

# Antecedents of Competitive Advantage and Its Impact on Firm Performance: Empirical Study on Construction Industries in Indonesia

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## Abstract:

This study aims to analyze the factors that drive competitive advantage in improving firm performance among Indonesian construction companies. This study tries to combine all theories (Theory of The Firm for Strategic, Performance Management, Relationships Marketing Theory, Contracting View of the Firm) as factors that influence the competitiveness and performance of a company. Prediction of factors taken from the variable electronic customer relationship management, project innovation, project organizational culture, and dynamic capabilities that have a major influence on competitive advantage and firm performance. The type of research used is quantitative research with a causal study research design. This research uses purposive sampling technique with a sample of 385 respondents who work in the construction industry. The result shows that dynamic capabilities and project organizational culture only have significant influence on firm performance, whereas e-CRM and project innovation have positive and significant influence on competitive advantage and firm performance. Therefore, Indonesian construction companies need to focus on e-CRM and project innovation to optimize their competitive advantage and firm performance.

**Keywords:** electronic customer relationship management, project innovation, project organizational learning

## INTRODUCTION

The market competition of construction companies is increasingly competitive along with the increasing number of construction companies, the quality of human resources, technology, and global competition. Therefore, companies are required to be smarter in increasing their competitiveness. The increasing competition in the construction sector in Indonesia can be seen from the number of construction companies that continue to grow every year. The number of construction companies rose from 131 thousand pieces in 2013 to 160 thousand pieces in 2018. This shows the average growth of 500 companies every year. But the increase in the number of such enterprises is not accompanied by a growth in the number and value of projects with reduced efficiency, due to weak competitiveness.

Polat's study (2010) stated that competition in the current technological era requires companies

to have a *competitive advantage* to be able to continue to improve their competitiveness globally. Competitive advantage is everything that the company has such as cost, uniqueness, and specific targets that the company has. Such competitive advantages can be implemented by creating a good portfolio, innovative design and having information related to project tenders available. Increasing competitive advantage can be one of the solutions to overcome the problems faced by the Indonesian construction industry.

The occurrence of fierce competition in the construction sector makes various companies need to have the right strategy in marketing, designing the development of unique project innovations, and strategies for obtaining a project contract (Polat, 2010). In addition, companies must have a good marketing strategy, a good performance portfolio, extensive connections, and a flexible funding platform

strategy to win the competition in obtaining projects (Horta & Camanho, 2013).

The problem of intense competition that is getting sharper in construction companies in Indonesia is exacerbated by the "dominance" of State-Owned Enterprises (BUMN) Karya which control strategic government projects. The Indonesian Chamber of Commerce and Industry (Kadin) stated that around 37,000 local private contractors went bankrupt during the 2014-2018 period due to lack of involvement in the infrastructure development process in Indonesia. The reason is that massive infrastructure development built in Indonesia does not have a good impact on business growth in the local construction sector and is the main trigger for the majority of infrastructure projects to be controlled by SOEs and subsidiaries in the name of SOE synergy (Baderi, 2019).

Some of the national strategic projects controlled by SOEs are the construction of toll and non-toll road infrastructure, transportation infrastructure projects, one million housing programs, dam projects and irrigation networks, educational infrastructure, electricity infrastructure development programs and several other strategic infrastructure (Nobel & Larasati, 2017). Unfair competition in the government and state-owned project sectors encourages entrepreneurs and construction companies to look for other private projects and regional projects that are still wide open in terms of competition and tenders. To get complete, accurate and detailed information about the project is certainly not an easy thing because it must have a connection and an extensive database (database). This creates its own opportunities and gives birth to big data-based companies to provide and collect all project information and construction companies that will be involved in the project.

The phenomenon of the emergence of big data companies is inseparable from the development and utilization of information and communication technology in the economic field. This can support construction companies to obtain project tenders in accordance with their industrial scale and specifications. The existence of big data companies also encourages open, transparent, healthy competition and tender competition, and avoids monopolies in certain companies (Indrayadi & Wardhani, 2015). On the other hand, companies that need construction

services or organize tenders can choose a company with advantages in the field of innovation and cheaper in terms of cost.

One of the innovation efforts that is currently developing is the use of technology in the strategy of managing relationships with customers, or often referred to as Customer Relationship Management (CRM). The results of research by Zerbino et al. (2018) show that big data-based Customer Relationship Management (CRM) has the potential to affect the Critical Success Factor (CSF) of related CRM strategies. CRM is closely related to efforts to explore customer needs and characteristics, so it is important to implement (Hassan et al., 2015). This strategy of establishing relationships with customers includes introducing products, capacities, and introducing information on workmanship and project scheduling. Nowadays, CRM is widely developed digitally and computerized (called e-CRM) so that companies can be one step ahead in maintaining good relationships with customers. The most developed e-CRM today is a page-based (web) CRM, which is evolving and supported with other tools such as electronic mail (email), electronic forums, and social media support (Lee-Kelley et al., 2003; Rilvari, 2005).

e-CRM is a technological innovation in the field of marketing that has the ability to collect and analyze data on customer patterns, predict customer behavior, develop prediction models to determine the right strategy, respond to complaints and information needs in a timely manner so as to produce effective communication and services for customers (Chen & Popovich, 2003; Sinisalo et al., 2005). The use of technology to optimize interactions between the company and customers, able to motivate customers to loyally use services or products from the company (Fjermestad & Romano, 2003). The ability of e-CRM certainly makes the company have high competitiveness in competing for the market with other companies (Hamid, 2005). e-CRM can also be used to communicate various excellent services, the latest products, and the advantages of each product owned by the company, so that the perception of the company's good performance can be shown to customers (Chaffey, 2009). The implementation of e-CRM is expected to be able to generate significant value for companies and

customers in an era when society is increasingly connected to each other (Jih & Lee, 2010). Jih and Lee (2010) also explained that e-CRM is the right solution for companies in maintaining relationships with customers in today's digital era.

In the field of construction services, in the midst of a climate of fierce competition, a corporate culture is certainly needed in projects that are creative and innovative (corporate project culture). Chukwuemeka and Onuoha (2018) said that the company's dynamic capabilities have a significant influence on the company's competitive advantage. Although there have been mixed attempts to analyze the relationship between dynamic capabilities and competitive advantage, there is still a gap in the form of a lack of empirical studies that comprehensively investigate the specific relationship between the two concepts in business arrangements in Nigeria. As a result, different research results come from field observations in the Nigerian banking sector (Ogunkoya et al., 2014). This makes there a research gap so that this variable is interesting to study further.

Furthermore, Adiputra, Pratama, and Mandala (2017) proved that the company's dynamic capabilities have a positive and significant effect on the company's competitiveness and performance advantages. Thus, existing resources must be managed properly because they can be a competitive advantage that affects the overall performance of the company. This was also confirmed by Kristinawati and Tjakraatmadja (2018) who said that knowledge management alone is not enough but companies must have dynamic capabilities to be able to adapt and improve company performance.

This research focuses on antecedent investigations that affect competitive advantage in improving company performance with firm size control variables in construction companies in Indonesia. Antecedents themselves are defined as variables that precede independent variables. This variable has a positive and significant effect on independent variables (Darmanto & Dwiyani, 2015).

This research is based on several previous theories and research as a reference and research problem as a basis for taking the title and location of the research. Some of the previous studies that have been summarized in the state of

the art (see sub-chapter 2.4) have differences with this study, specifically with regard to theories and variables that affect competitive advantage and company performance. The various theories and variables studied from previous research are then used as references to compile a new research framework that distinguishes this research from previous research.

There are two grains of novelty offered by this study. First, the inclusion of discussions about the e-CRM phenomenon in construction companies that have used big data systems. The use of big data in construction companies to increase competitiveness is a new breakthrough so as to increase transparency and healthy competition in the construction industry. Based on this, this research is then proposed in order to help the development and application of e-CRM theory, project innovation, corporate project culture and dynamic capabilities in increasing competitiveness excellence, as well as analyzing its implications for performance with company size as a control variable in construction companies in Indonesia.

The second novelty is a research variable that is in accordance with things that can be used as a strength by construction companies in Indonesia to be able to improve their performance in the midst of technological advances and conditions of increasingly fierce global competition. These variables are electronic customer relationship management, project innovation, company project culture, dynamic capability, competitive advantage, and company performance.

## METHODS

The type of research used is quantitative research with a causal study research design, which is research that studies causal relationships. This research belongs to the type of inferential statistical research, which is research that helps researchers to find out whether the results obtained from a sample can be generalized in the population. Inferential statistics are often used to compare differences between treatment groups. Inferential statistics used measurements from sample subjects in experiments to compare treatment groups and make generalizations about larger populations of subjects (Sugiyono, 2010).

The method of data collection is to use questionnaires, questionnaires are given with screening questions to ensure that respondents have at least a manager position from the department that manages marketing, production, human resources, and R&D to be respondents in this study. The study used a six-point Likert scale consisting of "Strongly Disagree" (1), "Disagree" (2), "Somewhat Disagree" (3), "Somewhat Agree" (4), "Agree" (5), and "Strongly Agree" (6). Researchers use three methods to collect and verify data, namely through questionnaires and *in-depth interviews*. Both methods are carried out in stages.

## RESULT AND DISCUSSION

### ECRM Effects on Competitive Advantage

The hypothesis testing 1 result, i.e., the power of ECRM on competitive advantage, revealed that ECRM has a positive and substantial influence on competitive advantage. It is shown from the CR value of 4.158 and the value of 0.000. The CR value is larger than 1.96 ( $4.158 > 1.96$ ), as is the P value less than 0.05 ( $0.000 < 0.05$ ) indicates that ECRM has a substantial influence on competitive advantage. The positive value estimate value (0.709) shows that the influence given by the ECRM is positive. That is, the better the ECRM Company of MSMEs competitive Advantage will be escorted. The results of the hypothesis test show the hypothesis 1 (H1) received.

Tarabih (2011) previously had conducted a study that proved a significant positive influence between Competitive Advantage with Firm Performance, but Kumar et al. (2011) Arrange it by showing an unusual impact of competitive advantage against Firm Performance. In research conducted by Fazzladeh et al. (2011) found that CRM can improve Form Performance. A strong positive relationship between the two variables has also been confirmed by Coltman et al. (2011).

### Influence Project Innovation to Competitive Advantage

The result of hypothesis testing 2, i.e., Project Innovation to Competitive Advantage, shows a positive and significant effect of Project Innovation to Competitive Advantage. It can be

seen from the value of CR by 2.423 and the value of P-Value by 0.025. The value of CR is greater than 1.96 ( $2.423 > 1.96$ ) as well as value P-Value is smaller than 0.05 ( $0.025 < 0.05$ ), which shows there is a significant effect of Project Innovation on Competitive Advantage. The estimated value of positive (0.233) shows the influence given that the project innovation is positive. That is, the better the project Innovation Company SMEs the competitive advantage will be escorted. The results of the hypothesis test show the hypothesis 2 (h2) received.

Rutherford and Zone (2017) indicate that Product Innovation has a substantial and beneficial effect on product competitiveness. It is also reinforced by Lii and Kuo (2016), who state that innovation is necessary to raise the value of the business's products and the supply chain, allowing the company to improve its performance. However, Shouyu (2017) said that innovation does not necessarily improve the performance of a company.

Nguyen and Watanabe (2017) confirm a substantial relationship between organizational culture projects and firm performance in running construction projects. They also said that the impacts of organizational culture organization should be taken into account because it may significantly affect performance firm performance.

### Influence Project Organizational Culture on Competitive Advantage

The hypothesis testing 3 results, i.e., the Project Organizational Culture on Competitive Advantage, demonstrate that organizational culture has a positive and substantial influence on competitive advantage. It can be seen from the value of CR by 2.424 and the P-Value by 0.015. The value of CR is greater than 1.96 ( $2.424 > 1.96$ ), as well as the value of P. 015 ( $0.015 < 0.05$ ) shows there is a significant effect of organizational culture against competitive advantage. The positive value estimate value (0.316) shows the influence that the Project Organizational Culture is positive. That is, the better the project organizational culture company UMKM the competitive advantage will be semi-urine. The results of the hypothesis test showing hypothesis 3 (H3) received.

Tendean and Devie (2014) found a significant positive relationship between Organizational Culture and Competitive Advantage, Organizational Culture and Entrepreneurship, Entrepreneurship and Competitive Advantage, and Organizational Culture and Supply Chain Integration in East Java manufacturing companies. Wien Dyahrin (2019) showed that organizational culture affects performance through the competitive advantage of cooperatives. These findings contain that meaning if the organizational culture is strong, then the benefit of competing for better is expected to have a beneficial influence on the performance of cooperatives in West Java Province.

Supported by Harrigan, Ramsey, and Ibbotson's (2012) research, the study reported how SMEs innovate in marketing, highlighting theoretical and practical areas of essential. Theoretically, this paper breaks up ECRM into keys to the capabilities that may apply to larger organizations. Sudana (2011), with the effort to improve efficiency, is one way that the company can use to maintain and improve its competitive advantage. The strategic approach to cost management can help companies have short-term economic difficulties and create a permanent efficiency culture.

According to Soebarjo and Rokhyadi (2014), there is a link between organizational culture (hierarchy culture, group culture, development culture, and rational culture) and firm performance, and green strategy increase organizational culture on corporate performance. Supported by Andrew Klein's (2011) study, the generic strategy type is not as significant as the factor used in understanding the link between strategy and results, such as the culture type. Regardless of the approach used, constructive cultural norms appear to be favorably related to quality, whereas defensive norms are negatively connected with quality.

### **Influence of Dynamic Capabilities against Competitive Advantage**

The results of hypothesis testing 4 of the influence of Dynamic Capabilities on Competitive Advantage reveal that Dynamic Capabilities have a positive and substantial effect on Competitive Advantage. It can be seen from the value of CR by 4.001 and value of

0.000. The value of CR is greater than 1.96 ( $4.001 > 1.96$ ) as well as P-Value is smaller than 0.05 ( $0.000 < 0.05$ ), demonstrates that Dynamic Capabilities have a substantial impact on competitive advantage. The positive value estimate value (0.414) shows the effect of dynamic capability car is positive. That is, the better the Dynamic Capabilities Company MSMEs competitive Advantage will be escorted. The results of the hypothesis test show hypothesis 4 (h4) accepted.

According to Farida (2016), entrepreneur orientation does not influence market capability or social capital, while innovation has a favorable and substantial impact on market capabilities and marketing performance. This demonstrates that innovation is a vital part of market capabilities' advantages while influencing the small-scale marketing performance known as SMEs. Research Harrigan, Ramsey, & Ibbotson (2011), stronger managerial, where the practice of relevant implications and recommendations surrounding ECRM is provided for SME owners-managers, helping bridge the gap between theory and the practice.

In line with the research conducted by Suyono (2018), based on the above description, the concept filed by Teece et al. (1997) is appropriate, this is because the college is in a dynamic and rapidly changing environment. Universities to be a World Class University through dynamic capabilities that include processes, positions, and path dependence. Path dependence can be developed by managing the behavior of its members in this case of academic co-establishment. According to Sudrajat (2013), there is a direct link between dynamic capabilities and innovative performance. Variables for dynamic capabilities include adaptive capabilities, absorptive capabilities, and innovative capabilities). In comparison, the link between dynamic capabilities and corporate performance could be either direct or indirect through innovation performance.

As mentioned by Bambbade et al. (2019), construction companies will likely use more sustainability in project delivery if they have efficient resource capabilities. This research adds to existing discussions on critical criteria for social sustainability in constructions. Kristinawati and Tjakraatmadja (2018) that the concept of dynamic capabilities not only saw the

external and future environment but should also maintain today's competitive advantage through EFI SIESI. Hence, the concept of staged harmony also needs to be included as a dynamic capability component.

### **The effect of competitive advantage against firm performance**

The result of hypothesis testing 5, i.e., Firm Performance's competitive advantage, shows a positive and significant effective competitive advantage against Firm Performance. It can be seen from the value of CR by 4.140 and value of 0.000. The value of CR is greater than 1.96 ( $4.140 > 1.96$ ) as well P-Value is smaller than 0.05 ( $0.000 < 0.05$ ), which shows there is a significant effective competitive advantage against firm performance. The positive value estimate value (0.759) shows that the influence given by the competitive advantage is positive. That is, the better the competitive advantage company of MSMEs, then the firm performance will be escorted. The results of the hypothesis test show the hypothesis 5 (H5) received.

Chukwuemeka and Onuoha (2018) said that Dynamic Capabilities of the company have a significant effect on Competitive Advantage Company. Similarly, Aguirre (2011) who studied Dynamic Capabilities and Competitive Advantage among Mexican companies and concluded that Dynamic Capabilities and Competitive Advantage tended to be important for the survival of the company in marked markets to be innovative and in rapid technological changes. Aguirre (2011), whose study was on Dynamic Capabilities and Competitive Advantage of Mexican companies, also stated that Dynamic Capabilities and Competitive Advantage is crucial for the company's survival in marked markets to be innovative and with rapidly-changing technologies.

However, regardless of the great research efforts in analyzing the relationship between Dynamic Capabilities and Competitive Advantage, there is still a lack of intensive empirical studies investigating special relationships between two concepts, mainly because of the Nigerian business settings. Consequently, several research reports from the field were seen (Ogunkoya, Hassan, & Shobayo, 2014). In line with research conducted by Radulovich,

Pendleton, and Scherer (2005), it is important for global marketers to understand how consuming decision-making on the web affects strategic and financial performance. The current literature by integrating consumer decision behavior on the web, CRM, and corporate performance. Creation of sustainable competitive advantage using customer-focused strategies to develop customer loyalty for superior company performance.

### **ECRM Effects on Firm Performance**

The results of hypothesis testing 6, i.e., ECRM influence on firm performance, demonstrate that ECRM has a positive and substantial effect on firm performance. It can be seen from the value of CR by 3.479 and P-value by 0.000. The value of CR is greater than 1.96 ( $3.479 > 1.96$ ) as well as P-Value is smaller than 0.05 ( $0.000 < 0.05$ ), demonstrates that ECRM has a substantial impact on company performance. The positive value estimate value (0.533) shows that the influence given by the ECRM is positive. The better the ECRM Company of MSMEs, the better the Firm Performance will be escorted. The results of the hypothesis test show the hypothesis 6 (H6) received.

Research conducted by Alim and Ozuem (2014) on the effect of ECRM on customer loyalty in the mobile industry in the UK is ECRM's influence on customer loyalty. ECRM is critical in marketing strategies development that can lead to consumer loyalty. As stated by Chen and Popovich (2003), despite most CRM involves technology, viewing CRM as a special technological solution may lead to failure. Managing a successful CRM deployment necessitates an integrated and balanced approach of technology, procedures, and people. Research conducted by Kelly et al. (2013) demonstrates how to improve customer management planning that ECRM can increase customer loyalty.

Mohammed and Rashid (2012) said that implementing a well-planned strategy formulation will result in good corporate performance. Mohammed and Rashid (2012) said that the literature on implementing strategies and attention to the implementation is less than the formulation of the strategy. The success of the implementation of CRM strategy results in corporate performance. Ngambi and

Ndifor (2015) observed that return on Investment (ROI) is a valid parameter in assessing the company's performance. It was supported by Oualid (2016) that ROI is the rate of criterion.

### **Influence Project Innovation on Firm Performance**

The outcome of hypothesis testing 7, namely the influence of Project Innovation on Firm Performance, demonstrates that Project Innovation has a positive and substantial impact on Firm Performance. This is shown by the value of CR by 4.627 and the value by 0.000. The value of CR is greater than 1.96 ( $4.627 > 1.96$ ), as well as P-Value is smaller than 0.05 ( $0.000 < 0.05$ ), which shows that Project Innovation has a major impact on Firm Performance. The positive value estimate value (0.670) shows the influence given the project innovation is positive. That is, the better the project Innovation Company SMEs then the firm performance will be escorted. Therefore, the results of the hypothesis test show the hypothesis 7 (H7) received.

A strong organizational culture will provide support for an organization or company in the face of all challenges so that it has superiority except over other companies. This in accordance with the results of research conducted by Indiyati (2014) with the results showed that the organizational culture posed a positive effect on competitive advantage. According to Dyahrini (2019), organizational culture affects performance through the advantage of competing cooperatives. These findings contain that meaning if the organizational culture is strong, then the advantage of competing is better. The criteria in assessing the company's performance submitted in various literature, the criteria include financial and non-financial criteria. This study also supported Adeyeye (2013) in his research on Bank in Oyo City, Nigeria showing a significant positive influence of CRM on corporate performance, supported by Borsaly research (2014) in his research on Bank in Egypt showing a significant positive influence of CRM on corporate performance. Valmohammadi (2017) discussed the importance of CRM practices and how it directly affects the organization's ability and innovation of Iran companies.

Although limited, the importance of project Innovation for Firm Performance is discussed in some literature (Rosli & Sidek, 2013). Sandvik (2003), in the Journal of Rosli and Sidek (2013), found that the project Innovation positively impacts corporate sales growth. Additionally, Varis and Littunen (2010), in the Journal of Rosli and Sidek (2013), using the estimated model, confirmed a very significant effect between innovative activities related to the market and firm performance.

### **Influence Project Organizational Culture on Firm Performance**

The result of hypothesis testing 3, i.e., the Project Organizational Culture Road on Firm Performance, shows a positive and insignificant organizational culture project on firm performance. It can be seen from the small CR value of 0.165 and the value of 0.869. The value of CR is greater than 1.96 ( $0.165 < 1.96$ ), as well as P-Value is greater than 0.05 ( $0.869 > 0.05$ ), which shows the project organizational culture does not affect the firm performance. The positive value estimate value (0.316) shows the influence that the Project Organizational Culture is positive. The results of the hypothesis test show the hypothesis 8 (h8) was rejected.

Results of Navimipour and Soltani (2016) also showed that customer costs positively influence the performance of customer relationships, which increased ECRM's effectiveness in the organization. As similarly stated by Pathirianage (2019), which concluded that organizational culture has a profound influence on the variety of organizational processes, employees, and performance.

### **Influence of Dynamic Capabilities for Firm Performance**

The hypothesis testing 9 results, i.e., Dynamic Capabilities tariff to Firm Performance, revealed that Dynamic Capabilities have a positive and insignificant influence on Firm Performance. It can be seen from the small CR value of 0.165 and the value of 0.869. The value of CR is greater than 1.96 ( $0.165 < 1.96$ ) as well as P-Value greater than 0.05 ( $0.869 > 0.05$ ) shows that Dynamic Capabilities do not affect Firm Performance. The positive value estimate value

(0.316) shows that the effect of dynamic capability potential is positive. Therefore, the results of the hypothesis test show the hypothesis 9 (H9) was rejected.

According to Protogerou et al. (2008), dynamic capabilities are antecedents for additional functional competencies that have a major impact on the company's performance; therefore, dynamic capabilities directly impact the company's performance. Similarly, Ambrosiini and Bowman (2009) mentioned that the performance of dynamic capabilities would impact more than just increased performance. This improvement will occur there is only a suitability of the expected dynamism and the common dynamic, and only the company actually has the necessary dynamic capabilities, the hope is a positive performance.

While Griffith et al. (2006) mention that the development of dynamic capacity or dynamic capabilities can improve company performance, Roberts and Grover (2011) discovered evidence of a positive connection between Dynamic Capabilities and performance. According to Teece et al. (2007), the company's competitive advantage stems from dynamic capabilities in the high-day daily performance, inherent in its process and conditioned by its development process.

### Theoretical Contributions

The results of simultaneous testing of all variables in the study have shown significant results on company performance mediated by competitiveness advantages as the main problem in this study. Competitive advantage is influenced by the variable *e-CRM* because *e-CRM* is a technological innovation in the field of marketing that has the ability to collect and analyze data on customer patterns, predict customer behavior, develop prediction models to determine the right strategy, respond to criticism and information suggestions in a timely manner (Chen & Popovich, 2003; Sinisalo et al., 2005). *e-CRM* is also considered the right solution for companies in maintaining customer relationships in today's digital era. *e-CRM* makes companies have high competitiveness in competing for the market with other companies (Ab Hamid, 2005). The statement of Ab Hamid (2005) is supported by the results of previous studies such as those of

Fazlzadeh et al. (2011) which concluded that *e-CRM* exerts a significant influence on improving company performance through competitiveness advantages.

Then the next hypothesis is tested and proven related to project innovation with competitive advantage that can improve the company's performance. The goal is that the company can be superior to its competitors and also to meet market needs. Companies are also required to be able to see opportunities quickly and agilely because customers need products that suit their needs. Product differentiation is defined as a marketing process that shows between the differences of a product to look more attractive by comparing its unique qualities compared to competitors' products. Therefore, small businesses can make effective use of project innovation and can develop and grow into larger businesses. Thus, the results of this study show that there is a significant influence between project innovation and competitiveness excellence. The results of this study are in line with previous research owned by Rutherford and Zaman (2017) that there is a strong influence between project innovation and product competitiveness excellence. Lii and Kuo (2016) also added that innovation is important to be able to increase the value of the company's products and also the supply chain so that the company can then improve its performance.

In the results of subsequent research, the cultural variables of the company's project can affect competitive advantage and improve the company's performance. Construction project organizations are operated by many individuals with varying backgrounds and different individual behaviors, so it sometimes backfires on teamwork in a project. Therefore, the workers participating in the project significantly affect the success of the project. The influx of workers with a negative culture and attitude greatly interferes with the success of the project in the future (Tijhuis, 2011). Thus, the results of the research conducted show that the culture of the company's project has an influence on the superiority of competitiveness. The results of the research conducted in line with research owned by Soebarjo and Rokhyadi (2014) revealed that there is a relationship between corporate culture (hierarchical culture, group culture, development culture, and rational culture) on company performance, and green strategies to



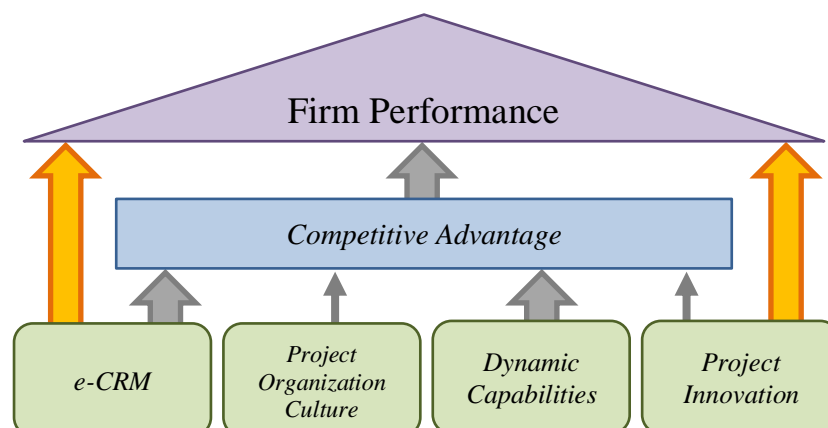
strengthen corporate culture in company performance. However, in practice the culture of the company's projects greatly affects the company's performance, especially when there is an advantage in competitiveness as explained in interviews with several *top* executives in the Indonesian construction sector. Therefore, this research contributes to the theory of corporate project culture so that subsequent researchers can pay attention to other aspects that are not studied in the variables of corporate project culture.

The last variable is dynamic capability with competitive advantage that can improve company performance. Hana (2013) argues that in a volatile and dynamic business, every organization aims to outperform competitors and attract potential consumers to purchase its products and services while still retaining current customers. Chukwuemeka and Onuoha (2018) said that the company's dynamic capabilities have a significant influence on the company's competitive advantage. Companies need to develop their dynamic capabilities to compete in the market successfully. Therefore, dynamic capabilities and competitive advantages are inseparable, as the company continues to develop the ability to face new challenges from the environment. Thus, the results of this study show that dynamic capabilities have an influence on competitive advantage in improving company performance. This result is in line with the study of Adiputra, Pratama, and Mandala (2017) which states that the company's dynamic capabilities have a

positive and significant effect on the company's competitiveness and performance advantages. However, in real conditions, dynamic capabilities greatly affect the company's performance. The company's dynamic capability in making future plans and invocations affects the growth of a company. If the company does not have good dynamic capabilities, it will be difficult for the company to maintain the company's competitiveness and performance advantage. Therefore, the dynamic capabilities in this study contribute to other researchers in order to be able to examine aspects that are not involved in this study.

### Managerial Implications

This research has managerial implications that can be a lesson for construction industry players so that they are able to take strategic steps related to company performance. The results of the study explained that the variable of competitiveness advantage as a moderation variable proves the variable *e-CRM*, a good innovation project. In addition, this research also found that the better the project culture of small and medium-sized companies, the more competitive advantage the competitiveness will increase. Likewise, when the dynamic capabilities of small-medium companies are good, the competitive advantage will increase. Another result states that the better the competitiveness, *e-CRM*, and project innovation of small and medium industrial companies, the more the company's performance will increase.



**Figure 1. Practical framework for the role of variables supporting company performance in the construction industry business in Indonesia**

Meanwhile, the results of the company's project

culture on company performance and the results

for dynamic capabilities were rejected due to insignificant results. Based on this, it is important for every company to have a high orientation to be able to perform optimally, reliably and be able to meet the needs of the company. The management must strive for various things related to the company's competitive advantage in order to grow the company's performance even better. Companies must improve their dynamic capabilities to face challenges in a dynamic business world and also innovate to be different from other companies. If it does not have good dynamic capabilities, it will be difficult for the company to maintain its competitiveness. This situation can lead to loss of investment, decreased profitability, as well as loss of market share. In the long run, the losses suffered by the company will lead to a decrease in the company's performance. Companies also need to pay attention to corporate culture because corporate culture affects the performance of construction companies on the scale of small, medium and large companies. Companies need to care about creating that culture for the long term. This is because some construction industries tend to be fixated on the desire to meet short-term targets alone. In addition to corporate culture, e-CRM can also help improve company performance because large companies need to implement e-CRM. But it needs to be underlined, the use of e-CRM must pay attention to customer needs that may be different from each other. For example, in terms of customer position, a company owner will have a different perspective and needs from officials at the operational level such as project managers. Large companies tend to be more complex so they need to maintain relationships with customers (B2C) and relationships with business level partners (B2B). Companies need to innovate in order to maintain competitiveness in a dynamic business world. However, large companies do not always focus on being able to compete with other companies, therefore companies are more competitive in innovation in implementing new ideas, improving services and innovations in optimizing business processes.

## CONCLUSION

Variabel e-CRM has a significant effect on the performance of construction companies in Indonesia. This shows that construction

companies in Indonesia must get to know their consumers further to understand their needs. With e-CRM, construction companies can obtain an in-depth analysis of consumer needs in each construction project.

Variabel project innovation has a positive and significant effect on competitive advantage. Therefore, construction companies in Indonesia need to innovate consistently in every project to increase competitiveness excellence;

The cultural variables of the company's projects have a positive and significant effect on competitiveness advantages. Therefore, in order to increase the competitive advantage of construction companies, it is necessary to apply a work culture in each project. Especially in permanent employees, as they are able to give direction and help the company in completing projects;

Dynamic capability variables have a positive and significant effect on competitiveness excellence which shows that efficient use of internal resources is able to assist companies in increasing competitiveness advantage. Another advantage is that construction companies are able to handle projects in a timely and appropriate manner;

Variabel competitiveness advantage has a positive and significant influence on the performance of the company. This finding is in line with various previous research results. Therefore, there should be no more hesitation for the company to increase the competitive advantage in every project it handles;

The e-CRM variable has a positive and significant effect on company performance which shows that e-CRM is a necessity that must be applied by construction companies, especially in the current industrial era 4.0;

Project innovation variables have a positive and significant effect on the company's performance so that construction companies need to implement innovations in every project they handle;

Variabel the company's project culture does not have a significant effect on the company's performance but this is understandable because it is difficult for construction companies to apply a good culture to contract workers or freelancers who are only oriented towards the results of

work;

Dynamic capability has no significant effect on the company's performance. The main cause found in this research is that construction companies in Indonesia generally do work based on short-term employment contracts making it difficult to maximize their internal resources in a sustainable manner.

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