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Analysis of the Effect of Electronic Customer Relationship Management and Customer Engagement on Customer Loyalty on Gojek Online Transportation Services Users

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Abstract: Loyalty is recognized as a key indicator that can show a company's success in a competitive market competition. Activities related to customer and company contacts can maximize the realization of customer loyalty, activities referred to as customer relationship management in which in technological developments there is the concept of e-CRM. The emergence of various online transportation platforms is a phenomenon that we have encountered over the past decade. This intense industry competition makes Gojek need to plan various strategies to be able to maintain its existence. This study intends to analyze the influence of customer relationships and involvement on customer loyalty among Gojek users. The results of hypothesis testing show that there is a direct significant effect of e-CRM on customer loyalty, and indirectly there is a significant influence of e-CRM on customer loyalty, through customer engagement.

Keywords: Electronic Customer Relationship Management, Customer Engagement, Customer Loyalty, Online Transportation, Gojek.

INTRODUCTION

Loyalty can be recognized as a future-oriented concept and is a key indicator that can show a company's success in competitive market competition (Hwang et al., 2021). Loyal customers will be willing to repurchase the products and services offered, even to the point of creating a positive image for the company (Tu et al., 2012). More revenue and an increase in market share will be obtained by companies that have more loyal customers (Han et al., 2018). This situation makes customer loyalty an important factor that needs to be considered by every company from various industrial sectors.

Repurchasing by customers due to a commitment to a brand or company is a form of customer loyalty (Kotler & Keller, 2016). When customers invest more time and energy in brands or companies, this situation will help companies maintain sustainable relationships with these customers (Gao & Huang, 2021). In addition, active engagement with various company activities can provide value to the company, where customers who are more

involved may have better connectedness when compared to customers who are not involved (Kotler & Keller, 2016). Therefore, problems related to the relationship between the customer and the company become a part that needs to be facilitated properly by the company so that customers can get good service.

The process of managing detailed information about customers and managing activities related to customer contact with the company can maximize the realization of loyalty, this activity which can be referred to as customer relationship management (Kotler & Keller, 2016). The integration of customer relationship management and internet technology helps companies develop competitive advantages, as this integration develops, it is referred to as electronic customer relationship management (e-CRM). Meanwhile, high service failure rates will show a stronger tendency to negative behavior than those with lower service failure incidents (Laili et al., 2022; Wang et al., 2011).

Rapid technological developments ultimately affect the implementation of various community activities. The emergence of various platforms related to online transportation services has become one of the phenomena that we have encountered over the last decade (Nasution et al., 2020). Industry competition in online transportation services in Southeast Asia is currently dominated by Gojek and Grab. Slightly higher sales revenue compared to Gojek makes Grab lead Indonesia's market share throughout 2021. Obtaining a figure of 57% made Grab dominate the market in both two-wheeled and four-wheeled transportation services that year. Gojek will only be able to replace Grab as the market share leader in May 2022, in which month Gojek will gain 52%.



Figure 1. Indonesia ride-hailing market share by share Source: measurable.ai

This study intends to analyze the effect of electronic customer relationships management and involvement on customer loyalty among Gojek online transportation service users. Based on the description that has been presented, it is necessary to research the analysis of the influence of electronic customer relationship management and customer engagement on customer loyalty among users of Gojek online transportation services.

LITERATURE REVIEW

Electronic Customer Relationship Management

Customer relationship management in a broad sense refers to the practice of building and maintaining profitable customer relationships through the provision of superior customer value and satisfaction, which relates to all aspects of attracting, acquiring and growing customers (Kotler & Armstrong, 2021). Creating superior value for customers, a strategic approach to customer relationship management emphasizes tailoring interactions between customers and companies and ensuring the coordination of complex organizational capabilities for the benefit of customers (Cravens & Piercy, 2009).

The digital era has given rise to a variety of new tools that can be used to build customer relationships, including websites, blogs, online communities, mobile applications and social media platforms (Kotler & Armstrong, 2021). The integration of CRM and Internet technology helps companies develop competitive advantages, enables them to establish relationships with customers, and increases customer satisfaction levels (Chaston & Mangles, 2003; Krishnan et al., 1998; Lam et al., 2013). The use of internet technology in the implementation of customer relationship management gave rise to the current term known as electronic customer relationship management (e-CRM).

Customer Engagement

Engagement is the level of attention and active involvement of customers in communication, where a more active response from customers allows the company to obtain better value (Kotler & Keller, 2016). Creating customer engagement and value, according to Kotler & Armstrong (2021), requires a work unite between all parts of the company to be able to complete this task, between companies and brands individually need to provide mutually supportive values. The conceptualization of customer engagement is not just an attitude perspective, but more than that reflects the psychological and behavioral dimensions (Patterson & Yu, 2006; So et al., 2014).

Customer Loyalty

Loyalty is a deeply held commitment to repurchase or re-patronize a product or service preferred by a customer in the future even though there are external factors and marketing initiatives from competitors that may encourage switching actions (Kotler & Keller, 2016). Based on this understanding, customer loyalty can be interpreted as a repurchase decision made by a customer based on his commitment to a brand or company. Customer loyalty can be divided into several loyalty level groups, namely 1) some customers are completely loyal, 2) customers are somewhat loyal and 3) buyers show no loyalty to any brand (Kotler & Armstrong, 2021).

Research Framework

Based on the literature review that has been described, a research framework can be formulated "Analysis of the Influence of Electronic Customer Relationship Management and Customer Engagement on Customer Loyalty for Users of Gojek Online Transportation Services", as follows:

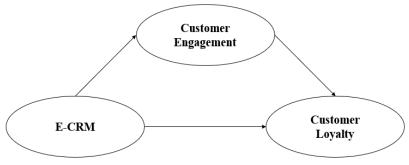


Figure 2. Research framework

Research Hypothesis

Based on the framework and research paradigm that has been described previously, the initial hypothesis or conclusion can be drawn as follows:

- 1. There is an effect of electronic customer relationship management on customer loyalty.
- 2. There is an effect of customer engagement on customer loyalty.
- 3. There is an effect of electronic customer relationship management on customer engagement.
- 4. There is an effect of electronic customer relationship management on customer loyalty through customer engagement.

RESEARCH METHODS

This research was conducted to determine the effect of electronic customer relationship management and customer engagement on customer loyalty. The type of research used in this research is descriptive and verification. The population in this study are users of Gojek online transportation services, where the number is unknown so it can be categorized as infinite. The Lemeshow formula is used to determine the number of samples in an infinite population. Based on the calculation results, the minimum number of samples required is 96 respondents which will be rounded up to 100 respondents.

The sampling technique used in this study is the non-probability sampling technique, in which this collection technique does not provide equal opportunities for each element or member of the population to be selected as a sample (Sugiyono, 2013).. Meanwhile, purposive sampling was chosen as the sampling technique in this study. The analysis technique in this study used quantitative analysis techniques, in which an objective approach was used, including quantitative data collection and analysis and using statistical testing methods. The data collected was evaluated using a 5-point Likert rating scale ranging from strongly disagree to strongly agree.

FINDINGS AND DISCUSSION

Description of Respondent Characteristics

Table 1. Respondents based on gender					
Jenis Kelamin Jumlah Persentase					
Laki-laki	33	33%			
Perempuan	67	67%			
Total 100 100.00%					

Based on the results of data processing, it is known that out of a total of 100 respondents, 33 people or 33% obtained male sex data, while 67 female sex data or 67%.

Table 2. Respondents based on age				
Usia	Jumlah	Persentase		
16 - 25 tahun	75	75%		
26 - 35 tahun	14	14%		
36 - 45 tahun	5	5%		
≥ 46 tahun	6	6%		
Total	100	100.00%		

Based on age, data obtained from Gojek online transportation service users aged 16-25 years were 75 people (75%), aged 26-35 years were 14 people (14%), aged 36-45 years were 5 people (5%), and age \geq 46 years as many as 6 people (6%).

Table 3. Respondents based on work				
Usia	Jumlah	Persentase		
Pelajar / Mahasiswa	42	75%		
Pekerja Pemerintahan	9	9%		
Pekerja Swasta	35	35%		
Wirausaha	8	8%		
Freelancer	4	4%		
Ibu Rumah Tangga	1	1%		
Pensiunan	1	1%		
Total	100	100%		

Meanwhile, based on work, it shows that out of a total of 100 respondents who use Gojek online transportation services and work as students, the highest number of respondents is 42 people (42%). 9 people (9%) work as workers or government employees, 35 private workers (35%), 4 freelancers (4%), 1 housewife (1%), and 1 pensioner (1%). **Validity Test**

Tab	Table 4. Validity test results					
			Criteri			
Statement	r _{count}	rtable	a			
X1	0.767	0.197	Valid			
X2	0.745	0.197	Valid			
X3	0.683	0.197	Valid			
X4	0.721	0.197	Valid			
M1	0.838	0.197	Valid			
M2	0.851	0.197	Valid			
M3	0.804	0.197	Valid			
M4	0.727	0.197	Valid			
M5	0.760	0.197	Valid			
Y1	0.713	0.197	Valid			
Y2.1	0.826	0.197	Valid			
Y2.2	0.832	0.197	Valid			
Y3	0.783	0.197	Valid			

Based on the data contained in table 4, it is known that the results of the validity test for the statements contained in the research questionnaire have been distributed to 100 respondents. Each statement of the electronic customer relationship management (X), customer engagement (M) and customer loyalty (Y) variables has an roount value greater than the rtable value ($r_{count} > r_{table}$) meaning that the statements contained in this research questionnaire as a whole are valid.

Reliability Test

Table 5. Reliability test results					
Variable	Cronbach's Alpha	Criteria			
e-CRM (X)	0.706	Reliable			
Customer Engagement (M)	0.852	Reliable			
Customer Loyalty (Y)	0.816	Reliable			

Based on the data contained in table 4.10 it can be seen that the three variables in this study, namely electronic customer relationship management (X), customer engagement (M) and customer loyalty (Y) have a Cronbach's Alpha coefficient value greater than 0.60 (> 0.60) then it can be stated that each variable in this study is reliable.

Table 6. Substructure I coefficients						
	Unstandar Coeffici		Standardized Coefficients			
Model	В	Std. Error	Beta	t	Sig.	
(Constant)	.588	1.080		.545	.587	
e-CRM	.271	.085	.275	3.194	.002	
Brand Image	.341	.053	.558	6.472	.000	

Path Analysis Substructure I

The standard error value contained in the equation for substructure I can be calculated using the following formula:

$$e_2 = \sqrt{(1 - R^2)} \\ = \sqrt{(1 - 0.589)} \\ = 0.641$$

Referring to the variable regression coefficient values contained in the standardized coefficient Beta column in table 4.12, the following equation can be obtained:

$$Y = 0.275X + 0.558M + 0.641$$

Based on the regression equation above, it can be seen that electronic customer relationship management and customer engagement have positive regression coefficient values, so this shows that there is a directly proportional effect on customer loyalty. The regression equation shows that the electronic customer relationship management and customer engagement variables will have a positive influence on customers

Coefficient of Determination (R²) Substructure I

Table 7. Substructure I model summary				
Adjusted R Std. Error of				
Model	R	R Square	Square	the Estimate
1	.767 ^a	.589	.580	1.43950

Based on the table above it can be seen that R Square has a value of 0.589. The data results show that the coefficient of determination for the effect of electronic customer relationship management and customer engagement on customer loyalty is 58.9%. Meanwhile, 41.1% of customer loyalty is influenced by other variables outside of this study. **F-test (Simultaneous Effect) of Substructure I**

	Table 8. Substructure I anova						
Sum ofMeanModelSquaresdfSquaresF							
1	Regression	287.592	2	143796	69.395	.000 ^b	
	Residual	200.998	97	2.072			
	Total	488.590	99				

Based on Table 8, the significance value of the effect of electronic customer relationship management and customer engagement on customer loyalty is 0.000, less than 0.05 and the F_{count} value is 69,395 greater than the F_{table} value of 3.09, then H_0 is rejected and H_a is accepted. Therefore, it can be stated that there is a significant influence of electronic customer relationship management and customer engagement on customer loyalty.

T-test (Partial Effect) of Substructure I

Partial hypothesis testing or t-test is carried out to determine whether there is an influence or not between the independent variables on the dependent variable. Based on table 6, it is known that the significant value and t_{count} value of the electronic customer relationship management and customer engagement variables on customer loyalty. The following is a comparison of the significant value and the t_{count} value with the t_{table} value:

- 1. Electronic customer relationship management has a significance value of 0.002, less than 0.05, and has a t_{count} value of 3,194 greater than a t_{table} value of 1,985. Therefore, it can be stated that there is a significant influence of Electronic customer relationship management on customer loyalty.
- 2. Customer engagement has a significance value of 0.000, less than 0.05, and has a t_{count} of 6,472 greater than a t_{table} of 1,985. Therefore, it can be stated that there is a significant influence of customer engagement on customer loyalty.

Path Analysis Substructure II

	Table 9. St	ubstructu	re II Coefficients		
	Unstanda Coeffici		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	1.837	2.062		.891	.375
e-CRM	1.056	.123	.655	8.589	.000

The standard error value contained in the equation for substructure II can be calculated using the following formula:

$$e_1 = \sqrt{(1 - R^2)} \\ = \sqrt{(1 - 0.429)} \\ = 0.756$$

Referring to the variable regression coefficient values contained in the standardized coefficient Beta column in table 9, the following equation can be obtained:

$$M = 0.655X + 0.756$$

Based on the regression equation above, it can be seen that electronic customer relationship management has a positive regression coefficient value, so this shows that there is a directly proportional effect on customer engagement. The regression equation shows that the electronic customer relationship management variable will have a positive influence on customer engagement.

T	Table 10. Substructure II Model Summary				
	Adjusted R Std. Error of				
Model	R	R Square	Square	the Estimate	
1	.655ª	.429	.424	2.75926	

Coefficient of Determination (R²) Substructure II

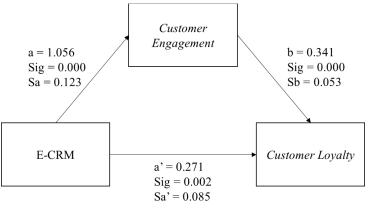
Based on table 10 above, it can be seen that R Square has a value of 0.429. The data results show that the coefficient of determination for the effect of electronic customer relationship management on customer engagement is 42.9%. Meanwhile, 57.1% of customer engagement is influenced by other variables outside of this study.

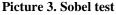
t-test (Partial Effect) of Substructure II

Based on table 9, it is known that the significant value and t_{count} value of the electronic customer relationship management variable on customer engagement. Electronic customer relationship management has a significance value of 0.000, less than 0.05, and has a t_{count} of 8,589 greater than a t_{table} of 1,984, then H₀ is rejected and H_a is accepted. Therefore, it can be stated that there is a significant influence of Electronic customer relationship management on customer loyalty.

Sobel Test

The indirect effect of the independent variable on the dependent variable through the mediating variable can be calculated by multiplying the results of the path of the independent variable (X) on the mediating variable (M) and the path of the mediating variable (M) on the dependent variable (Y). Referring to the data in table 6 and table 9, the model can be described as follows:





Based on the data in Figure 3, the Sobel test is carried out for the indirect effect of electronic customer relationship management on customer loyalty through customer engagement by determining the standard error value for the indirect effect as follows:

$$\begin{split} S_{ab} &= \sqrt{b^2 S a^2 + a^2 S b^2 + S a^2 S b^2} \\ &= \sqrt{0.341^2 \times 0.123^2 + 1.056^2 \times 0.053^2 + 0.123^2 \times 0.053^2} \\ &= 0.008 \end{split}$$

A significant test of the indirect effect is carried out partially by using the following calculation formula:

$$z = \frac{ab}{S_{ab}} = \frac{1.056 \times 0.341}{0.008} = 45.012$$

The results of the Sobel test calculation above show that the z value of 45,012 is greater than 1.96, thus proving that customer engagement can mediate electronic customer relationship management for customer loyalty. Based on the results of these calculations, then H_0 is rejected and H_a is accepted, so it can be stated that there is a significant effect of electronic customer relationship management on customer loyalty.

Discussion

Based on the findings in this study, there is a significant influence of electronic customer relationship management on customer loyalty. The results of this study indicate that the relationship between the company and its customers is an important factor that needs to be considered in every implementation of the company's activities. Kotler & Keller (2016) stated that by improving relationships with customers in the long term, it is more likely that customers will continue to survive. In addition, when companies can serve customer needs better, this situation will increase customer loyalty which will ultimately affect company profitability (Ramsey et al., 2008).

The effect of electronic customer relationship management on the implementation of a business is an important part, where with a good customer relationship management program, customers can be increasingly connected with the company. In its development, this can have a good influence on the development of the company.

Electronic customer relationship management also has a significant effect on customer engagement, this situation shows that the better the implementation of electronic customer relationship management, the higher the engagement by Gojek online transportation service customers. Implementation of customer relationship management programs can create value for customers, when the program creates value for customers, companies can be able to obtain value from their customers (Kotler & Keller, 2016).

There is a significant influence of customer engagement on customer loyalty, which can be closely related to psychological processes. This is because customer engagement with sentimental and calculative factors can lead to customer satisfaction furthermore, it can lead to customer loyalty (Arora & Sharma, 2018; Bowen & Shoemaker, 1998).

Customer engagement can mediate the effect of electronic customer relationship management on customer loyalty. Vivek et al. (2012) in their research stated that customers who are involved with a product or service can have an emotional attitude toward the company that provides it, at the same time it will encourage them to be more loyal when compared to those who are not involved. Not only that, customer engagement changes customer relationships from short-term ones to long-term relationships, even close ones (Sawhney et al., 2005).

CONCLUSION

The results of hypothesis testing in this study indicate that the four hypotheses proposed are acceptable. The results of hypothesis testing indicate that there is a direct significant effect of electronic customer relationship management on customer loyalty, electronic customer relationship management on customer engagement, customer engagement on customer loyalty, and indirectly there is a significant effect of electronic customer relationship management on customer engagement. Electronic customer relationship management is an important factor in increasing customer loyalty in a company, especially Gojek online transportation services. Customer engagement can mediate the effect of electronic customer relationship management on customer loyalty. Customers who are involved with a product or service can have an emotional attitude towards the company, at the same time encouraging these customers to be more loyal than those who are not involved. Not only that, customer engagement changes customer relationships from short-term ones to long-term relationships, even close relationships. Companies that have a loyal customer base can have a competitive advantage over their competitors.

Based on the findings in this study, it can be seen that the electronic customer relationship management variable in online gojek transportation services has a lower influence value when compared to customer engagement. Therefore, attention to the implementation of programs related to electronic customer relationship management needs to be increased. Implementation of a good customer relationship management program can facilitate customers to be more connected with the company. In its development, this can have a good influence on the competitive advantage possessed by the company.

REFERENCES

- Arora, L., & Sharma, B. K. (2018). Social customer relationship management: A literature review. *Eurasian Journal of Analytical Chemistry*, 13(6), 308–316.
- Bowen, J. T., & Shoemaker, S. (1998). Loyalty: A strategic commitment. *The Cornell Hotel* and *Restaurant Administration Quarterly*, 39(1), 12–25. https://doi.org/https://doi.org/10.1016/S0010-8804(97)83878-5
- Chaston, I., & Mangles, T. (2003). Relationship marketing in online business-to-business markets. *European Journal of Marketing*, 37(5/6), 753–773. https://doi.org/10.1108/03090560310465134
- Cravens, D. W., & Piercy, N. F. (2009). Strategic Marketing Ninth Edition.
- Gao, M., & Huang, L. (2021). Quality of channel integration and customer loyalty in omnichannel retailing: The mediating role of customer engagement and relationship program receptiveness. *Journal of Retailing and Consumer Services*, 63, 102688. https://doi.org/10.1016/J.JRETCONSER.2021.102688
- Han, H., Nguyen, H. N., Song, H., Chua, B. L., Lee, S., & Kim, W. (2018). Drivers of brand loyalty in the chain coffee shop industry. *International Journal of Hospitality Management*, 72(November 2017), 86–97. https://doi.org/10.1016/j.ijhm.2017.12.011
- Hwang, J., Choe, J. Y. (Jacey), Kim, H. M., & Kim, J. J. (2021). Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty? *International Journal of Hospitality Management*, 99(June), 103050. https://doi.org/10.1016/j.ijhm.2021.103050
- Kotler, P., & Armstrong, G. (2021). Principles of Marketing (18th ed.). Pearson.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson.
- Krishnan, M. S., Ramaswamy, V., Meyer, M. C., & Damien, P. (1998). Customer Satisfaction for Financial Services: The Role of Products, Services, and Information Technology. SSRN Electronic Journal. https://doi.org/10.2139/SSRN.160168
- Laili, I., Sumiati, & Sudjatno. (2022). The effect of service failure on customer loyalty through customer forgiveness and service recovery as mediation variables. *International Journal of Research in Business and Social Science* (2147- 4478), 11(4), 23–29. https://doi.org/10.20525/ijrbs.v11i4.1792
- Lam, A. Y. C., Cheung, R., & Lau, M. M. (2013). The Influence of Internet-Based Customer Relationship Management on Customer Loyalty. *Contemporary Management Research*, 9(4), 419–440. https://doi.org/10.7903/CMR.11095

- Nasution, A. A., Erwin, K., & Bartuska, L. (2020). Determinant Study of Conventional Transportation and Online Transportation. *Transportation Research Procedia*, 44(2019), 276–282. https://doi.org/10.1016/j.trpro.2020.02.042
- Patterson, P., & Yu, T. (2006). Understanding Customer Engagement in Services.
- Ramsey, E., Harrigan, P., & Ibbotson, P. (2008). e-CRM in SMEs: an exploratory study in Northern Ireland. *Elaine Ramsey*, 26. https://doi.org/10.1108/02634500810879296
- Sawhney, M., Verona, G., & Prandelli, E. (2005). Collaborating to create: The Internet as a platform for customer engagement in product innovation. *Journal of Interactive Marketing*, 19(4), 4–17. https://doi.org/https://doi.org/10.1002/dir.20046
- So, K. K. F., King, C., & Sparks, B. (2014). Customer Engagement with Tourism Brands: Scale Development and Validation. *Journal of Hospitality & Tourism Research*, 38(3), 304–329. https://doi.org/10.1177/1096348012451456
- Sugiyono. (2013). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.
- Tu, Y.-T., & Chang, H.-C. (2012). Corporate Brand Image and Customer Satisfaction on Loyalty: An Empirical Study of Starbucks Coffee in Taiwan. *Journal of Social and Development Sciences*, 3(1), 24–32. https://doi.org/10.22610/jsds.v3i1.682
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer Engagement: Exploring Customer Relationships Beyond Purchase. *Journal of Marketing Theory and Practice*, 20(2), 122–146. https://doi.org/10.2753/MTP1069-6679200201
- Wang, Y. S., Wu, S. C., Lin, H. H., & Wang, Y. Y. (2011). The relationship of service failure severity, service recovery justice and perceived switching costs with customer loyalty in the context of e-tailing. *International Journal of Information Management*, 31(4), 350– 359. https://doi.org/10.1016/J.IJINFOMGT.2010.09.001