

The relationship between Competitive Advantage to The Performance of Construction Industry Companies in Indonesia

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Abstract: The company's performance at construction in Indonesia is declining due to defeat in competing globally, various national strategic projects controlled by state-owned enterprises, company delays in adjusting to technological developments, and low innovation. These problems can be done by identifying what factors can support Indonesian construction companies to be more competitive. The objective of this research is to find out (i) the effect of electronic customer relationship management on competitive advantage, (ii) the effect of project innovation on competitive advantage, (iii) the effect of competitive advantage on company performance (iv) the effect of electronic customer relationship management on company performance (v) influence of project innovation on company performance (vi) influence of company project culture on competitive advantage (vii) influence of dynamic capabilities on competitive advantage (viii) influence of company project culture on company performance (ix) influence of dynamic capabilities on company performance. The research method used is inferential statistics. The population of this study is all construction companies in Indonesia. The findings of this study are (i) the e-CRM variable has a significant effect on the performance of construction companies in Indonesia (ii) the project innovation variable has a positive and significant effect on competitive advantage (iii) the corporate project culture variable has a positive and significant effect on competitive advantage (iv)) the dynamic capabilities variable has a positive and significant effect on competitive advantage (v) the competitive advantage variable has a positive and significant effect on company performance (vi) the e-CRM variable has a positive and significant effect on company performance (vii) the project innovation variable has a positive and significant effect on performance company (viii) corporate project culture variable has no significant effect on company performance (ix) dynamic capabilities variable has no significant effect on company performance.

Keywords: company innovation, company performance, construction company, global competitiveness

1. Introduction (Times New Roman 10 Bold)

The market competition for construction companies is increasingly competitive due to increased construction companies, the quality of human resources, technology, and global competition, so companies must be more innovative in improving

competitiveness. To continue improving the ability to compete globally, the company's strategy in winning the competition in the current technological era requires companies to have a competitive advantage.

Companies need to have the right strategy in marketing and unique project

innovation development designs to get project contracts to increase competitive advantage. According to **Polat (2010)**, This strategy is essential because of the issue that SOE controls several national strategic projects (**Alfred & Nabila 2017**). Unhealthy competition in the government and state-owned projects sector encourages entrepreneurs and construction companies to look for other private projects and regional projects in terms of competition and tenders. A database must support this strategy to obtain complete, accurate, and detailed information about the project. However, the database needs to be supported by an understanding of big data and the strategy that can help the use of big data by companies in the CRM initiative.

The CRM principles that underpin big data may require some changes in the associated CSF. This approach is often referred to as Customer Relationship Management (CRM). With e-CRM, companies must see opportunities quickly and agilely because customers need products that suit their needs. A good product must be supported by product innovation obtained from the results of market research.

Innovation in construction companies on project innovation can be seen from the process and results of value engineering activities. In addition to product innovation, other factors affect the company's performance, namely corporate culture. However, **Nguyen and Watanabe (2017)** debate a debate that emphasizes the decisive influence of the company's project culture in carrying out construction projects. This debate is argued by Ali, Said, Abdullah (2017), stating the

relationship between company culture and company financial performance is not convincing. This reason is what causes a research gap so that the variable of corporate culture is interesting to study.

Besides the debate from these two researchers, it appears other arguments. **Petrakis, Kostis, and Valsamis (2015)** confirmed the strong influence of corporate culture on the company's competitive advantage. **Chukwuemeka and Onuoha (2018)** state that the company's dynamic capabilities significantly influence the company's competitive advantage. **Aguirre (2011)** concludes that dynamic capabilities and competitive advantage are essential for companies. These arguments create a research gap so that this variable is interesting to study. Based on the research gap debate phenomenon, this research becomes something interesting to prove and provide new scientific contributions to studying the company's operational management.

2. Significance of The Study

The significance of this research is to answer some research gaps. The study's novelty can be seen from the inclusion of the e-CRM phenomenon in construction companies that have used big data systems. Another novelty of this research is the variables appointed according to the things that can be used as strengths by construction companies in Indonesia

3. Review of Related Studies

Competitive advantage is everything both owned by the company, in terms of costs, uniqueness of the company, and specific targets that the company has. Competitive advantage can be implemented by creating a good portfolio, innovative

designs, and information related to project tenders. **Polat (2010);Tarabieh (2016)** proved a significant positive effect between competitive advantage and company performance. However, **Kumar and Kaur (2016)**refuted it by showing no significant impact between the two. The inconsistency of these results is interesting for further investigation.

The intense competition in the construction sector makes various companies need to have the right strategy in marketing, project innovation development design, and an essential factor to get a project contract (**Polat, 2010**). Companies must have a good marketing strategy, a good portfolio of performance, vast connections, and a flexible funding platform strategy to secure projects (**Horta & Camanho, 2013**). The demand for platforms underlies the emergence of big data companies that support construction companies to obtain project tenders. Big data companies also encourage open, transparent, healthy competition and tender competition and avoid the monopoly of specific companies (**Indrayani & wardhani, 2015**).**Zerbino et al. (2018)** show that CRM initiatives supporting big data may require some changes in the associated CSF.

Currently, CRM is developing digitally and computerized or e-CRM. Today's most developed e-CRM is web-based CRM (**Lee-Kelley, Gilbert, and Mannicom 2003;Rilvari 2005**). The implementation of e-CRM is expected to generate significant value for companies and customers in an age when people are connected (**Jih & Lee, 2010**).Research from (**Fazlzadeh et al. (2011); Coltman, Devinney, and Midgley**

(2011)found that CRM can improve company performance. However, **Siregar (2016)** found a different fact, that CRM has no significant effect on company performance in Indonesia even though e-CRM can support the development of product innovation. Businesses that can differentiate their products from other firms in the same industry will mostly reap the benefits. This program can be applied to how small businesses use product innovation. Innovation in construction companies emphasizes project innovation which can be seen from the process and results of value engineering activities. Value engineering is an activity that involves efforts to optimize the quality and quantity of a project, both in terms of the materials used in construction project activities, efficient working methods that are cheap, easy to implement, and fast in time but still prioritize quality and aesthetics (**Sexton & Barrett, 2003**).The innovation management process includes project scope design and analysis, project complexity design, market demand adjustment, access to new technologies, and scheduling design and construction projects (**Ling, 2003**).

Project innovation in the construction sector is very influential on the competitiveness and performance of the company (**Davey et al., 2004**). Appropriate techniques and methods can result in the maximum possible cost reduction by maintaining quality and functionality. One of the methods that can be used to control project costs is to apply value engineering (**Au & Hendrickson, 1986**).**Rutherford and Zaman (2017); Lii, P., & Kuo (2014)**confirmed a strong and positive

effect of product innovation on the competitive advantage of products. However, **Shouyu (2017)** says that innovation cannot improve the work performance of a company. Even in some companies where people within the company tend to resist change, innovation can be destructive and harm company performance.

Staff quality due to cultural differences can lead to conflicts related to communication between individuals, which reduces the capacity of construction organizations to achieve project objectives **Tijhuis (2011); Nguyen and Watanabe (2017)** confirm a strong influence between the company's project culture and the company's performance in carrying out construction projects. However, **Ali et al. (2017)** provide a different conclusion: the relationship between corporate culture and company financial performance is not convincing and requires further investigation. **Petrakis et al. (2015)** confirm that corporate culture strongly influences competitive advantage. Even a corporate culture is a tool in facing economic recession. **Djajaatmadja and Anggadwita (2018)** also say that corporate culture has the highest score in its contribution to increasing its competitive advantage.

Kanter (2010) mentions that the culture of a construction company must be considered because it involves the future of a project. Conflicts that occur due to low corporate culture can destroy the company instantly (**Flamholtz & Randle 2011**). The corporate project culture must be shaped by management within the corporate environment through regulations. The main focus of a corporate project culture can be

to encourage a culture of individual creativity. Individual creativity forms a group creativity culture (**Erez & Nouri, 2010**). The results show that the creative culture of an organization affects the entire creativity process (**Kwan and Liou 2018**). However, in a project operated by many individuals, it is possible to emerge a conflict that significantly affects the project's success (**Tijhuis, 2011**).

Urbancova (2013) argues that in a fluctuating and dynamic business, the goal of every organization is to outperform its competitors and attract potential buyers to buy its products and services. **Chukwuemeka and Onuoha (2018); Aguirre (2011)** say that a company's dynamic capabilities significantly influence the company's competitive advantage and dynamic capabilities and competitive advantage are essential for the company's survival. This strategy is indicated by the readiness to adapt to technological changes. Nevertheless, despite the extensive research efforts in analyzing the relationship between dynamic capabilities and competitive advantage, there is still a lack of in-depth empirical studies investigating the specific relationship between the two concepts (**Ogunkoya, O., Hassan, B., & Shobayo, 2014**).

4.Objectives of The Study

- To find out the effect of electronic customer relationship management on competitive advantage
- To find out the effect of project innovation on competitive advantage

- To find out the effect of competitive advantage on company performance
- To find out the effect of electronic customer relationship management on company performance
- To find out the effect of project innovation on company performance
- To find out the influence of the company's project culture on competitive advantage
- To find out the effect of dynamic capabilities on competitive advantage
- To find out the influence of the company's project culture on company performance
- To find out the effect of dynamic capabilities on company performance

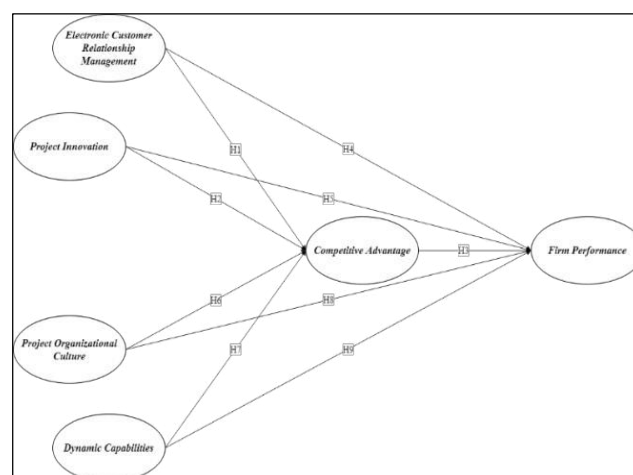
- Project innovation has a significant positive effect on company performance
- Corporate project culture has a significant positive effect on competitive advantage
- Dynamic capabilities have a significant positive effect on competitive advantage
- Corporate project culture has a significant positive effect on company performance
- Dynamic capabilities have a significant positive effect on company performance

5. Hypotheses of The Study

The research hypothesis is divided into several points as follows:

- Electronic customer relationship management has a significant positive effect on competitive advantage
- Project innovation has a significant positive effect on competitive advantage
- Competitive advantage has a significant positive effect on company performance
- Electronic customer relationship management has a significant positive effect on company performance

Figure 1. Research Model



6. Population and Sample

The population of this study is all construction companies in Indonesia registered in the Construction Services Development Institute (LPJK), with a total of 132,985 business entity contractors (consisting of 126,827 national general contractors and 6,158 national specialists) (Construction Service Development Institute, 2020). The target population of this study also needs to meet the following criteria,

namely (1) having been in existence for at least two years, (2) having won a tender, (3) using a Big Data-based e-CRM system, and (4) willing to become a respondent.

Later the questionnaire is targeted to be filled out by the departments related to top management functions. The questionnaire is sent online in a google form so that it can be filled out directly online. The minimum expected respondent's position is division head, director, general manager, and branch head.

To determine the research sample, the researcher uses a stratified random sampling technique. In this study, the researcher divided the population into seven classes based on company size, namely small companies (sub-qualification 1-3; K1-K3), medium-sized companies (sub-qualification 1-2; M1-M2), and large companies (sub-qualifications 1-2; B1-B3).

6.1. Statistical Techniques Used in the Present Study

Data analysis in this research uses Structural Equation Modeling (SEM) method with the help of AMOS software. The collected data will be tested first using Explanatory Factor Analysis (EFA) in analyzing the data. In this research, the characteristics of the respondents are examined by descriptive and frequency tests using SPSS software. This study also uses hypothesis testing to determine the suitability between variables: electronic customer relationship management on competitive advantage. Project innovation on competitive advantage. Competitive advantage on company performance. Electronic customer relationship management on company performance.

Project innovation on company performance. Corporate project culture on competitive advantage. Dynamic capabilities to competitive advantage. Corporate project culture on company performance. Dynamic capabilities on company performance.

6.2. Data Analysis and Interpretation

Variable Descriptive Analysis

Table 1. Frequency Distribution Answers of e-CRM Variable

Indicator	STS		TS		ATS		AS		S		SS		M
	F	%	F	%	F	%	F	%	F	%	F	%	
X1.1	1	0%	31	9%	5	1%	146	42%	147	42%	20	6%	4,33
X1.2	0	0%	20	6%	25	7%	177	51%	123	35%	5	1%	4,19
X1.3	0	0%	20	6%	23	7%	98	28%	165	47%	44	13%	4,54
X1.4	0	0%	14	4%	21	6%	140	40%	153	44%	22	6%	4,42
X1.5	0	0%	36	10%	12	3%	88	25%	169	48%	45	13%	4,50
X1.6	0	0%	24	7%	33	9%	104	30%	149	43%	40	11%	4,42
X1.7	0	0%	25	7%	11	3%	160	46%	145	41%	9	3%	4,29
X1.8	1	0%	21	6%	28	8%	171	49%	112	32%	17	5%	4,21
X1.9	0	0%	28	8%	33	9%	163	47%	109	31%	17	5%	4,15
X1.10	0	0%	24	7%	39	11%	132	38%	120	34%	35	10%	4,29
Mean													4,34

Interpretation of table 1.

It can be seen that the e-CRM variable consists of 10 items. The item that gets the highest average score is the 3rd item, with a value of 4.54. Meanwhile, the item with the lowest average score is the 9th item, with a value of 4.15. Furthermore, the overall average obtained from the 10 items of the e-CRM variable is 4.34.

Project Innovation Variables

Table 2. Frequency Distribution Answer of Project Innovation

Indicator	STS		TS		ATS		AS		S		SS		M
	F	%	F	%	F	%	F	%	F	%	F	%	
X2.1	0	0%	0	0%	0	0%	110	31%	199	57%	41	12%	4,80
X2.2	2	1%	0	0%	6	2%	163	47%	176	50%	3	1%	4,49
X2.3	0	0%	0	0%	0	0%	69	20%	225	64%	56	16%	4,96
X2.4	0	0%	2	1%	2	1%	200	57%	142	41%	4	1%	4,41
X2.5	2	1%	0	0%	7	2%	26	7%	265	76%	50	14%	5,01
X2.6	0	0%	2	1%	0	0%	66	19%	270	77%	12	3%	4,83
X2.7	0	0%	0	0%	15	4%	33	9%	241	69%	61	17%	4,99
X2.8	0	0%	0	0%	0	0%	31	9%	246	70%	73	21%	5,12
X2.9	0	0%	2	1%	8	2%	193	55%	138	39%	9	3%	4,41
X2.10	0	0%	0	0%	5	1%	38	11%	271	77%	36	10%	4,97
X2.11	0	0%	0	0%	7	2%	28	8%	268	77%	47	13%	5,01
X2.12	0	0%	0	0%	18	5%	100	29%	212	61%	20	6%	4,67
Mean													4,81

Interpretation of table 2.

It can be seen that the project innovation variable consists of 12 items. The item that gets the highest average score is the 8th item, with a value of 5.12. Meanwhile, the items that got the lowest average score are items 4 and 9, with a value of 4.41. Furthermore, the overall average obtained from the 12 Project Innovation variable items is 4.81.

Project Organizational Culture Variables

Table 3. Frequency Distribution Answer of Project Organizational Culture Variable

Indicator	STS		TS		ATS		AS		S		SS	
	F	%	F	%	F	%	F	%	F	%	F	%
X3.1	0	0%	0	0%	0	0%	33	9%	220	63%	97	28%
X3.2	0	0%	0	0%	0	0%	58	17%	256	73%	36	10%
X3.3	0	0%	0	0%	5	1%	20	6%	292	83%	33	9%
X3.4	0	0%	0	0%	0	0%	80	23%	252	72%	18	5%
X3.5	0	0%	0	0%	0	0%	156	45%	172	49%	22	6%
X3.6	1	0%	3	1%	0	0%	194	55%	121	35%	31	9%
X3.7	0	0%	0	0%	4	1%	39	11%	201	57%	106	30%
X3.8	0	0%	0	0%	0	0%	89	25%	147	42%	114	33%
X3.9	2	1%	0	0%	3	1%	48	14%	173	49%	124	35%
X3.10	0	0%	0	0%	9	3%	14	4%	227	65%	100	29%
X3.11	0	0%	0	0%	5	1%	31	9%	239	68%	75	21%
X3.12	0	0%	0	0%	0	0%	54	15%	226	65%	70	20%
X3.13	0	0%	0	0%	0	0%	49	14%	197	56%	104	30%
X3.14	0	0%	0	0%	0	0%	87	25%	149	43%	114	33%
Mean												

Interpretation of table 3.

From 14 indicators contained in the Project Organizational Culture variable, the 10th item has the highest average value of 5.19. At the same time, the indicator that gets the lowest average value in the Project Organizational Culture variable is the 6th item with an average value of 4.50. Meanwhile, overall of the 14 Project Organizational Culture variable indicators, the figure is 5.00.

Dynamic Capabilities Variables

Table 4. Frequency Distribution Answer of Dynamic Capabilities Variable

Indicator	STS		TS		ATS		AS		S		SS		M
	F	%	F	%	F	%	F	%	F	%	F	%	
X4.1	0	0%	5	1%	5	1%	42	12%	231	66%	67	19%	5,00
X4.2	0	0%	0	0%	10	3%	52	15%	259	74%	29	8%	4,88
X4.3	0	0%	0	0%	1	0%	47	13%	232	66%	70	20%	5,06
X4.4	2	1%	8	2%	10	3%	33	9%	232	66%	65	19%	4,94
X4.5	0	0%	0	0%	0	0%	155	44%	165	47%	30	9%	4,64
X4.6	0	0%	0	0%	5	1%	42	12%	255	73%	48	14%	4,99
X4.7	0	0%	0	0%	10	3%	43	12%	238	68%	59	17%	4,99
X4.8	0	0%	0	0%	1	0%	100	29%	234	67%	15	4%	4,75
X4.9	0	0%	0	0%	10	3%	29	8%	235	67%	76	22%	5,08
X4.10	0	0%	5	1%	0	0%	71	20%	222	63%	52	15%	4,90

Interpretation of table 4.

From 10 indicators contained in the Dynamic Capabilities variable, the 9th item has the highest average value of 5.08. At the same time, the indicator that gets the lowest average value in the Dynamic Capabilities variable is the 5th item with an average value of 4.64. Meanwhile, overall, the 10 Dynamic Capabilities variable indicators show 4.92.

Company Performance Variables

Table 5. Frequency Distribution Answers of Company Performance Variable

Indicator	STS		TS		ATS		AS		S		SS		M
	F	%	F	%	F	%	F	%	F	%	F	%	
M1.1	0	0%	41	12%	10	3%	151	43%	115	33%	33	9%	4,25
M1.2	0	0%	30	9%	26	7%	186	53%	79	23%	29	8%	4,15
M1.3	0	0%	58	17%	20	6%	145	41%	106	30%	21	6%	4,03
M1.4	0	0%	10	3%	22	6%	159	45%	103	29%	56	16%	4,49
M1.5	0	0%	78	22%	21	6%	140	40%	78	22%	33	9%	3,91
M1.6	0	0%	12	3%	28	8%	58	17%	214	61%	38	11%	4,68
M1.7	0	0%	19	5%	22	6%	80	23%	167	48%	62	18%	4,66
M1.8	0	0%	63	18%	12	3%	187	53%	65	19%	23	7%	3,92
M1.9	0	0%	17	5%	15	4%	138	39%	122	35%	58	17%	4,54
M1.10	0	0%	38	11%	26	7%	135	39%	94	27%	57	16%	4,30
Mean													4,29

Interpretation of table 5.

From 10 indicators contained in the company's performance variable, the 6th item has the highest average value of 4.68. At the same time, the indicator that gets the lowest average value in the company's performance variable is the 5th item with an average value of 3.91. Meanwhile, overall of the 10 indicators of the company's performance variables, the figure is 4.29.

Competitive Advantage Variables

Table 6. Frequency Distribution Answers of Competitive Advantage Variable

Indicator	STS		TS		ATS		AS		S		SS		M
	F	%	F	%	F	%	F	%	F	%	F	%	
Y1.1	0	0	39	11%	5	1%	167	48%	85	24%	54	15%	4,31
Y1.2	0	0	49	14%	1	0%	99	28%	138	39%	63	18%	4,47
Y1.3	0	0	32	9%	10	3%	191	55%	112	32%	5	1%	4,14
Y1.4	0	0	16	5%	11	3%	159	45%	129	37%	35	10%	4,45
Y1.5	0	0	31	9%	9	3%	222	63%	86	25%	2	1%	4,05
Y1.6	0	0	5	1%	14	4%	43	12%	215	61%	73	21%	4,96
Mean													4,40

Interpretation of table 6

From 6 indicators contained in the competitive advantage variable, the 6th item has the highest average value of 4.96. While the indicator that gets the lowest average value in the competitive advantage variable is the 5th item with an average value of 4.05. Meanwhile, overall, the 6 competitive advantage variable indicators show a figure of 4.40.

SEM Assumption Evaluation

Normality Evaluation

The univariate normality test can be seen from the critical value (c.r.) skewness. In contrast, the multivariate normality test can be seen from the critical value (c.r.) kurtosis, and the normal distribution is met if the C.R. is in the range of ± 2.58 at a significance level of 0.01 univariate and multivariate. The results of the data normality test are presented in Table 7.

Table 7. Normal Evaluation

Variable	Min	Max	Skew	C.R.	Kurtosis	C.R.
Y1.1	2,000	6,000	-,442	-,957	,039	,092
Y1.2	2,000	6,000	-,828	-,852	,117	,272
Y1.3	2,000	6,000	-,953	-1,434	,846	1,968
Y1.4	2,000	6,000	-,528	-1,456	,700	1,630
Y1.5	2,000	6,000	-1,009	-1,697	,684	1,920
Y1.6	2,000	6,000	-1,144	-1,324	,606	1,134
M1.1	2,000	6,000	-,624	-1,906	,148	,344
M1.2	2,000	6,000	-,264	-1,228	,235	,548
M1.3	2,000	6,000	-,469	-1,184	-,463	-1,077
M1.4	2,000	6,000	-,263	-1,225	,034	,080
M1.5	2,000	6,000	-,129	-,602	-,994	-2,313
M1.6	2,000	6,000	-1,019	-,742	,850	1,978
M1.7	2,000	6,000	-,899	-,183	,560	1,303
M1.8	2,000	6,000	-,337	-1,569	-,451	-1,049
M1.9	2,000	6,000	-,422	-1,964	-,162	-,376
M1.10	2,000	6,000	-,353	-1,645	-,482	-1,122
X4.10	2,000	6,000	-,914	-1,257	,902	2,355
X4.9	3,000	6,000	-,749	-1,486	,780	1,143
X4.8	3,000	6,000	-,298	-1,385	-,003	-,007
X4.7	3,000	6,000	-,623	-1,902	,200	,793
X4.6	3,000	6,000	-,468	-2,179	,519	1,535
X4.5	4,000	6,000	,520	2,420	-,655	-1,525
X4.4	1,000	6,000	-1,759	-2,187	,663	1,853
X4.3	3,000	6,000	-,213	-,993	,408	,948
X4.2	3,000	6,000	-,972	-2,525	1,128	1,952
X4.1	2,000	6,000	-1,276	-1,939	,983	1,271
X3.14	4,000	6,000	-,078	-,362	-1,280	-1,179
X3.13	4,000	6,000	-,179	-,831	-,713	-1,659
X3.12	2,000	6,000	-,755	-2,516	,771	1,285
X3.11	2,000	6,000	-1,082	-1,039	1,282	1,639
X3.10	3,000	6,000	-,865	-2,025	1,101	1,891
X3.9	1,000	6,000	-1,309	-2,092	1,606	1,721
X3.8	4,000	6,000	-,092	-,427	-1,299	-1,023
X3.7	3,000	6,000	-,518	-2,412	,428	,997
X3.6	1,000	6,000	-,310	-1,441	1,472	1,752
X3.5	2,000	6,000	-,409	-1,902	1,307	1,042
X3.4	2,000	6,000	-1,464	-1,817	,900	1,077

Variable	Min	Max	Skew	C.R.	Kurtosis	C.R.
X3.3	3,000	6,000	-1,082	-2,035	1,150	1,659
X3.2	2,000	6,000	-1,054	-2,905	,763	1,430
X3.1	4,000	6,000	-,093	-,434	-,408	-,949
X2.12	3,000	6,000	-,515	-2,395	,185	,431
X2.11	3,000	6,000	-,819	-1,813	1,089	1,189
X2.10	3,000	6,000	-,582	-1,709	1,096	1,245
X2.9	2,000	6,000	-,334	-1,556	,634	1,119
X2.8	4,000	6,000	,077	,358	,302	,703
X2.7	3,000	6,000	-,817	-1,803	1,473	2,429
X2.6	2,000	6,000	-2,188	-1,182	1,451	2,469
X2.5	1,000	6,000	-2,097	-1,763	1,416	2,243
X2.4	2,000	6,000	-,504	-2,344	1,775	1,131
X2.3	4,000	6,000	,013	,059	-,172	-,400
X2.2	1,000	6,000	-1,637	-,619	1,235	1,511
X2.1	4,000	6,000	,200	,930	-,645	-1,502
X1.1	1,000	6,000	-1,002	-,663	1,048	1,905
X1.2	2,000	6,000	-,890	-1,142	,903	2,102
X1.3	2,000	6,000	-,794	-,697	,584	1,358
X1.4	2,000	6,000	-,695	-,235	,720	1,676
X1.5	2,000	6,000	-,924	-,300	,211	,491
X1.6	2,000	6,000	-,662	-1,080	-,061	-,142
X1.7	2,000	6,000	-1,069	-,975	,340	,119
X1.8	1,000	6,000	-,639	-,975	,921	2,143
X1.9	2,000	6,000	-,447	-,080	,183	,426
X1.10	2,000	6,000	-,446	-1,076	-,230	-,535
<i>Multivariate</i>				2.032	3.667	2,032

Interpretation of table 7

It can be seen that there is a value of c.r. Skewness is outside the range of ± 2.58 . It can be concluded that the univariate normality of the data is not good. The multivariate test also shows the value of c.r. 2.032, where this figure is categorized as multivariate normally distributed data. Thus

the data has met the requirements for the normality test.

Goodness-of-fit Criteria Evaluation

Table 8 Model Conformity Test Results (Goodness of Fit)

Fit Test Index	Result	Cut Off Result	Explanation
Chi-Square	1977,521	Diaharapkan kecil	Poor
Probability	0,959	Marginal fit ($0,8 \leq AGFI \leq 0,9$)	Good Fit
CMIN/Df	3,297	Good fit ($\geq 0,9$)	Good Fit
GFI	0,9980	Good fit ($\geq 0,9$)	Good Fit
AGFI	0,940	Good fit ($\geq 0,9$) Marginal fit ($0,8 \leq AGFI \leq 0,9$)	Good Fit
TLI	0,951	Good fit ($\geq 0,9$)	Good Fit
CFI	0,974	Good fit ($\geq 0,9$)	Good Fit
RSMEA	0,933	Good fit ($\leq 0,08$)	Good Fit

Interpretation of table 8

The chi-square value obtained is 1977,521, meaning it does not meet the required requirements based on the model suitability analysis. But this value can be accepted marginally and can perform further analysis by looking at the value of GFI, AGFI, CFI, and RMSEA. If it meets the criteria for good, then further analysis can be carried out. Based on these results, it can be explained that the model in this study as a whole meets the criteria as a fit model.

Hypothesis test

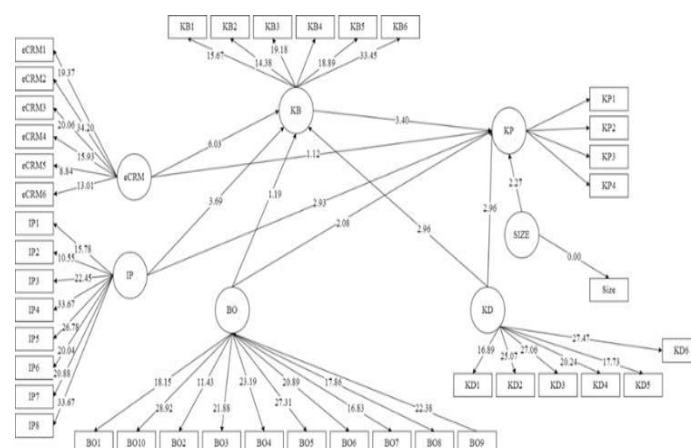
Hypothesis testing is done by using the t-value with a significance level of 0.05. The t-value in the AMOS program is the critical ratio (c.r) value on the Regression Weight of the fit model. Suppose the critical ratio (c.r) is ≥ 1.967 . Or the probability value (P) is 0.05, then H_0 is rejected (the research hypothesis is accepted). The results of processing by AMOS for the entire model can be seen in Table 10.

Table 9. Hypothesis Testing

	Estimate	S.E.	C.R.	p	Label
Competitive <--- e-CRM	,709	,171	4,158	***	par_58
Competitive <--- Innovation	,232	,163	2,423	,025	par_59
Competitive <--- Culture	,316	,131	2,424	,015	par_60
Competitive <--- Dynamic	,414	,104	4,001	***	par_61
Performance <--- Competitive	,759	,420	4,140	***	par_62
Performance <--- e-CRM	,533	,277	3,479	***	par_63
Performance <--- Innovation	,670	,112	4,627	***	par_64
Performance <--- Culture	,027	,162	,165	,869	par_65
Performance <--- Dynamic	,373	,193	1,938	,053	par_66

The understanding of hypothesis analysis can be used to clarify and be detailed by analyzing each hypothesis point.

Figure 2. Hypothesis testing



Interpretation of table 9

e-CRM effect on Competitive Advantage

The results of hypothesis testing 1show a positive and significant impact of e-CRM on Competitive Advantage. This finding can be seen from the CR value of 4.158 and the P-Value of 0.000. The CR value is greater than 1.96 ($4.158 > 1.96$), and the P-Value is smaller than 0.05 ($0.000 < 0.05$), indicating that there is a significant effect of e-CRM on Competitive Advantage. The estimated value is positive (0.709), showing

that the impact given by e-CRM is positive. This finding means that the better the e-CRM of MSME companies, the more competitive advantage will be. The results of hypothesis testing show that Hypothesis 1 (H1) is accepted.

Project Innovation effect on Competitive Advantage

The results of hypothesis testing 2 show a positive and significant effect of Project Innovation on Competitive Advantage. This finding can be seen from the CR value of 2.423 and the P-Value of 0.025. The CR value is greater than 1.96 ($2.423 > 1.96$), and the P-Value is smaller than 0.05 ($0.025 < 0.05$), indicating that there is a significant effect of Project Innovation on Competitive Advantage. The estimated value is positive (0.233), demonstrating that the impact given by Project Innovation is positive. This finding means that the better the Project Innovation of MSME companies, the Competitive Advantage will increase. The results of hypothesis testing show that Hypothesis 2 (H2) is accepted.

Corporate Project Culture Influence on Competitive Advantage

The results of hypothesis testing 3 show a positive and significant influence of corporate project culture on Competitive Advantage. This finding can be seen from the CR value of 2.424 and the P-Value of 0.015. The CR value is greater than 1.96 ($2.424 > 1.96$), and the P-Value is smaller than 0.05 ($0.015 < 0.05$), indicating that there is a significant influence of corporate project culture on Competitive Advantage. The estimated value is positive (0.316), indicating that the influence given by the company's project culture is positive. This

finding means that the better the project culture of MSME companies, the more competitive advantage will be. The results of hypothesis testing show that Hypothesis 3 (H3) is accepted.

Dynamic Capabilities Effect on Competitive Advantage

The results of hypothesis testing 4 show a positive and significant impact of Dynamic Capabilities on Competitive Advantage. This finding can be seen from the CR value of 4.01 and the P-Value of 0.000. The CR value is greater than 1.96 ($4.001 > 1.96$), and the P-Value is less than 0.05 ($0.000 < 0.05$), indicating that there is a significant effect of Dynamic Capabilities on Competitive Advantage. The estimated value is positive (0.414), indicating the effect given by Dynamic Capabilities is positive. That is, the better the Dynamic Capabilities of MSME companies, and the Competitive Advantage will increase. The results of hypothesis testing show that Hypothesis 4 (H4) is accepted.

Competitive Advantage Effect on company performance

The results of hypothesis testing 5 show a positive and significant impact of Competitive Advantage on the company's performance. This finding can be seen from the CR value of 4.140 and the P-Value of 0.000. The CR value is greater than 1.96 ($4.140 > 1.96$), and the P-Value is smaller than 0.05 ($0.000 < 0.05$), indicating that there is a significant effect of Competitive Advantage on the company's performance. The estimated value is positive (0.759), indicating the effect given by Competitive Advantage is positive. That is, the better the

Competitive Advantage of SMEs, the company's performance will increase. The results of hypothesis testing show that Hypothesis 5 (H5) is accepted.

e-CRM Effect on Company Performance

The results of hypothesis testing show a positive and significant impact of e-CRM on company performance. This finding can be seen from the CR value of 3.479 and the P-Value of 0.000. The CR value is greater than 1.96 ($3.479 > 1.96$), and the P-Value is smaller than 0.05 ($0.000 < 0.05$), indicating that there is a significant effect of e-CRM on company performance. The estimated value is positive (0.533), indicating that the impact given by e-CRM is positive. That is, the better the e-CRM of MSME companies, the company's performance will increase. The results of hypothesis testing show that Hypothesis 6 (H6) is accepted.

Project Innovation Effect on Company Performance

The results of hypothesis testing show a positive and significant impact of Project Innovation on company performance. This result can be seen from the CR value of 4.627 and the P-Value of 0.000. The CR value is greater than 1.96 ($4.627 > 1.96$), and the P-Value is smaller than 0.05 ($0.000 < 0.05$), indicating that there is a significant effect of Project Innovation on company performance. The estimated value is positive (0.670), indicating the impact given by Project Innovation is positive. That is, the better the Project Innovation of MSME companies, the company's performance will increase. The results of hypothesis testing show that Hypothesis 7 (H7) is accepted.

Corporate Project Culture Influence on Company Performance

The results of hypothesis testing show a positive and insignificant effect of company project culture on company performance. This result can be seen from the small CR value of 0.165 and the P-Value of 0.869. The CR value is greater than 1.96 ($0.165 < 1.96$), and the P-Value is greater than 0.05 ($0.869 > 0.05$), indicating that the company's project culture does not affect company performance. The estimated value is positive (0.316), indicating that the influence given by the company's project culture is positive. The results of hypothesis testing show that Hypothesis 8 (H8) is rejected.

Dynamic Capabilities Influence on Company Performance

The results of hypothesis testing show a positive and insignificant impact of Dynamic Capabilities on company performance. This result can be seen from the small CR value of 0.165 and the P-Value of 0.869. The CR value is greater than 1.96 ($0.165 < 1.96$), and the P-Value is greater than 0.05 ($0.869 > 0.05$), indicating that Dynamic Capabilities do not affect company performance. The estimated value is positive (0.316), indicating that the influence given by Dynamic Capabilities is positive. The results of hypothesis testing show that Hypothesis 9 (H9) is rejected.

7. Recommendations

- The research results can be used as reference material in scientific work that can develop knowledge.
- This research is an exercise and learning in applying the theory obtained so that it is expected to increase knowledge and

experience, for example, is expanding the company's competitive advantage.

- For companies, the research result may be used as reference material for managers in each of their respective subdivisions to maximize the value of their business.

8. Conclusion

This study has proven that the e-CRM variable significantly affects the performance of construction companies in Indonesia. This finding shows that construction companies in Indonesia need to get to know their customers better to understand their needs. With e-CRM, construction companies can get an in-depth analysis of consumer needs in each construction project. The project innovation variable has a positive and significant effect on competitive advantage, and this shows that construction companies that innovate in each construction project are in line with implementing strategies built to increase competitive advantage.

The company's project culture variable has a positive and significant impact on competitive advantage, indicating that for the competitive advantage strategy to work well, construction companies need to apply a work culture in every project, especially for their permanent employees because employees are still able to provide direction and assist the company in completing projects. The dynamic capabilities variable has a positive and significant effect on competitive advantage, which indicates that the maximized use of internal resources can help competitive advantage strategies so that construction companies can handle projects in a timely and efficient manner. The competitive advantage variable has a

positive and significant effect on the company's performance where this result follows previous research, and there is no doubt for a company to improve its competitive advantage strategy 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 implemented by construction companies, especially in the current industrial 4.0 era.

The project innovation variable has a positive and significant effect on the company's performance to implement innovation in every project. Although the company's project culture variable has no significant impact on company performance, this is understandable because it is difficult for construction companies to apply an excellent culture to contract workers or freelancers who are only oriented to work results. The dynamic capabilities variable has no significant effect on the company's performance caused by the factor that construction companies generally do work based on work contracts, so it is not easy to maximize their internal resources.

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