

ROLE OF DIRIGEN OF RESOURCE ORCHESTRATION AND DYNAMIC CAPABILITY ON COMPETITIVE STRATEGY AND THEIR IMPLICATIONS TOWARD COMPETITIVE ADVANTAGE OF SOEs CONSTRUCTION SERVICE

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Abstract

In a company that has been well-established and gone international, to grow, the company must adapt to its business environment and would certainly undergo strong external pressure, so that a conductor is required to align the activities of various divisions and subsidiaries. The purpose of this study is to discover the influence of resource orchestration and dynamic capability on competitive strategy and their implications toward competitive advantage. In addition, to determine the effect of dynamic capability towards the strategy and competitive advantage in soes Construction Service. This study is conducted by a conceptual approach using grounded theory. Questionnaire and interview are distributed to 60 top leaders and project managers of soes Construction Service to explore their strategic perspective in the construction industry. The sampling technique by using proportional random sampling technique. The data is in the form of SEM and is analyzed by Path Analysis. Novelty of this study result is the discovery of negative effect and insignificant of the resource orchestration variable against competitive strategy. On the other hand, the resource orchestration variable has positive effect and significant to the competitive advantage. Meanwhile, dynamic capability variable has positive effect on competitive strategy and competitive advantage. The study also shows that resource orchestration is not required to improve competitive strategy, but dynamic ability is necessary to adapt with the dynamic environment changes to enhance the competitive advantage.

Keywords: *External Environment Pressure, Resource Orchestration, Dynamic Capability, Business Strategy, and Competitive Advantage*

1. INTRODUCTION

Several State-Owned Companies have invested abroad or Go International, among others in ASEAN region, South Asia, Australia, Middle East, and Africa (Table 1). The development undertaken such as government buildings, airports, hotels, bridges, plazas, toll roads, housing, factories, and others. The construction export value acquired by national companies is listed in the table below:

Table 1 Overseas Projects Acquisition of SOEs Construction Service

No.	Country	Contractor	Project Name	Period	Project Value
1	Uni Emirat Arab	Pt Waskita Karya	Burj View Dubai; Trade License Dubai Government; Abu Dhabi Stock Exchange	2007 - 2008	IDR 1.039 Trillion
		PT Wijaya Karya	Dubai	2009 - 2011	IDR 100 Billion

2	Qatar	PT Adhi Karya	Doha City Center Hotel	2011 - 2013	IDR 750 Billion
		PT Pembangunan Perumahan	New Doha International Airport	2005 - 2013	IDR 1 Trillion
3	Oman	PT Adhi Karya	Tilal Complex Project (Grand Muscat Mall, 3 tower office, 3 tower apartment, 1 tower service apartment); Shaden Oman (1 level basement parking, 1 level GF, 6 level residential & service apartment, penthouse, swimmingpool)	2007 - 2012	Rp 973 Billion
4	India	PT Adhi Karya	Construction of Roadbed incl. Major & Minor Bridges Facilities with Construction of New BG Line Haridaspur Paradeep	2007 - 2012	US\$ 61.4 Million
5	Algeria	PT Wijaya Karya	Construction of housing in the amount of 3,100 units di Annaba	2011	IDR 923 Billion
		PT Wijaya Karya	Continued Housing	2013	IDR 1.2 Trillion
6	Myanmar	PT Wijaya Karya	Precast Concrete Factory; Pyay Tower & Resident Yangoon	2013	US\$ 125 Million
7	South Africa	PT Wijaya Karya	Precast Concrete Factor	2013	US\$ 30 Million
8	Timor Leste	PT Pembangunan Perumahan	Ministry of Finance RDTL Building; Karimbala – Batugede Sector Road; Tibar – Gleno Road; Bridge in Oecusse (re-tender); Liquica – Mota Ain Road	2012 - 2013	US\$ 92 Million

Source: Bulletin of the Directorate General of International Trade Cooperation, Ministry of Trade, 2015

From Table 1 above shows that SOEs Construction Service have been able and significant to obtain overseas projects. However, when viewed from the viewpoint of a country's competitiveness compared with other countries, then in overall, competitiveness ranking of Indonesia has a movement that tends to decrease as listed in the following table:

Table 2 Ranking of Infrastructure Development Competitiveness of Indonesia

Year	Ranking
2010 – 2011	90
2011 – 2012	82
2012 – 2013	92
2013 – 2014	82
2014 – 2015	72

Sumber: World Economic Forum (WEF), 2015

To achieve the capability of bigger acquisition of overseas projects and to improve the competitiveness of infrastructure development, the ability to manage the available resources is necessary. Resources in the form of assets, divisions, subsidiaries, as well as the ability to apply strategies that appropriate to the situation and pressure in the environment where the company operates, should be driven by an expert to lead and run the resource wheel, thus forming a valuable synergies and able to build competitive advantage (Sirmon DG, et al (2011). If analogized with an orchestra, then such resource orchestration should be driven by a conductor who is able to arrange in order to produce harmony and conformity with the strategy and simultaneously build competitive advantage (Sirmon DG, et al, (2011).

Behavior of consumers is also tend to change, consumers need a product that change to adapt with their needs, it will force manufacturers to be able to adapt with the needs of these consumers. As a business, SOEs Construction Service will encounter external pressure that will affect the business strategy to achieve sustainable business (Smith and Grimm, 1987; Snow and Hrebiniak, 1980). This adaptive capability is defined as the ability to integrate, build, and reconfigure the internal and external capabilities to cope with the rapid environmental change.

The research question is, does resource orchestration of SOEs Construction Service affect the competitive strategy and able to build competitive advantage? Does Dynamic Capability affect the strategy and able to build competitive advantage?

2. THEORITICAL FRAMEWORK

2.1. Overview of SOEs Construction Services

State Owned Enterprise (SOE) is a business entity that the entire or most of its capital owned by the state through direct investments coming from state assets set aside. The objectives and purposes of establishment of SOEs Construction Service pursuant to Article 2 of SOE Law shall be to: (1) make contributions to national economic development in general and state revenues in particular. (2) make a profit. (3) establish public benefit through supply of high quality and affordable goods and/or services for the lives of many people. (4) become the pioneer of business activities that cannot be performed by private sector and cooperatives. (5) participate actively to provide guidance and assistance to the weak economy entrepreneurs, cooperatives, and community. Noting such objectives and purposes, then SOE should utilize its resources to produce profusely for the contribution to national economic development, by doing competitive strategy that appropriate and profitable for shareholders.

SOEs Construction Service consist of several state companies that are: 1. PT Wijaya Karya, 2. PT Waskita Karya, 3. PT Adhi Karya, 4. PT Hutama Karya, 5. PT Pembangunan Perumahan, 6. PT Brantas Abhipraya, 7. PT Nindya Karya.

Table 3 Total Turnover Generated in the Last 4 Years

No.	Name of SOEs Construction Service	TURNOVER (IDR Trillion)				Remark
		2012	2013	2014	2015	
1	PT. Adhi Karya	19.47	19.58	20.24	27.07	
2	PT. Hutama Karya	NA	NA	NA	NA	
3	PT. Pembangunan Perumahan	19.47	19.58	20.24	27.07	
4	PT. Waskita Karya	12.26	8.78	21.49	32.08	
5	PT. Wijaya Karya	17.13	17.73	17.63	25.22	

Source: Annual Report of ADHI, PP, Waskita, WIKA, 2012-2015

2.2. Dynamic Capability

Dynamic capability is defined as the ability of organization to integrate, build, and reconfigure internal and external pressures to overcome the change of environment (Teece, Pisano & Shuen, 1997). Dynamic capability will reflect the organization's ability to achieve new forms and innovative to build competitive advantage which demonstrated by the ability to create change to adapt with the pressure of external environment (Leonard-Barton, 1992).

Dynamic Capability Simulation

Dynamic capability can be simulated and modeled. Quoted from the journal of Gary, M. S. et al. (2008) *System Dynamics and Strategy*, states that to make decisions toward overcome the decisions relating to external pressure can be simulated in the model that is now become a subsection of management science called System Dynamic.

From such various quotes, the dimension and indicator of Dynamic Capability can be summarized as described in Table 4 below.

Table 4 Variable, Dimension, and Indicator of Dynamic Capability

Variable	Dimension	Indicator
Dynamic Capability	a. Strategic capability	<ul style="list-style-type: none"> • Capability to have competitive flexibility • Capability to aware new opportunities and threats • Capability to have entrepreneurship characteristic • Capability to integrate knowledge
	b. Innovation capability	<ul style="list-style-type: none"> • Capability to evaluate the strengths and weaknesses • Capability to innovate at the right time and direction • Capability to develop promotion programs by using new
	c. Management capability	<ul style="list-style-type: none"> • Capability to understand the customers' needs • Capability to communicate and coordinate divisions • Capability to motivate the staffs • Capability to run business effectively
	d. Adaptive capability	<ul style="list-style-type: none"> • Capability to react properly to market change • Capability to withstand changes in the market • Capability to withstand e-commerce trend

2.3 Resource Orchestration

Resource orchestration is a perfect solution to overcome the coordination problems among the functions in business processes/activities of a company. By applying the resource orchestration method, all of the available management functions will be integrated each other, conformable, mutual need/understanding, fair in sharing duties and responsibilities, balance and harmonious like an orchestra. In genuine, resource orchestration will improve the style of corporate culture to be proactive. Once implemented, this system will work/run by itself and will continue to be refined by the sharpness and sensitivity of the holders of top-level management (Wikipedia, Sirmon DG, et al, (2011).

Standard form of coordination line among management functions in the resource orchestration method is very different with coordination structure of management functions that applied/enforced in almost all companies at this time. Even for the advanced level, not only management functions within the company that made into orchestra, but will also involve related resources and the variety of external functions related to company business activities (Sirmon DG, Hit MA, RD Ireland, Gilbert (2011).

Resource management framework explicitly discuss the process-oriented managerial actions involved in achieving competitive advantage and creating value. Sirmon DG et al (2011) conclude that the framework indicates that resource management including resource portfolio management (i.e., acquiring, accumulating, and divesting), resource bundling to build excellence (i.e., stabilizing, enriching, and pioneering), and improve capability in the market (i.e., mobilizing, coordinating, and utilizing) to create more value than the competitors.

According to Simon DG et al, in his journal *Resource Orchestration to Create Competitive Advantage*, a leader or team leader is necessary to act as a conductor who will serve to direct overall resources and these rules in order to be conformable, efficient, and valuable.

Table 5 Variable, Dimension, and Indicator of Resource Orchestration

Variable	Dimension	Indicator
Resource Orchestration	Portofolio Management	Acquiring Accumulating Divesting
	Resource Bundling	Stabilizing

	Enriching
	Pioneering
Build Marketing	Mobilizing
	Coordination
	Utilizing

2.4 Competitive Advantage

Thomson, Strickland, & Gamble (2010) explain that to achieve competitive advantage in the best cost, a company must have the abilities as follows: (1) incorporation of low product cost on the same product features with competitors; (2) provide quality products at a lower price than competitors; (3) develop products that provide the best performance at a lower price than competitors; (4) provide lower price on providing the same customer service with competitors.

Barney (2010: 10) says that a company has competitive advantage when such company is able to create economic value more than its competitors. Porter (2004: 3) conclude that competitive advantage evolve from the value created by a company for its customers that exceeds the cost of company to create them.

Thus, it can be concluded that a resource is said to have competitive advantage if: 1. Able to provide better economic value than competitors, 2. Able to provide something rare in the present and future. 3. Able to provide lower price with the same quality. 4. Become a trusted company

Table 6 Dimension of Competitive Advantage Variable

Thomson, Strickland and Gamble (2010)	Barney (2010)	Porter (2004)	Author Proposal (2016)
1. At the same product quality with a lower price	1. Able to provide better economic value than competitors	1. The company is able to create superior value than competitors	1. Able to provide better economic value than competitors
2. Development of best performance product at a lower price		2. The company is able to offer lower prices than competitors with quality products / services that are useful and valuable	2. Something that is rare in the present and future
3. Provide better service at a lower price			3. Able to provide lower price with the same quality
			4. Become a trusted company

Source: Thomson, Strickland dan Gamble (2010), Barney (2010), Porter (2004), and processed by author.

2.6 Competitive Strategy

In general, definition of strategy is a way to achieve long-term goals. The methods taken may include geographic expansion, diversification, acquisition, product development, market penetration, employee rationalization, divestment, liquidation, even merger (David. P 15. 2014). Competitive strategy is an attempt to find a position in the industry (Porter, 1987), a process for good defense and resistance (Walker, 2001).

Wheelen and Hunger (2012: 183) state that competitive strategy focuses on the development of competitive position of business units engaged in goods and services. Pearce and Robbinson (2011: 215) argue that competitive strategy is an effort to create sustainable competitive advantage through product uniqueness and cost leadership. Ireland, Hoskisson, and Hitt (2009: 90) reveal that competitive strategy is the integration and coordination in designing commitment and action to win the competition in a specific market. Furthermore, Hubbard and Beamish (2011: 20) state that competitive strategy is the method of an organization to position its business in order to be more competitive compared to other similar industries.

Table 7 Dimension of Competitive Strategy

Porter (1987)	Ireland and Hitt (2011)	Pearce and Robbinson (2011)	Hubbard and Beamish (2011)	Author's Proposal
Overall Cost Leadership	Overall Cost Leadership	Low Cost Strategies	Cost Leadership	Cost Leadership
Differentiation Focus Cost	Differentiation	Differentiation Strategies	Differentiation	Differentiatiaon Strategy
Leadership Focus Differentiation		Speed Based Strategy		Time Speed Based Strategy

Source: Porter (1987), Ireland and Hint (2011), Pearce and Robinson (2011), Hubbard dan Bearnish (2011), processed by author

3. CONCEPTUAL FRAMEWORK MODELS

Quoted from the Journal of Sirmon DG, Hit MA, RD Ireland, Gilbert (2011), Resource orchestration to Create Competitive Advantage, Journal of Gary, M. S. et al. (2008). System Dynamics and Strategy, and Journal of DJ Teece, G. Pisano, Shuen A.. Dynamic capabilities and strategic management. Strategic Management Journal, mentioned that there is a relationship and influence of Dynamic Capability and Resource Orchestration toward Competitive Strategy and Competitive Advantage as shown in conceptual framework in Figure 3.1 below.

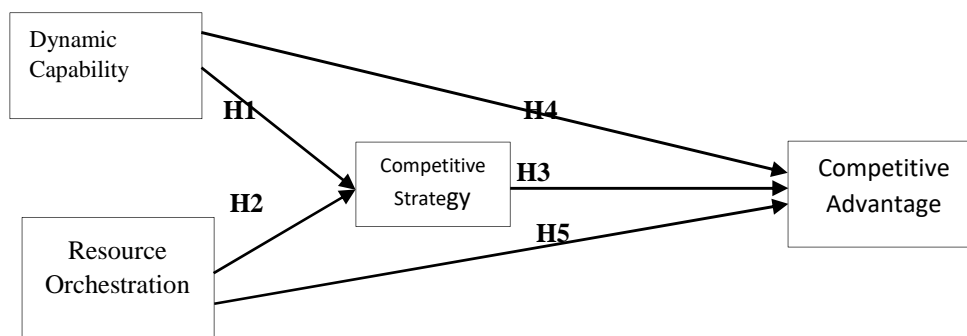


Figure 3: Conceptual Framework Model of SOEs Construction Service. Relationship among Dynamic Capability, Resource Orchestration, Competitive Strategy, and Competitive Advantage

Source: Sirmon, D.G., Hit, M.A., Ireland R.D., & Gilbert. (2011). Resource Orchestration to Create Competitive Advantage and Gary, M. S. et al. (2008). System Dynamics and Strategy. Processed by author

3.1 Hypothesis

From Figure 3 Conceptual Framework, hypotheses obtained are as follows:

- Hypothesis 1 Dynamic Capability has an effect on Competitive Strategy
- Hypothesis 2 Resource Orchestration has an effect on Competitive Strategy
- Hypothesis 3 Competitive Strategy has an effect on Competitive Advantage
- Hypothesis 4 Dynamic Capability has an effect on Competitive Advantage
- Hypothesis 5 Resource Orchestration has an effect on Competitive Advantage

4. RESEARCH METHODS

- a. This study is a combination between literature review and descriptive research study, i.e. the method to resolve the problem by tracing the writing sources that have been made previously and conducting interview to respondents with questionnaire.
- b. The questionnaire that will be used to collect research data must previously be examined for its validity and reliability. Instrument validity examination aims to find out the extent of precision and accuracy of the measuring instrument in performing its functions. Meanwhile, reliability examination is related to the accuracy of the results. (Joseph E. Hair, William Ronald L, 1980, Multivariate Data Analysis, Printice Hall Publication).
- c. Research data is analyzed by using path analysis technique. This path analysis technique will be used to examine the amount of contribution shown by the path coefficient for each path diagram of causal influence against X1, X2, X3, and Y variables and the impacts, correlation and regression analysis which are the basis for the calculation of path coefficients by using SPSS version 16 software.
- d. In this study, descriptive research is conducted by survey method. Respondents of this study are the perpetrators of SOEs Construction Service who are selected based on their experiences and positions in the holding company. The number of respondents is 60 people, which consists of general manager and project manager of SOEs Construction Service.

Path Analysis process:

1. The steps of Path Analysis are as follows:

From the research model as follows:

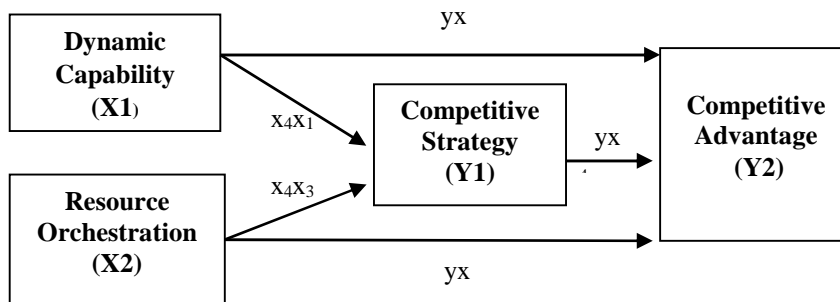


Figure 4: Relationship of X₁, X₂ Structures Toward Y₁ and Y₂

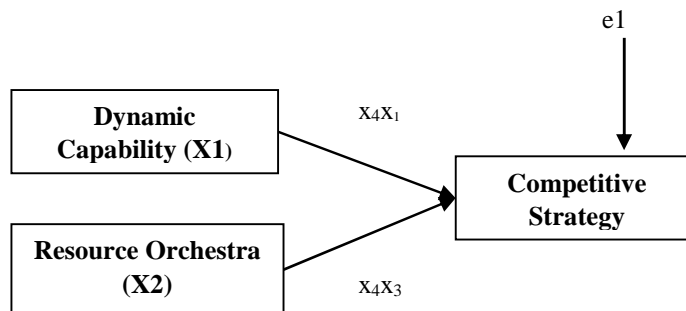


Figure 5: Relationship of X₁, X₂ Structures Toward Y₁

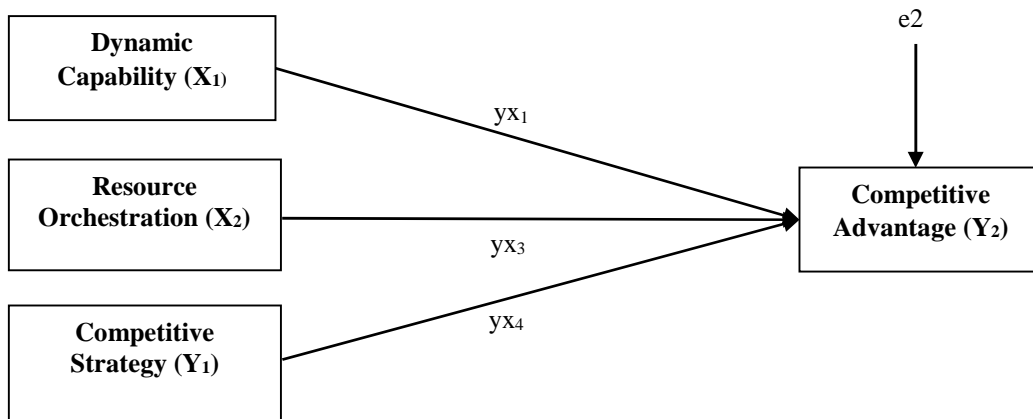


Figure 6: Relationship of X1, X2, and Y1 Structures Toward Y2

5. DISCUSSION AND RESULTS

From the questionnaire data processing by using SPSS software, the path analysis result can be obtained as follows:

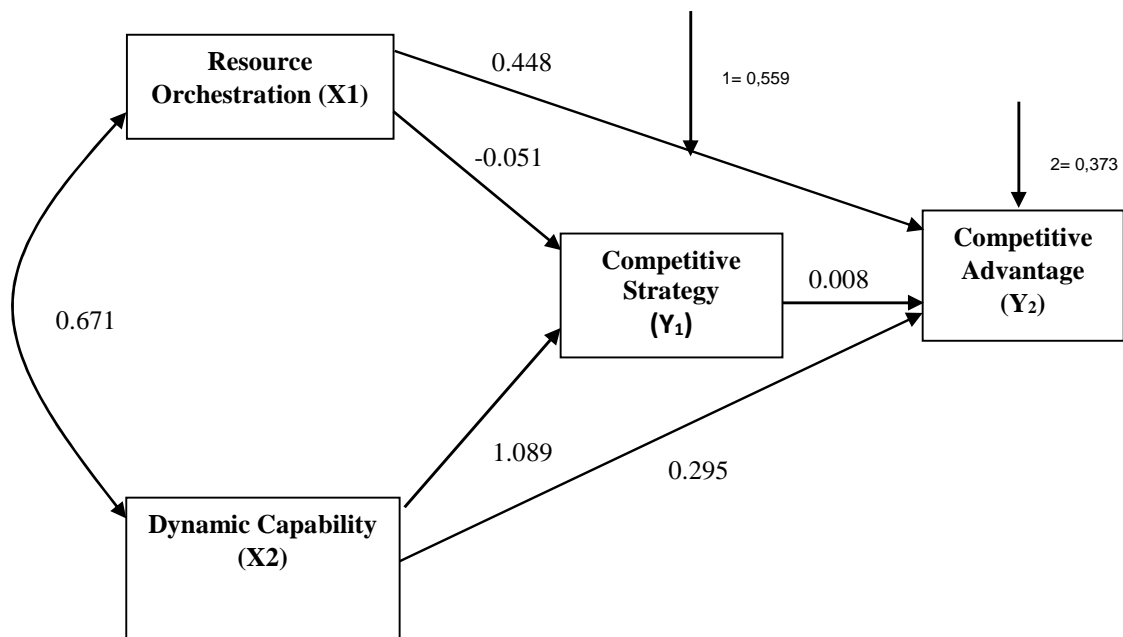


Figure 7: Empiric Causal Relationship of X1, X2, and Y1 Variables Toward Y2

The answer of this study problems are summarized in Table 8 as follows:

Table 8 Path coefficient, direct effect, indirect effect, total effect, and mutual effect of Resource Orchestration (X1), Dynamic Capability (X2), Competitive Strategy (Y1) Towards Competitive Advantage of SOEs Construction Service (Y2)

Variable	Regression Coefficient	Effect			Mutual effect (R^2_{yx})
		Direct	Indirect through X_4	Total	
X1	0,419	0.448	0,0004	0,4484	-
X2	0,260	0.295	0.009	0.304	-

Y1	0.008	0.008	-	-	-
ϵ_1	0,559	31,25	-	-	-
ϵ_2	0,373	13,91	-	-	-
X ₁ ,X ₂ dan Y ₁	-	-	-	-	0,861

Independent Variable Y₂

Source: Data Processing Result by Using SPSS

6. CONCLUSION

- a. Resource Orchestration has negative effect and is not significant towards Competitive Strategy, it can be shown with sig value at 0.488 and effect value at -0.051. Effect value of Resource Orchestration has negative effect and is not significant towards Competitive Strategy. This is inconsistent with the study carried out by Sirmon DG, Hit MA, Ireland RD, Gilbert (2011) ***Resource Orchestration to Create Competitive Advantage***, which states that the resource orchestration has positive effect towards competitive strategy. Researcher assumes that it happens due to the SOPs, organizational culture, and systems that have already been formed in the well-established SOEs Construction Service and run independently in accordance with the long-established regulations.
- b. Dynamic Capability has positive effect and is significant towards Competitive Strategy, it can be shown with sig value at 0.000 and effect value at 1,089. Effect value of Dynamic Capability has positive effect and is significant towards Competitive Strategy.
- c. Resources Orchestration has positive effect and is significant towards Competitive Advantage of SOEs Construction Service, it can be shown with sig value at 0.000 and effect value at 0.448. Effect value of Resource Orchestration has positive effect and is significant towards Competitive Advantage of SOEs Construction Service.
- d. Dynamic Capability has positive effect and is significant towards Competitive Advantage of SOEs Construction Service, it can be shown with sig value at 0.011 and effect value at 0.295. Effect value of Dynamic Capability has positive effect and is significant towards Competitive Advantage of SOEs Construction Service.
- e. Competitive Strategy has positive effect and is not significant towards Competitive Advantage of SOEs Construction Service, it can be shown with sig value at 0.034 and effect value at 0.008. Effect value of Competitive Strategy has positive effect and is not significant towards Competitive Advantage of SOEs Construction Service.

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