Empirical Model of Strategic Decision Making in Real Estate Development Relation between Economies, Capabilities, CRE Sustainable Development Strategies and Performances

Hastjarjo

Doctoral Student in Managemen Science– Padjadjaran University, Bandung

**ABSTRACT**

Today, everything has changed. Globalization, the integrated internationalization of markets and corporations. Globalization is an undeniable phenomenon that is fundamentally changing the way business is conducted. The changing landscape of the industry is very rapidly, requires a faster decision-making process in real estate development. The generic real estate development process was too long for decision making. The contemporary framework would be much useful to integrate both resource-based view (RBV) and industrial organization (IO) paradigm. It’s combine economies, capabilities, Corporate Real Estate (CRE) strategies, sustainable development, and Net Present Value (NPV) and Economic Value Added (EVA) performance. Empirical model of Strategic Decision Making in Real Estate Development applied with multiple optimization methods and decision criteria.

**INTRODUCTION**

1.1. Background of the Research: Globalization Phenomenon and It’s impact to Strategic Decision Making in Real Estate Development:

Today, everything has changed. Globalization, the integrated internationalization of markets and corporations, has changed the way modern corporations do business. As Thomas Friedman points out in *The World Is Flat*, jobs, knowledge, and capital are now able to move across borders with far greater speed and far less friction than was possible only a few years ago (Wheelen, Thomas L. and Hunger, J. David,. 2012).

Since the Global Financial Crisis, Southeast Asia has been one of the world’s few bright spots for economic growth and investment returns. Commercial real estate continues along a bumpy path to recovery. Real estate organizations in today’s world are faced with a dynamic environment characterized by rapid technological change, mainly globalization. This globalization have impact to Indonesia real estate industry and make a life cycle more short and more turbulence.

Real estate in Indonesia is one of the strategic industries, the real estate industry is one of the drivers of economic growth. Industry Minister MS Hidayat in the deliberation of the National Real Estate Indonesia, 2013, in Jakarta, Tuesday (26/11), said bahawa there are two key sectors that should be encouraged performance, ie, real estate and automotive. The real estate industry has multiple effects (multiplier effect) is remarkable because it moves 150 subsectors supporters and utilize domestic components. In addition, capital-intensive and labor-intensive. Along with the policy of regional development in Indonesia, which refers to the development plan of 6 (six) Economic Corridor - Master Plan for Acceleration and Expansion of Indonesian Economic Development (MP3EI), Ministry of Housing (Kemenpera) is encouraging the development of new towns in 24 locations across Indonesia. Construction of new cities is done by (Suara Pembaharuan.com, December 7, 2011).

According to Too, L., Harvey, M., & Too, E. (2010) globalization today is an undeniable phenomenon that is fundamentally changing the way business is conducted. Globalisation rewrites the rules of business management and introduces a new level of competition, i.e. hypercompetition. Globalisation is growing in significance to corporate real estate managers in that to be competitive in one market/country, one has to be network into other markets to remain competitive in the global real estate market. A company may have no or little intention to become enmeshed in the global marketplace, but due to foreign competitors entering their home real estate market, a counter strategic thrust may be warranted.

**Keywords:** Economics, Capability, CRE Strategy, Performance, Real Estate Development
1.2. Identification of The Problem/Gaps:

The identification of the problems find some gaps. Some of gaps indicates the need for a strategic decision making framework in real estate development.

**Methodological gaps.** Too, L., Harvey, M., & Too, E. (2010) research utilizes a qualitative approach to analyze secondary data in order to identify the corporate real estate capabilities for a hypercompetitive business environment. This is a conceptual paper and future empirical research needs to be conducted to verify the propositions made in this paper. In this regard, future research may take two streams. First, qualitative research through case studies and/or focus group interviews will be helpful in providing support or refining the propositions made here. Thereafter, quantitative methods can be applied to statistically test for the existence and strength of the relationship between corporate real estate capability and performance.

**Theoretical gaps.** Brahma, S. S., & Chakraborty, H. (2011) despite of the debate among scholars regarding RBV, there is no denying of the fact that sustainability is a function of the firm's critical resources and immobility of these factors. Surely the question that what makes these critical resources valuable, suggests that product-market concept of strategy has also been extremely helpful to answer this.

It follows, therefore that a firm's product market as well as the resource positions are both useful for strategy scholars as Peteraf and Barney (2003) claim that,

*Resource-Based Theory (RBT) is not a substitute for industry level analytic tools, such as five-forces analysis (Porter, 1980) and game theory. It is not a substitute for strategic group analysis or for analysis of the macro environment. Rather, it is a complement to these tools. It looks within the enterprise and down to the factor market conditions that the enterprise must contend with, to search for some possible causes of sustainable competitive advantage (p. 312).*

**Practical gaps.** Parayitam, S., & Guru, K. (2010). One of the burning questions in strategic management is how firms attain sustained competitive advantage. The conceptual clarity of the rent generation process under the contemporary framework would be useful to future researchers who are attempting to integrate both RBV and DCA. Especially in view of the changing landscape of the competition in the twenty first century, calling for industry transformation and suggesting the firms to change the configurations of resources and capabilities to meet the changing demands, the contemporary framework would be much useful. The framework would be helpful for the future researchers to integrate both these approaches (RBV and DCA) help them extending the framework to link it to industrial organization (IO) view. Such linkage is essential because organizations have to tie the resources and capabilities with what is required in environment i.e. to take advantage of opportunities and reduce threats from environment.

Real estate development is a complex process involving multiple steps and stages. According to Das, P., Sah, V., Sharma, D., Singh, V., & Galuppo, L. (2013), depending on the market, some steps are taken earlier and some concurrently with others. Because of the capital-intensive and risk-prone nature of real estate development, a careful planning of the whole process is critical. Diaz and Hansz (2010) depict the real estate development process as having six stages, which are broadly divided into two sets of activities:

1. **pre-commitment** (conceiving the project, feasibility analysis, refining the concept) and
2. **post-commitment** (design, construction, asset management).

The changing landscape of the industry is very rapidly, requires a faster decision-making process in real estate development. Decision-making process at the stage of pre-commitment (conceiving the project, feasibility study, and refining the concept) was too long for business situations today. It is necessary for the decision-making process more strategic and more concise, This research concentrate in pre-commitment activities on the strategic process of making location decisions (choosing the type of investment and its site) and the result of that process, which is the location of a given business activity that is tied to a given site.

1.3. Formulation of The Problem:

The need for a complex approach to strategic decision making in real estate development allows to state the research problem as follow: in view of the changing landscape of the hyper competition a generic real estate development process lacks solutions from strategic management perspective, especially capabilities. Processes of real estate development have not been considered within a strategic decision making process.

An efficient way of solving the above problem is based on two ideas:

- The contemporary framework would be much useful to integrate both RBV and IO, because resource-based theory (RBT) is a complement for industry level analytic tools.
- Todevelop strategic decision making process model, multiple optimization methods and decision criteria may be applied.

The strategic decision making in real estate development is a comprehensive analysis of strategic management. The drivers of the globalisation of corporate real estate may be attributed to three interrelated trends (Too, L., Harvey, M., & Too, E., 2010):
- **Economic factors**. Differences in land regulations and taxation are attracting real estate managers from developed countries to invest in the markets of the future. Coupled with attractive exchange rates between developed and developing countries, real estate managers are attracted to the "bargain" real estate opportunities. It is being estimated that 85 per cent of the world's population will live in these emerging economies and therefore commercial activities should increase dramatically in these countries.

- **Political factors.** The liberalization of production factor inputs, particularly in regional trading blocs through the deregulation of capital, personnel and raw material flows, has promoted regional integration. Heightened attention to property protection in emerging markets has also given companies greater confidence in expanding their business.

- **Technological factors.** The rapidly declining computing, communication and transportation costs means that market expansion can be more operationally and financially efficient. Additionally, technological "leap frogging" by firms in emerging economies means access to a trained and ready workforce. Sarathy, P. S. (2011) the real estate industry in particular residential construction has high degree of uncertainty in innovative adoption. It is apparent that organizations, in this kind of a market environment, need to be more creative and innovative to sustain, compete, grow, and lead. Innovation through creativity is essential for the success and competitive advantage of organizations as well as for strong economies in the 21st century. According to Rymarzak, M., & Sieminska, E. (2012) location decisions are dynamic because when companies make decisions of strategic importance, they must consider not only the present situation (location seen statically), but also future needs.

- **Capability factors.** In response to an increasingly competitive environment, many management researchers have argued for a resource-based view (RBV) approach to maintain competitive advantage by focusing on the inside elements of the company. The RBV contends that organizations compete through control of unique and inimitable resources. Inimitable resources centre principally on the cumulative bodies of organization-specific knowledge and skill that are the result of organizational learning processes. Under this framework, an organization's long-term survival rests on the organization's ability to develop capabilities and innovation.

- **CRE Sustainable Development strategies.** In a turbulent industry environment and global competition, real estate development requires a holistic strategy planning. According to Park, A., & Glascock, J. L. (2010) Corporate Real Estate (CRE) is inherently multi-dimensional and cross-functional in supporting core business activities, academic researchers have tackled the topic of CRE from diverse angles, and have drawn upon concepts and theories from a variety of disciplines - economics, finance, architecture, management, organizational behavior, and marketing, among others. Corporate strategy, and in particular the resource-based view of the firm, provides the heretofore most developed analytical framework to properly consider CRE as an enterprise resource.

- **Multiple decision criteria.** The end result of activities of strategic decision making multi decision criterias/performances.

1.4. **Purposes of the Research:**

This strategic management research constructively identifies variables and examine the relationship between the economies, capabilities, strategies, and performances of real estate development. This research designed to answer the following research questions:

- What is the relationship between economies and capabilities?
- What is the relationship between economies and strategies?
- What is the relationship between economies and performances?
- What is the relationship between capabilities and strategies?
- What is the relationship between capabilities and performances?
- What is the relationship between strategies and performance?

1.5. **Benefits of the Research:**

This research provides benefits as follows:

- Provide relevant information and knowledge that will help financial institutions, real estate developers and real estate investors about the factors that can affect the performance of investment portfolios and real estate, and the causal relationship of these factors.
- Provide an understanding of the implications and impact of changes in economic factors and the performance of the investment portfolio of real estate in Indonesia.
- Provide feedback to the Government of Indonesia, especially Government Agencies related to policy-the policy of the effect on the economy and the real estate business in Indonesia.

2. **Literature Review:**
2.1. **Structuring Process of Strategic Decision Making in Real Estate Development:**
2.1.1. **Strategic Decision Making: Improving the Method:**
Whelen and Hunger (2012) proposed eight-step strategic decisions to improve strategic decision making as follows:
1. Evaluate the current performance results in terms of (a) the return on investment, profitability, and so on, and (b) the mission, goals, strategies, and policies.
2. Review of corporate governance - that is, the performance of the company’s board of directors and top management.
3. Scanning and assess the external environment for factors that pose opportunities and threats.
4. Scan and assess the company’s internal environment to determine the strategic factors to look for strengths (core competencies) and weaknesses.
5. Analyzing strategic (SWOT) factors for (a) pinpoint problem areas and (b) review and revise the company’s mission and objectives, as needed.
6. Produce, evaluate, and choose the best alternative strategies in the light of the analysis conducted in step 5.
7. Implementing the strategies chosen through programs, budgets, and procedures.
8. Evaluating strategies implemented through the feedback system, and control of activities to ensure their minimum deviation from the plan.

According to Atherton, French, and Gabrielli (2008) decision model can be divided into three different types; Descriptive analysis: the model is intended to describe how we decide, normative analysis: a model that shows how we need to decide, and prescriptive analysis: models that use normative models to guide decision-makers in other cognitive parameters limit.

In this study, the strategic decision making applied combination model as follows:
• Descriptive: search journal that examines the process of how developers act in the past.
• Normative: analyzing decisions with investment analysis (finance), and
• Prescriptive: analyzing the decision makers on rational choice, and their cognitive limits.

This point is an 1st effort of the research using qualitative method that it is develop strategic real estate process through Crystal Ball, which will be described further in research methods.

2.1.2. Real Estate Development Process: Advantaging the Capabilities:

Development decisions are influenced by various determinants, which makes this process becomes complex, dynamic and difficult. A generic flow diagram of development process is presented in Figure 1. The figure illustrates how a project passes through the various stages of its development. Strategic decision making is on project initiation dan conception. It is a long process and its need to simplify. Project initiation dan conception (pre-commitment process) pressed to one process -added to capability analysis - integrated into strategic decision making in real estate development.

Generic Development Process:

![Strategic Decision Making Diagram](image-url)

Fig. 1: Simplify and Strategically Real Estate Development Decision Process

According to Wilson, C. (2012) All successful strategies whether knowingly or unknowingly involve the IO approach, RBV and DCA. When there is a shift in the industry it requires the IO approach to analyze the situation and determine where the firm is and where it should be (industry positioning). It takes
RBV to decide on the resources and operational capabilities required to take it to the new position (resource picking), and in the end, it takes the DCA to move the firm resource bundle to the new position.

This point is an 2nd effort of the research using capability analysis into strategic decision making in real estate development process. It is an integration of strategic management approach (IO, RBV, DCA).

2.1.3. Decision making Process: Cycling the Entrepreneurship:

According to Baltar, F., & de Coulon, S. (2014) The main attributes related to entrepreneurial skills are the talent to materialize ideas into projects and the resolute behavior to assume risks, react to uncertain contexts and solve problems. Definitely, all the effort is oriented to exploit market’s opportunity (e.g. innovations in products and services, processes and materials and/or access to unexplored markets). Those innovations constitute the key elements to develop and consolidate productive models in the context of the “new economy”. In fact, new ventures and innovations are important to improve employment conditions, social cohesion and consequently, economic development. (Reynolds et al. 1995; Drucker, 1998; Baumol, 2003, 1993; Audretsch, 2004)

According to Fan-qil, Z., Xiang-zhi Bu, & Li, S. (2011) Timmons model elaborate us the entrepreneurial process in a concise graceful form with dynamic richness contents. Just as shown in literature (Timmons and Spinelli, 2005), it gives three key elements in starting a new business: commercial opportunity, resources, team, and the concept of balancing strategic match of the three, moreover, a holistic approach to entrepreneurship. The process of entrepreneurship is driven by opportunities, such that entrepreneurs should first detect new possibilities in an ambiguous uncertain environment and then organize resources from outside world such as capital market. At the same time, entrepreneurs should build an effective team to realize the potential value of the chances, which is a dynamic process that from resources and opportunities adaption, to discrepancy and final accommodation.

Opportunity. Recognition the economic factors and creation location of opportunities isthe heart of this stage. In understanding of opportunity, (1) focus on market readiness, the consumer trends and behaviors, and (2) explore the characteristic of location that seek new products or services.

Resources. The role of this stage in leading the resources through a benefit and risk method that balances the available resource with the opportunity and the potential of the team.

Team. Once the entrepreneur identifies an opportunityo start a business by putting together the team and gathering the required resources. The nature of the opportunity determines the size and shape of the team.

From the above description, the process of strategic real estate development consists of 5 (five) main steps, namely:

- Economic Analysis (Macro) and Location Analysis (Micro),
- Capability Analysis,
- CRE Sustainable Development Strategy, and
- Development Decision. In Figure 2.
Fig. 2: Strategic Decision Making in Real Estate Development Process.

This point is an 3rd effort of the research using entrepreneur driving force to develop strategic decision making real estate process.

2.2. Constructing Variables of Strategic Decision Making in Real Estate Development:

2.2.1. Economic Factors: Opportunity Identification:

Constructing economic factors search opportunity of space market. In this market the demand comes from the households (tenants) that use (consume) residential space. The demand for residential space depends on:

1. economies (interest rates, credit restrictions, household income, regional employment prospects) (Montezuma, Joaquim., 2004); Aggregate employment (Ho, K. H. D., & Faishal bin, I. M., 2010)
2. demographics (number of households, household composition, age of household) (Montezuma, Joaquim., 2004); aggregate household consumption (Ho, K. H. D., & Faishal bin, I. M., 2010); population size, distribution and demographic development, purchasing power, prices and availability of financing (Falade-Obalade, T., & Dubey, S., PhD. 2014)
3. government intervention (subsidy to the rented sector, direct provision of social housing could be a close substitute to private renting);
4. technology factors (transport and communication network features that change the meaning of distances and urban location).

The new supply depends on:

1. the cost of developing new housing stock, including the land cost, construction cost and the developers’ cost of equity capital (“profit”). (Montezuma, Joaquim., 2004);
2. changes in rents, technological know-how, Expectations of Developers Falade-Obalade, T., & Dubey, S., PhD. (2014)

Economic variables of this research as follow:

- economies GDP
- interest rates, exchange rate
- currency exchange rate

Aggregate employment

- demographic development aggregate household consumption
- purchasing power
- prices and changes in rents
- availability of financing

Politics

- government intervention

Technology

- site value
- accessibility
- constructability
- the cost of developing land cost
- construction cost
- cost of equity capital

2.2.2. Capability Variables: Entrepreneur Leadership:

Zhang, Shen, Wu, and Peng (2010) argues that business performance in an uncertain environment depends on the competitiveness of the organization’s capability to compete. There are some important organizational capabilities, namely: prediction of risk sensitive, assessment and response capacity, entrepreneurship, corporate brand development of green, and green strategies to get social responsibility.

Meanwhile, according to research results Too, Harvey, and Too (2010) indicates that some of the Capability flexibility. In response to the uncertain climate, as hypercompetition, property portfolio should be more flexible in three ways:

- Flexibility physical. Possibility of a space can accommodate a variety of configurations.
- Financial Flexibility. Property obtained under short-term agreements.
- Flexibility functional. The property is located on land where planning guidelines provide for multi-or mixed use.

Stimson, R. J., Stough, R. R., & Salazar, M. (2005) Leadership is not a straight forward concept, particularly in the context of regional economic development. These attributes are:

- Recognizes and anticipates problems
- Induces collaboration and consensus building patterns among diverse stakeholders.
Guides strategy development.
Elicits participation in strategy implementation.
Elicits commitment of slack institutional resources to strategy goals.
Requires monitoring of implementation to assess progress.

Capability variables of this research as follow:
- Physical flexibility
- Development of green corporate brand
- Conduct green strategy to gain social responsibility
- Create activity and live style
- Design in some architecture style/themes
- Adaptation climate change with green infrastructure
- Financial flexibility
- Good at expanding finance channels and cash liquidity
- Good at making investment analysis and orientation
- Access to a diverse range of capital
- Functional flexibility
- Business marketing ideas, strategies and marketing
- Knowledge of change in market environment and trend
- Leadership capability
- Recognizes and anticipates problems
- Guides strategy development.

Commitment of slack capabilities to strategy goals.

2.2.3. CRE Development Strategy: Benefits and Risks in Real Estate Cycle:

Research by Roulac (1999) has identified seven distinct contributions that corporate strategy is superior properties can create a competitive advantage of a company that is:
- the competitive advantage of the core competencies;
- create and retain customers;
- attracting and retaining exceptional people;
- contribute to effective business processes to optimize productivity;
- promote the values and corporate culture;
- stimulate innovation and learning; and
- increase stakeholder wealth.

Raslanas, S., Stasiukynas, A., & Krutinis, M. (2012). Developers can contribute to the implementation of these necessary changes in sustainable development plans by offering dense, compact forms with mixed use, accessible by public transport. Basically, the policy of sustainable development means the following:
- Development of the mixed-use becomes the norm.
- The priority is given to public transport rather than to the personal.
- The diversity of the users of new developments: owners and tenants, private and social housing.
- High quality projects both in the public sector and the sector of individual buildings.
- Promotion of the green buildings and treatment of contaminated land.
- Revitalization of the city economy, at the same time promoting living in cities.

CRE Sustainable Development Strategy variables of this research as follow:

2.2.4. Performance Variables: NPV versus EVA:

This study is compare a classical NPV and a newer EVA to design performance measurement in real estate development.
Erasmus, P. D., & Lambrechts, I. J. (2006) enterprises endeavoured to maximise shareholder value often employ Net Present Value (NPV) techniques in an attempt to achieve their financial objectives. Since Economic Value Added in monetary terms (EVA^sub mon^), Economic Value Added in real terms (EVA^sub real^), and the measure Cash Flow Return on Investment (CFROI) focus on the maximisation of NPV, their implementation could contribute to the creation of shareholder value.

Peter, J. M. M. K., & de Vries, J. (2003) EVA is the financial performance measure that comes closer to capturing the true economic profit of an enterprise. The 20 September, 1993 cover story of Fortune declared EVA to be the "real key to creating wealth" and "today's hottest financial idea and getting hotter" (Fortune, 1993). It is a financial analysis technique to determine whether a company is creating economic value over and above the cost of capital for assets employed. According to Gressle (1996), EVA measures the value created during a defined period of time through increased margins and profitable redeployment of under-utilised assets, the last element, in particular often being of value to managing corporate real estate. EVA is defined as the net operating profit minus an appropriate charge for the opportunity cost of all capital invested in an enterprise or project. EVA is a method that highlights the inefficiencies of property at present.

2.3. Thinking Framework and Hypotheses:
2.3.1. Industrial Organization (IO) and Resource-based View (RBV):

Parayitam and Teachers (2010) explains the importance of contemporary framework for the future that integrates RBV and DCA (dynamic capabilities approach), Andersen (2011) uses the framework of resource utilization, competitive advantage, and performance of the company, and Mr. and Mai (2012) for two last decades, RBV has emerged as one of the most dominant theoretical perspective in the field of strategic management. Brahma and Chakraborty (2011) argues that the RBV is not a substitute for analytical instruments industry level, as Five Force Model (Porter, 1980) and game theory. RBV is not a substitute for strategic group analysis or the analysis of the macro environment. Instead RBV is complementary. Wilson, C. (2012) argues that all successful strategies either consciously or unconsciously approach involves IO, RBV and DCA. IO approach is needed to analyze the situation and determine where to position the company and will be where it should be, RBV is needed to decide resources and operational capabilities necessary to bring the company to a new position, and ultimately DCA needed to move the enterprise resource bundle into a new position.

H1: There is a positive relationship between IO and RBV approach in the planning of the company’s competitive strategy.

2.3.2. CRE Strategy and Performance:

According to Krumm and de Vries (2003) over the last few years more and more articles on the topic of real estate strategy has been published in journals such as the Journal of Corporate Real Estate, who said that the strategy of the company is not only focused on the reduction or minimization of capital costs but also to increase revenue. Similarly Scheffer and Singer (2006) who said that the real estate strategy is also a strategy of the company in an effort to determine the added value of real estate.


Tay and Liow (2006) also examined the CRE management in Singapore on three main perspectives of business management: strategic planning, organizational structure and performance of real estate companies. The results showed that the presence of strategic planning and real estate units in the organization have a direct impact on company performance real estate.

H2: Strategy Real Estate has a positive relationship with firm performance.

2.3.3. Industrial Environment, Strategy, and Performance:

Kim (2005) conducted a study to investigate the causal relationship between environmental factors, organizational structure, and performance in the process of internationalization of the company services. The study found some combination of environmental dimensions and organizational structures will lead to better organizational performance. Tai and Huang (2006) this research through LISREL analysis study of Taiwan SMEs build competitive advantage and better performance. The study found that the competitive environment required high industrial industry transformation strategies to influence better performance. Davies and Walters (2004) examined the relationship between strategy, environment, and performance on several companies in China. The result is a strategy / certain environment have significant implications for the performance.

H3: The industrial environment has a significant impact on strategy
H4: The industrial environment has a positive relationship with firm performance.

2.3.4. Capability, Strategy, and Performance:

Wang, Lo, Zhang, and Xue (2006) This paper refers to various theoretical perspectives to develop a hypothesis which proposes a direct connection between technology capabilities and business performance. This paper provides a framework that examines the technological capabilities of the company. Human and Naude (2009) adopted the view of RBV to validate network competence and network capabilities in South Africa. This analysis is based on data collected using mailed questionnaires. The results of this study showed a significant relationship between network competence and network capabilities, and the network capabilities and performance of the company, but not between competence and performance of enterprise networks.

Goll, Nancy, and Rasheed (2007) examined the relationship between knowledge capabilities, strategy changes, and performance of the company in the United States airline industry. This is a longitudinal study with a cross-sectional regression, the results support the theoretical model, that the knowledge capabilities affect change strategy which in turn affects the performance of the company. David, Chew, Yan, and Charles (2008) the purpose of this paper is to examine the relationship between a variable number of core competencies, competitive strategy and performance in the construction of small and medium enterprises (SMEs) in China. This paper consists of several quantitative surveys. The result of core competencies and competitive strategies affect the performance of construction SMEs. In addition, there is a positive relationship between core competencies and competitive strategy.

H5: Capability has a significant impact on corporate strategy

H6: Capability to have a positive relationship with firm performance.

Conclusion:

- Empirical Model. According to the above theories is developed empirical model (path diagram) of strategic RED below:

![Empirical Model of SDM – RED](image)

- State of the Arts
Table 1: State of the Arts.

<table>
<thead>
<tr>
<th>Researcher (year)</th>
<th>Dimensions / construct / concept / factor</th>
<th>Research Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porter (1980)</td>
<td>framework that determine the competitive intensity and market attractiveness</td>
<td></td>
</tr>
<tr>
<td>Wernerfelt (1984), Barney (1991)</td>
<td>the resource-based framework</td>
<td></td>
</tr>
<tr>
<td>Davies and Walters (2004)</td>
<td>Strategy, environment, and performance</td>
<td>Questioner survey and personal interviews</td>
</tr>
<tr>
<td>Tai and Huang (2006)</td>
<td>Competitive advantage and performance</td>
<td></td>
</tr>
<tr>
<td>Human and Naude (2006)</td>
<td>competency, relation cap., and performance</td>
<td>Mail survey</td>
</tr>
<tr>
<td>David, Chew, Yan, and Charles (2008)</td>
<td>Core competence, competitive strategy, and performance</td>
<td>Quantitative survey</td>
</tr>
<tr>
<td>Scheffer and Singer (2006)</td>
<td>Contribution of Corporate Real Estate to Corporate Strategy</td>
<td></td>
</tr>
<tr>
<td>Ali, McGreal, Adair, and Webb (2008)</td>
<td>strategy (CRE) and financial performance</td>
<td>multivariate analysis</td>
</tr>
<tr>
<td>Lindholm (2008)</td>
<td>CRE and corporate performance</td>
<td>Constructive approach</td>
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<tr>
<td>Tuan and Mai (2012)</td>
<td>Resource - based view (RBV) and industrial organization (IO)</td>
<td>multivariate analysis</td>
</tr>
<tr>
<td>Wilson (2012)</td>
<td>IO, RBV, and Dynamic Capabilities Approach (DCA)</td>
<td>theoretical framework</td>
</tr>
</tbody>
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- **Novelty:**
  Contribution which is a novelty of this research are conceptual model of strategic decision making in real estate development (SDM-RED) with the basic approach to industrial organization / IO and resource-based view /RBV, with three efforts:
  - Adoption prescriptive method of decision theory
  - Strategic management perspective with capability analysis
  - Entrepreneurship cycling in process

**REFERENCES**


