to continuous transformation and agile strategies implies changes at all levels of the organization from its structure, through its leadership and decision-making dynamics, down to the skills and interpersonal relationships of the individuals implementing the agile mission. Thus, the challenge for large organizations will be to rekindle their innovative agile beginnings and for start-ups to continue to foster their dynamic capabilities as they grow (Appelbaum, S. H., et.al, 2017).

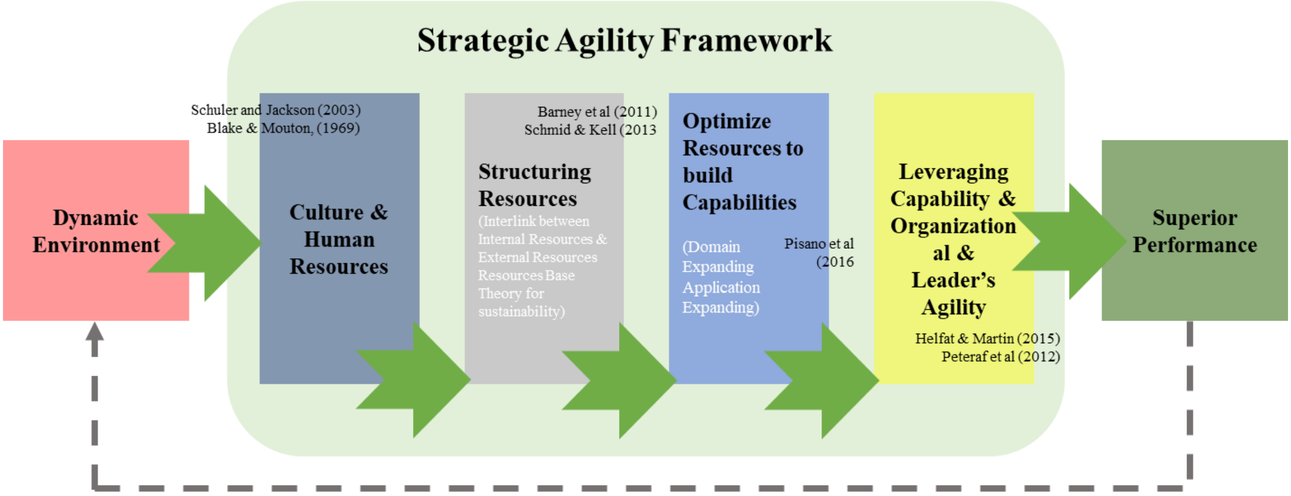

Figure 2.4. Strategic Agility Framework

Most oil and gas companies keep developing the strategic execution through cultivating their resources and capabilities to be more competitive to maintain the higher level of competition in a dynamic environment. Strategic agility is considered as the next industrial revolution including for all business-related upstream oil and gas sectors.

The strategic agility framework is proposed to develop for enhancement of understanding of organizational agility in high-tech firms operating in high-velocity environments, and is exposed to be relevant for the Upstream Oil and Gas sectors. The set of capabilities and competences that the oil and gas companies need to thrive and prosper in a continuously fluctuating and erratic business environment, however to measure the level of agility in these companies is still unexplored according to the capabilities and competences.

The oil and gas companies in Indonesia have mainly been influenced by changes in legal and regulatory framework that occurred after deregulation in 1994. This led to the increase in the number of new firms into the industry and has since intensified competition especially at the retailing level (Muthama, 2008). In the oil and gas sectors, environmental and industry factors change very rapidly , necessitating frequent review of milestones and thorough strategic monitoring (Chege, 2012). The high demand of oil and gas products, price volatility, increased completion and stringent regulatory requirements bring market dynamism in the petroleum industry require quick responses in matching the firm's resource and capability

The oil companies must create the strategy execution internally and within their environment in order to capture the new opportunities, overwhelmed encounters, risk mitigation to achieve the superior performance.

2.4 Operational Performance

Performance refers to the measurable aspects of the outcome of an organizational process. These aspects are given as reliability and production interruption. Operational performance in return affects business performance measures such as production target accomplishment. Elmuti (2002) prominent that operational performance encompasses indicators such as productivity (cost savings, efficiency). According to Venkatraman and Grant (2006), through agility, firms would be able to achieve superior performance.

Improvement of performance in operational terms is particularly remarkable when it is able to affect the competitive point of the firm. By being able to provide superior value and/or offer prices through lower costs a firm will increase throughput, potentially increase its market share and profitability (Leddick, 2009). Operational performance also embraces the speed of carrying activities in the business. According to Lee (2004) that firms ought to be more agile to sense on ability and respond to environment fluctuations quickly to maintain and improve the performance.

Companies that fail to be agile might find themselves losing market share and competitive advantage due to a lapse in their operational performances. Sambamurthy, Bharadwaj and Grover (2010) emphasized that increasing acknowledgement of agility as commanding for success. Through organizational agility the firm is able to operate with speed and surprise, without disrupting enhanced operational performance. Agile companies are resilient to shocks and disruptions in their business environments, adaptive to developing chances, in creating new business models to ensure enhanced operational performance (Bharadwaj & Sambamurthy, 2012).

DISCUSSION

This section predominantly synthesizes strategic theories that are substantial to figure out the essence of selected articles. The strategic agility framework is literate of the concept from resources base theory, dynamic culture and capabilities by combining with human resources practice in the environment uncertainty. At the end of section, we provide particularly the overall framework integrating those concepts of articles

In this shed article, the concept of future strategic agility is based on the resource-based theory as a basis for the continuity of RBT for any new directions and objectives. This will also provide several key opportunities from these different themes for further study that involve research-based theory. In this study, a detailed analysis of resource-based theory, managerial impact, dynamic capabilities, the drivers of resource value, links to value creation in a dynamic environment, dynamic managerial capability.

Refer to Conner (1991), the term of resource-based theory will be traced back at minimum to which the term appears. Other concerns, Alvarez et al 2001, conclude that the significance of individual behavior and cognitions in evolving human capital assets and the competitive sustainability.

In this section, we particularly synthesize a brief of dynamic capabilities. Pisano (2017) already developed the capabilities strategy that should be taken by firms with considering the aspect of domain capabilities and objective of capabilities. The commitment of firms into product markets or specific markets is very important as the objective to develop capabilities. When firms choose a specific market, they can focus on unique capabilities requirements. The consequences are the capabilities most likely cannot be used for a broad market. The general-purpose capabilities can be chosen by the firms if they are going to broad the market. The second-dimension strategy that firms should consider is they can be deepening the existing capabilities or broadening the capabilities. The map of capability strategy choices provides the flexibility and new perspective for the firms to choose where they should develop the capabilities. If they are going to expand the domain, they should develop the broad capabilities in general-propose. If they are deeming the capabilities, they also can extend a set of capabilities in general-purpose by fortifying the domain.

Of the selected articles build on the strategic agility frameworks on how a firm deals with the Resource, Capabilities and Competences. In the dynamic environment, managing resources is a process for structuring the resources then bundling it to build capabilities and leverage it. The ultimate objective of the firms is to gain the competitive advantage with creating value for customers and wealth creation for owners. Pisano (2017) suggests the firm's mapping capabilities with strategy choices. The firms can do domain expanding when they are broadening the capabilities for general-purpose RCC application expansion can be achieved if the firms are going to broaden the capabilities for specific markets.

CONCLUSION AND IMPLICATION

The strategic agility framework based on resource-based view as the main concept to be prevalent in the field of strategic management research, its underlying logic has been contested by a number of scholars as inadequate, indecisive, and particularly in its conceptualization of resource value. By synthesizing and constructing frameworks, we offer notably the theoretical foundations and considerable frameworks of resource, capabilities and competences that discuss the extant theories and frameworks in terms of strengthening the theory of . We conduct a fine-grain analysis of resource-based theory, managerial impact, dynamic capabilities, the drivers of resource value, links to value creation in a dynamic environment, and dynamic managerial capability. These findings contribute to crystallizing a set of corporate theories that offer insightful frameworks to superior competitive advantage.

Exploration of the references of selected journals on extending the of by five themes (Barney et al., 2011), the effect of managerial impact towards strategic change and performance (Helfat et al., 2014), recognizing conditions and mechanism through *ex-ante* investigation prior to picking up the resource (Schmidt & Keil, 2013), the linkage of value creation in dynamic environment (Sirmon et al., 2007), recognizing and selecting specific capabilities that lead to competitive advantage (Pisano, 2016), and examining the managerial impact on strategic change (Helfat & Martin, 2015).

This particularly contributes to knowledge of enterprise strategies dealing with the Resource, Capabilities and Competences. Most scholars who are concerned in ascertaining how the coverage of RBT will definitely describe how significant dealings with organizational visions for further innovation have the five themes that are explained above. To avoid decline and the RBT achieves to be revitalized, special improvements need to be made. Constructing the new approach for the concept of RBV by underpinning antecedents and mechanism under specific information and expectations, Schmidt & Keil (2013) principally recognized the drivers of corporate resource value by recognizing conditions and mechanism through *ex-ante* analysis of selecting the resources. This analysis consists of expected willingness to pay, expected market price, as well as expected firm or opportunity cost that shape the nexus of antecedents and mechanism of firm-level resources.

These two mechanisms deal with the two underlying assumptions under perfect information and accurate expectations. Whereas under accurate expectation standalone, the considerable mechanism is defined by privileged access towards information in the given position networks. The two essential results suggestively contribute to address the role of managers in resources (Sirmon et al., 2011) and the role of the demand side factors as a prospect space (Priem et al., 2012). These results contribute to explain the drivers that significantly lead to a different amount of resources and endowment existing among firms. These results reflect on which ways of enterprise acquire a resource, which in turn have a superior performance among others (Maritan & Peteraf, 2011).

Teece et al. (1997) or TPS recognized the complex routines and organizational mechanisms, while Eisenhardt and Martin (2000) or EM more aligned on simple routines and mechanisms of managerial level, so those differences are only in the perspective field. The levels of analysis and type will have important rules sequentially and instantaneously without concentrating only on one type is a little similar to the blind peoples besides the elephant. This will develop a clear understanding of dynamic capabilities that need the comprehensive portrait and sightseeing interlinked the whole of dynamic capability bundles.

Introducing the concept of strategic agility by incorporating dynamic managerial capabilities (DMC), Helfat & Martin (2015) predominantly delivered the three essential underpinnings of focusing the human practice from the managerial cognition, social capital, and human capital. The strategic agility becomes a vital role as the asset orchestration in the search of, reconfiguration and deployment (Maritan, 2001). This asset can lead to leverage value in adapting to changes in the given industrial contexts. The results showed the importance of heterogeneity in corporate performance under considerable changes (e.g., Sirmon & Hitt, 2009).

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