Determinants of Firm Performance: An Empirical Evidence from Construction Industry in Indonesia

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Abstract. The construction industry is the 4th largest contributing industry to gross domestic product in 2016 in Indonesia. However, its' growth is slowing down recently because of the companies' low competitiveness that causes production inefficiency. Despite the urgency for a comprehensive solution to increase its productivity, research in this area is still lacking. This study aims to examine the development and application of electronic customer relationship management (e-CRM) theory, project innovation (PI), project organizational culture (BO), and dynamic capabilities (KD) in increasing competitive advantage (KB), and its implications for business performance (KP), moderated by the size of construction companies in Indonesia.By collaborating with PT BCI Asia for data collection, at least 200 responses are targeted to collect from online questionnaires and analyzed by structural equation modeling (SEM). We found that (1) there is a significant influence of e-CRM, PI, and KD on KB; (2) there is an influence of PI, BO, and KD on KP, while e-CRM has no significant effect; (3) there is a significant influence of KB on KP in Indonesian construction firm; (4) KB mediates the influence of e-CRM, PI, BO, and KD on KP; and (5) firm size moderates the effect of KB on KP.

Keywords: Construction, electronic customer relationship management, innovation, organizational culture, dynamic capabilities

1 Introduction

The phenomenon of declining construction performance in Indonesia is caused by lower project growth, high debt, and state-owned companies' dominance. Some factors reduce construction companies' competitiveness, including project management, organizational structure, competitiveness strategies, bidding, marketing, technical and technological capabilities, and sound financial capabilities. It is estimated that the revenue of the construction sector will grow at the end of 2019 by 7%, and in 2020 it is predicted to be corrected by 8% from the previous 10.36% of Indonesia's total Gross Domestic Product (GDP) in the third quarter of 2018 (Kementerian Pekerjaan Umum dan Perumahan Rakyat, 2017). However, the construction industry is one of the

main contributors to economic development in Indonesia. This can be seen from its contribution to Gross Domestic Product (GDP). In 2016, the construction industry accounted for 10.38 % of the country's GDP, which was the fourth-highest contributor sector in Indonesia.

To overcome the aforementioned problems, the improvement of competitive advantage may become one of the solutions. Competitive advantages can be implemented by creating a good portfolio, innovative designs, and information related to available project tenders (Polat, 2010). Considering this is an industrial revolution era, technology optimization can be a key for construction companies to win in the market competition. Basheer dan Tarabieh (2011) had previously conducted research that proved a significant positive effect between competitive advantage and firm performance. However, Kumar et al. (2011) denied this by showing an insignificant effect of competitive advantage against firm performance. It continues to be a debate that makes it an interesting research gap to be studied.

Other factors like project innovation can also improve the companies' performance as a deciding factor in getting a project contract (Polat, 2010). Companies must have a good marketing strategy, a good portfolio of performance, extensive connections, and a flexible funding platform strategy to win the competition in getting a project (Horta & Camanho, 2013). Zaman (2017) confirms there is a strong and positive influence of product innovation on the product's competitive advantage. This is reinforced by Lii and Kuo (2016), who say 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. However, Shouyu (2017) said that innovation does not necessarily improve a company's work performance, even in some companies where people in the company tend to resist change; innovation can be destructive and have a negative effect on firm performance.

On the other hand, a company must also approach the customer to find out the customer's desires. Establishing relationships with customers by introducing products, capacities, workmanship strategies, scheduling and projects are essential for gaining trust. This approach is known as Customer Relationship Management (CRM). Companies can utilize CRM to include customer value along the supply chain so that the sales, marketing support and customer service, and other customer relationship functions can coordinate well. CRM is expected to improve firm performance both financially and non-financially (Sinisalo et al., 2005).

In addition, other factors affect firm performance, namely organizational culture. Culture has recently been seen as an important determinant of management practice. Especially the creative and innovative culture that are needed in a project. This project is known as project organizational culture. Rosabeth (1997) stated that project organizational culture in a construction company must be considered because it involves the project's and company's future. Nguyen and Watanabe (2017) emphasize that there is a strong

influence between organizational culture and firm performance projects in carrying out construction projects. They also said that the effects of changing organizational culture must be taken into account because it can significantly affect firm performance. However, Ali et al. (2017) gave different conclusions in their research: the relationship between organizational culture and the company's financial performance is not yet conclusive. It requires further investigation.

Other factor that may affect firm performance is dynamic capabilities. Chukwuemeka and Onuoha (2018) say that the company's dynamic capabilities significantly influence the company's competitive advantage. Similarly, Aguirre (2011) studies dynamic capabilities and competitive advantage among Mexican companies and concludes that dynamic capabilities and competitive advantages tend to be important for the survival of companies in markets that are marked to be innovative and rapid technological change.

This research investigates company internal factors that influence competitive advantage in improving firm performance with firm size as a control variables in construction companies in Indonesia. This is based on several theories and previous research as a reference, with some considerations of location of the study. Some previous studies that have been summarized have some differences with this research, especially relating to theories and variables that affect competitive advantage and company performance. We also entered the firm size variable as a control variable. The use of company size variables as control variables is a novelty of this study because no prior research includes company size as control variables. This research update can also be seen from entering the e-CRM phenomenon in construction companies that have used the big data system. The use of big data in construction companies to increase the competitive advantage is a breakthrough to increase transparency and fair competition in the construction industry.

Therefore, with this study we want to investigate the effects of (1) electronic customer relationship management, project innovation, project organizational culture and dynamic capabilities on the competitive advantage of construction companies in Indonesia; (2) electronic customer relationship management, project innovation, project organizational culture and dynamic capabilities on firm performance construction in Indonesia; and (3) competitive advantage on firm performanceof the construction companies in Indonesia.

Research method

This type of research is quantitative research with a causal study research design that is a study that studies the causal relationship. This study is included in the type of inferential statistical research that is research that helps

researchers to find out whether the results obtained from a sample can be generalized to the population. The population of this study is all construction companies throughout Indonesia; sampling is done in collaboration with PT BCI ASIA which already has 1,324 users. The total sample of the population in this study is using the Isaac and Michael formula. The Isaac and Michael formula is useful to determine the number of samples based on an error rate of 5% with a total sample of 200 people. Data analysis uses the Structural Equation Modeling (SEM) method with the help of SmartPLS software.
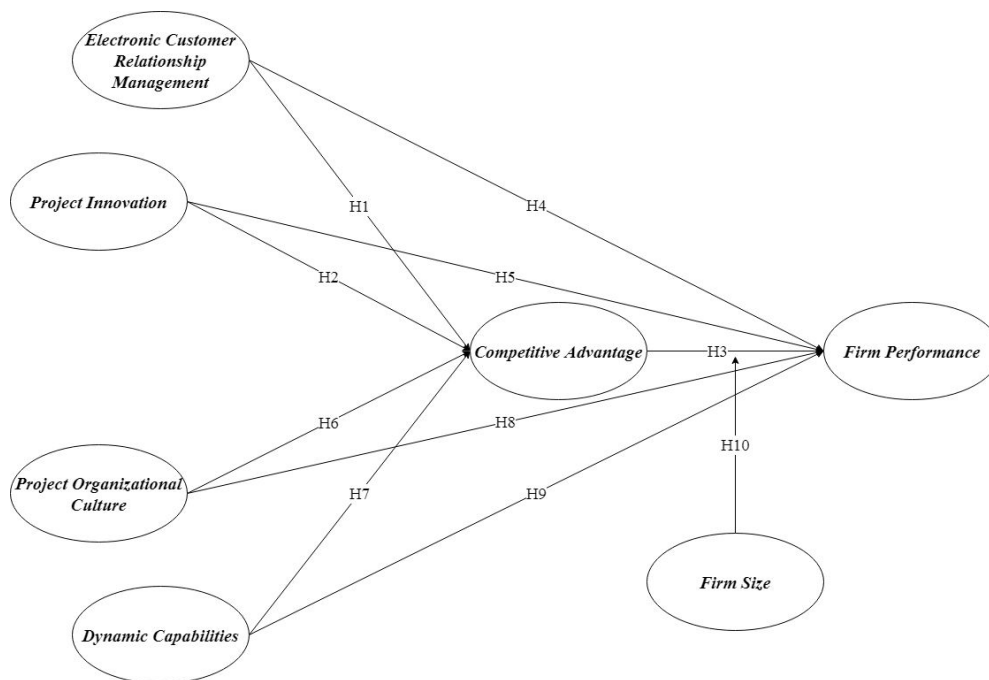
Figure 1. Proposed model

Result and Discussion

1. EvaluateMeasurement (Outer) Model
a. Convergent Validity

Convergent validity of the model can be seen from the correlation of indicators' scores and construct. Individual indicators are considered reliable if they have a correlation value above 0.60. Based on the results for outer loading (Table 1), all indicators have loading above 0.50 and are significant.

Table 1. Convergent Validity

Construct	Cognitive Level	X1	X2	X3	X4	Z	Y
Electronic Customer Relationship Management(X1)	1. eCRM1	0.847					
	2. eCRM2	0.769					
	3. eCRM3	0.756					
	4. eCRM4	0.864					
	5. eCRM5	0.765					
	6. eCRM6	0.690					
Project Innovation (X2)	1. IP1		0.828				
	2. IP2		0.741				
	3. IP3		0.858				
	4. IP4		0.777				
	5. IP5		0.751				
	6. IP6		0.822				
	7. IP7		0.706				
	8. IP8		0.877				
Project Organizational Culture (X3)	1. BO1			0.846			
	2. BO2			0.723			
	3. BO3			0.653			
	4. BO4			0.865			
	5. BO5			0.851			
	6. BO6			0.855			
	7. BO7			0.826			
	8. BO8			0.699			
	9. BO9			0.841			
	10. BO10			0.871			
Dynamic Capabilities (X4)	1. KD1				0.846		
	2. KD2				0.850		
	3. KD3				0.900		
	4. KD4				0.848		
	5. KD5				0.802		
	6. KD6				0.898		
Competitive advantage (Z)	1. KB1					0.765	
	2. KB1					0.783	
	3. KB3					0.760	
	4. KB4					0.804	
	5. KB5					0.776	
	6. KB6					0.878	
Firm performance (Y)	1. KP1						0.845
	2. KP2						0.902
	3. KP3						0.877

Construct	Cognitive Level	X1	X2	X3	X4	Z	Y
Firm size (M)	1. Size						1.000

Validity testing for the indicators were conducted by correlatingthe item scores and construct scores. From the table above, it is known that all of the dimensions meet convergent validity because it has a loading value of more than 0.50. The indicators are suitable for measuring perceptions so this study uses reflective indicators.

b. Discriminant Validity&Composite Reliability

Discriminate validity is measured using the square root of average variance extracted (AVE) value. The recommended value is above 0.50. A construct is said to be reliable if the composite reliability value is above 0.60. The results of data analysis showed that the research data met the criteria of discriminant validity and composite reliability.

Tabel 2. Average Variance Extracted (AVE) and Composite Reliability

Construct	AVE	Composite Reliability
Electronic Customer Relationship Management(X1)	0.614	0.905
Project Innovation (X2)	0.637	0.933
Project Organizational Culture (X3)	0.646	0.948
Dynamic Capabilities (X4)	0.736	0.944
Competitive Advantage (Z)	0.632	0.911
Firm Performance (Y)	0.711	0.910
Firm size (M)	1.000	1.000

### 2. Evaluate the Structural Model or *Inner* Model

Assessing the *inner* model is evaluating the relationship between latent constructs as hypothesized in this study, namely how the relationship of the first model examines the effect of Electronic Customer Relationship Management (X1), Project Innovation (X2) Project Organizational Culture (X3), and Dynamic Capabilities (X4) on Competitive Advantage (Z) and the second model of Electronic Customer Relationship Management influence (X1), Project Innovation (X2) Project Organizational Culture (X3) Dynamic Capabilities (X4) , and Competitive Advantage (Z) for Firm Performance (Y). The R square results show that both models produce more than 50% influence, namely 63.4% and 67.7%.

Tabel 3.R-SQUARE		
Model	**R Square**	**Adj. R. Square**
Competitive advantage (Z)	0.847	0.804
Firm Performance (Y)	0.870	0.858

3. Hypothesis Testing

The path analysis results will be used to see the effect between variables by looking at the level of significance between variables, as well as the relationships between variables. To see the level of significance between variables, the research Sig is used, if the research Sig is smaller than 0.05 (Sig < 0.05), then it is stated that there is a significant influence between the variables. If the Sig value of the study is greater than the value of 0.05 (Sig > 0.05), then it is stated that the influence between the variables is not significant or can also be seen using the t test. If the value of t arithmetic is greater than the table (t arithmetic > t table) then the influence between variables is significant. Conversely, if the value of t count is smaller than t table (t count <t table), the influence between variables is not significant.
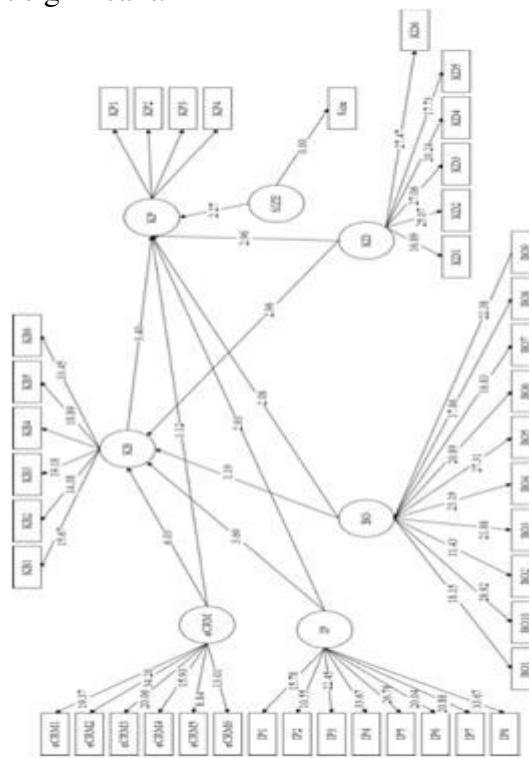
Figure2. Hypothesis Testing

The results of this study shows that there are some significant positive direct effects between several variables as stated on Table 4. Overall, almost every independent variables (X) and mediator in this study can directly effects the dependent variables, except for e-CRM on firm performance and project organizational culture on competitive advantage.

Table 4. Direct Effect

Path	Beta	T $_{Statistic}$	P Value	Explanation
Electronic Customer Relationship Management (X1) →Competitive Advantage (Z)	0.571	6.027	0.000	Positive Significant
Electronic Customer Relationship Management (X1) →Firm Performance (Y)	0.139	1.117	0.265	Not Significant
Project Innovation (X2) →Competitive Advantage (Z)	0.446	3.687	0.000	Positive Significant
Project Innovation (X2) →Firm Performance (Y)	0.391	2.931	0.004	Positive Significant
Project Organizational Culture (X3)→ Competitive Advantage (Z)	0.146	1.198	0.231	Not Significant
Project Organizational Culture (X3)→ Firm Performance (Y)	0.241	2.078	0.038	Positive Significant
Dynamic Capabilities (X4) → Competitive Advantage (Z)	0.199	2.960	0.003	Positive Significant
Dynamic Capabilities (X4) → Firm Performance (Y)	0.229	2.961	0.003	Positive Significant
Competitive Advantage (Z) → Firm Performance (Y)	0.406	3.403	0.001	Positive Significant

a. Path coefficient Effect of Electronic Customer Relationship Management Variables (X1) on Competitive Advantage (Z)

The statistical calculation results of the effect of the Electronic Customer Relationship Management variable (X1) on the Competitive Advantage variable (Z) show that the p-value is smaller than the value of α (0.007 <0.05). And the valueof the pathway (beta) has a positive number, the results are significant and positive. These results indicate that the Electronic Customer Relationship Management variable influences Competitive Advantage. The ability of eCRM certainly makes the company has a high competitiveness in fighting over the market with other companies (Ab Hamid, 2005).

b. Path coefficient Effect of Electronic Customer Relationship Management (X1) on Firm Performance(Y)

The results of the statistical calculation of the effect of the Electronic Customer Relationship Management variable (X1) on the Firm Performance variable (Y) indicate that the p-value is greater than the value of α (0.265>0.05). These results indicate that the Electronic Customer Relationship Management variable has no effect on Firm Performance.In research conducted by Fazlzadeh, Ghaderi, Khodadadi, and Nezhad (2011) found that CRM can improve firm performance, a strong positive relationship between the two variables has also been confirmed by Coltman, Devinney and Midgley (2011). However Siregar (2016) found a different fact, that CRM has no significant effect on firm performance in banks in Indonesia.

c. Path coefficient Influence ofProject Innovation(X2)on Competitive Advantage (Z)

The statistical calculation results of the influence of the Project Innovation variable (X2) on the Competitive Advantage variable (Z) indicate that the p-value is smaller than the value of α (0.000 <0.05). And the valueof the pathway (beta) has a positive number, the results are significant and positive. These results indicate that the Project Innovation variable influences Competitive Advantage.Companies need to set a mission, goals, and objectives in the market to develop strategies, determine market positions and prospects for development in selected markets (Mayorov, 2013). These management process innovations include activities that involve the design and analysis of project scope, design of project complexity and difficulties, adjusting market demand, utilizing access to new technologies, and scheduling design and construction project design. Rutherford and Zaman (2017) confirms that there is a strong and positive influence of product innovation on the competitive advantage of the product.

d. Path coefficient Influence ofProject Innovation(X2)on Firm Performance(Y)

The statistical calculation results of the influence of the Project Innovation variable (X2) on the Firm Performance(Y) indicate that the p-value is smaller than the value of α (0.004 <0.05). And the valueof the pathway (beta) has a positive number, the results are significant and positive. These results indicate that the Project Innovation variable influences Firm Performance(Y).Innovations that are tailored to the needs and market demands, especially in the field of construction will have an impact on the effectiveness and efficiency of the performance of a project and of course the performance of the company in general. In addition, innovation in project design is also an attraction for prospective consumers to make their choices on the construction company. This shows that Project

Innovation in the construction sector is very influential for competitiveness and firm performance (Davey etal., 2004). This is also reinforced by Lii and Kuo (2016) who say 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. However, Shouyu (2017) said that innovation does not necessarily improve the work performance of a company.

e. Path coefficient Influence ofProject Organizational Culture (X3)on Competitive Advantage (Z)

The statistical calculation results of the influence of the Project Organizational Culture (X3) on the Competitive Advantage variable (Z) indicate that the p-value is grater than the value of α (0.231>0.05). These results indicate that the Project Organizational Culture variable not influences on Competitive Advantage.Petrakis, Kostis and Valsamis (2015) confirm the inconsistent influence of organizational culture on the company's competitive advantage. Djajaatmadja and Anggadwita (2018) also said that organizational culture has the highest score in its contribution to increasing the company's competitive advantage.

f. Path coefficient Influence ofProject Organizational Culture(X3)on Firm Performance(Y)

The statistical calculation results of the influence of the Project Organizational Culture variable (X3) on the Firm Performance(Y) indicate that the p-value is smaller than the value of α (0.038<0.05). And the valueof the pathway (beta) has a positive number, the results are significant and positive. These results indicate that the Project Organizational Culture variable influences Firm Performance(Y).Nguyen and Watanabe (2017) emphasize that there is a strong influence between organizational culture and firm performance projects in carrying out construction projects. They also said that the effects of changing organizational culture must be taken into account because it can significantly affect firm performance. However, Ali et al. (2017) gave different conclusions in their research, namely that the relationship between organizational culture and corporate financial performance had no effect.

g. Path coefficient Influence ofDynamic Capabilities(X4)on Competitive Advantage (Z)

The statistical calculation results of the influence of the Dynamic Capabilitiesvariable (X4) on the Competitive Advantage variable (Z) indicate that the p-value is smaller than the value of α (0.003<0.05). And the value of the pathway (beta) has a positive number, the results are

significant and positive. These results indicate that the Dynamic Capabilities variable influences Competitive Advantage.Chukwuemeka and Onuoha (2018) say that the company's dynamic capabilities have a significant influence on the company's competitive advantage. Likewise, Aguirre (2011) who studies dynamic capabilities and competitive advantage among Mexican companies and concludes that dynamic capabilities and competitive advantages tend to be important for the survival of companies in markets that are marked to be innovative and in rapid technological change.

h. Path coefficient Influence ofDynamic Capabilities(X4)on Firm Performance(Y)

The statistical calculation results of the influence of the Dynamic Capabilitiesvariable (X4) on the Firm Performance(Y) indicate that the p-value is smaller than the value of α (0.003 <0.05). And the value of the pathway (beta) has a positive number, the results are significant and positive. These results indicate that the Dynamic Capabilities variable influences Firm Performance(Y).Chukwuemeka and Onuoha (2018) say that the company's dynamic capabilities have a significant influence on the company's competitive advantage . Likewise, Aguirre (2011) who studies dynamic capabilities and competitive advantage among Mexican companies and concludes that dynamic capabilities and competitive advantages tend to be important for the survival of companies in markets that are marked to be innovative and in rapid technological change.

i. Path coefficient Influence of Competitive Advantage (Z) Variable on Firm Performance(Y)

The statistical calculation results of the influence of the Competitive Advantage (Z) variable on the Firm Performance variable (Y) indicate that the p-value is smaller than the value of α (0.001<0.05). And the valueof the pathway (beta) has a positive number, the results are significant and positive. Furthermore Adiputra, Pratama and Mandala (2017) prove that the dynamic capabilities or capabilities of a company have a positive and significant effect on competitive advantage and also firm performance, this means that existing resources must be managed well because they can become competitive advantages that affect overall firm performance . This was also confirmed by Kristinawati and Tjakraatmadja (2018) who said that knowledge management alone was not enough but the company must have dynamic capabilities to be able to adapt and improve firm performance.

Although most of the independent variables (X) can directly effects the dependent variables, our indirect effect results shows a more comprehensive relations between those variables, as stated in Table 5.

Table 5. Indirect Effect

Path	Beta	T Statistic	P Value	Explanation
Electronic Customer Relationship Management (X1) →Competitive Advantage (Z)→Firm Performance (Y)	0.231	2.821	0.005	Positive Significant
Project Innovation (X2) →Competitive Advantage (Z)→Firm Performance (Y)	0.181	2.217	0.027	Positive Significant
Project Organizational Culture (X3) → Competitive Advantage (Z)→Firm Performance (Y)	0.059	1.124	0.262	Not Significant
Dynamic Capabilities (X4) → Competitive Advantage (Z)→Firm Performance (Y)	0.081	2.285	0.023	Positive Significant

a. Path coefficientInfluenceof Electronic Customer Relationship Management Variable (X1) on Firm Performance (Y) through Competitive Advantage Variable (Z)

The statistical calculation results of the influence of theElectronic Customer Relationship Management Variable (X1) on Firm Performance Variable (Y) through Competitive Advantage (Z)indicate that the p-value is smaller than the value of α (0.005<0.05).And the valueof the pathway (beta) has a positive number; the results are significant and positive.These results indicate that theCompetitive Advantage mediating the effect ofElectronic Customer Relationship Management Variable (X1) on Firm Performance Variable (Y).

b. Path coefficientInfluenceof Project Innovation(X2) on Firm Performance Variable (Y) through Competitive Advantage Variable (Z)

The statistical calculation results of the influence of theProject InnovationVariable (X2) on Firm Performance Variable (Y) through Competitive Advantage (Z)indicate that the p-value is smaller than the value of α (0.027<0.05).And the valueof the pathway (beta) has a positive number; the results are significant and positive.These results indicate that theCompetitive Advantage mediating the effect of Project InnovationVariable (X2)on Firm Performance Variable (Y).

c. Path coefficientInfluence ofProject Organizational Culture (X3)Variable (X3) on Firm Performance Variable (Y) through Competitive Advantage Variable (Z)

The statistical calculation results of the influence of theProject Organizational CultureVariable (X2) on Firm Performance Variable (Y) through Competitive Advantage (Z)indicate that the p-value is greater than the value of α (0.262 >0.05).These results indicate that theCompetitive Advantage not mediating the effect of Project InnovationVariable (X3) on Firm Performance Variable (Y).

d. Path coefficientInfluence ofDynamic Capabilities (X4) on Firm Performance Variable (Y) through Competitive Advantage Variable (Z)

The statistical calculation results of the influence of theDynamic Capabilities (X4) on Firm Performance Variable (Y) through Competitive Advantage Variable (Z)indicate that the p-value is smaller than the value of α (0.023<0.05).And the value of the pathway (beta) has a positive number; the results are significant and positive.These results indicate that theCompetitive Advantage mediating the effect of Project InnovationVariable (X4) on Firm Performance Variable (Y).

Furthermore, we found that *firm size* play the role as a moderator between competitive advantage and firm performance as stated in Table 6.

Table 6. Moderating effect

Path	Beta	T $_{Statistic}$	P Value	Explanation
Competitive Advantage (Z)→Firm Size (M) →Firm Performance (Y)	0.087	2.269	0.024	Positive Significant

a. Path coefficientInfluence ofCompetitive Advantage (Z)on Firm Performance (Y) moderating byFirm Size (M)

The statistical calculation results of the influence of Competitive Advantage (Z) on Firm Performance Variable (Y) moderating by Firm Size (M)indicate that the p-value is smaller than the value of α (0.024<0.05).And the valueof the pathway (beta) has a positive number; the results are significant and positive.These results indicate that theFirm Size moderating effect of Competitive Advantage (Z) on Firm Performance (Y).

Discussions and Conclusion

Our research findings supports Polat (2010) and Basheer and Tarabieh's (2011) who stated that competitive advantage in construction companies will improve firm performance. These findings can be generalized in Indonesian's construction companies. This seems to be relevant with Indonesian's circumstances in the last few years, as there are more growth in the number of construction companies but declining demands for it (Jannah, 2019). Despite this conditions, some public construction companies are dominating the market which have a great impacts on private companies in Indonesia. With less opportunities and demands, these private construction companies needs to escalate their values. Thus, competitive advantage plays a role on this circumstances. To survive, these private companies must upgrade their market value in any manner deemed appropriate so that their performance will be seen by prospective customers.

As we found that competitive advantage is an essentials to improve firm performances in construction companies in Indonesia, the size of the firm also play a significant role in increasing its performances. When we are comparing the effect of competitive advantage on firm performance based on the company size, the effect will be stronger if the companies are bigger. Thus, the bigger the companies, the more resources that they have, and the more likely they will be sought for by prospective customers. So, further research is needed to identify further of the effect of firm size in this context. It is also interesting to study on various projects which were more likely to be accepted in each kinds of firm sizes. Because we argue that firm size will also have impact on the scale of their projects and the target of their customers.

The relationship between competitive advantage and firm performance, also firm size's role as a moderator of these variables' relationships, it is important to identify on what kind of determinants that can improve construction companies' competitive advantage in Indonesia. As this can contribute for the private companies' survival in competing and can be used as a consideration for their added values. This research consider electronic customer relationship management, project innovation, project organizational culture, and dynamic capabilities.

Based on the results of this study, it can be concluded that almost of the determinants (e.g. electronic customer relationship management, project innovation, and dynamic capabilities) has some influences to increase the competitive advantage of the construction companies in Indonesia. However, the same can not be proven for project organizational culture effects on competitive advantage.We also found that there is a significant influence of project innovation, project organizational culture, and dynamic capabilities on firm performance of the construction companies. Meanwhile, electronic customer relationship management seems to have no direct effect on the firm

performance. These results shows that to improve one's value to win the competitions, a company should increase (1) their dynamic capabilities to be able to face the challenges in the current market and (2)project innovation to offer new breakthrough which make it possible for them to be different from other companies.

Beside that, two interesting results were found related to project organizational culture and electronic customer relationship management.First, project organizational culture turns out is not able to influence competitive advantage. We notice that organizational culture in a smaller scale like 'project' would not be able to be an advantage for the company to compete. Their influences were not big enough for the prospective customers to understand the uniqueness of their company. But, it is expected that project organizational culture would be able to affecting firm performance as it is closely related to the project that the company handled.

Second,the private construction companies needed to maximalize the use of electronic customer relationship as a media to improve their firm performances, as it has the ability to affect performance indirectly. Similar to Turban et al. (2008) and Hamid et al. (2011), we argue that accessibility of the company's detailed information is a great advantage to be known by others, and technology could be the answer for that. It is not time-consuming, easy to be accessed everywhere and anytime, and it makes the processes to be effective. Therefore, we recommend the private construction company to utilized the technology maximally in order to improve their performance by making it a channel to built a better relationship with customers, identify customers' needs, and optimalizing the growth of their competitive advantage. It would ensure the company's sustainability in the future if they are willingly to invest their resources in it.

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