

THE IMPACT OF COMMUNICATION INFORMATION QUALITY, COMMUNICATION APPROPRIATENESS, COMMUNICATION CLARITY, AND COMMUNICATION STYLE ON CUSTOMER LOYALTY IN ENTERPRISES IN THAI NGUYEN PROVINCE

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ABSTRACT

This study examines the impact of communication information quality, communication appropriateness, communication clarity, and communication style on customer loyalty in enterprises in Thai Nguyen Province, Vietnam. Data were collected from 236 customers using a structured questionnaire with a five-point Likert scale. The proposed research model was analyzed using SPSS through Cronbach's Alpha reliability analysis, Exploratory Factor Analysis (EFA), and multiple linear regression. The empirical results indicate that all four communication dimensions have positive and statistically significant effects on customer loyalty. Furthermore, the study offers practical managerial implications for enterprises seeking to improve communication effectiveness, strengthen customer relationships, and enhance customer loyalty in an increasingly competitive market.

Keywords: *Communication Information, Communication Appropriateness, Communication Clarity, Communication Style, Customer Loyalty, Thai Nguyen Province*

1. INTRODUCTION

In an increasingly competitive business environment, customer loyalty has become a critical factor determining the sustainable development of enterprises. In addition to product and service quality, effective communication between enterprises and customers plays a vital role in building trust, enhancing customer experience, and fostering long-term relationships.

Previous studies have confirmed that various communication-related factors, including communication information quality, communication appropriateness, communication clarity, and communication style, positively influence customers' perceptions and behavioral intentions. However, most existing studies have examined these factors separately or have been conducted in different research contexts. Empirical studies investigating the simultaneous effects of these communication dimensions on customer loyalty, particularly in the context of local enterprises, remain relatively limited.

Thai Nguyen Province is one of Vietnam's rapidly developing economic centers, characterized by the continuous growth of enterprises operating in the trade, service, and manufacturing sectors. This dynamic business environment requires enterprises not only to improve the quality of their products and services but also to enhance communication effectiveness in order to strengthen customer relationships and retain loyal customers. Against this background, this study aims to examine the impact of communication information quality, communication appropriateness, communication clarity, and communication style on customer loyalty in enterprises in Thai Nguyen Province. The findings are expected to enrich the existing literature on customer communication and provide practical managerial implications for enterprises seeking to improve communication effectiveness and strengthen customer loyalty.

2. THEORETICAL BACKGROUND AND OVERVIEW OF EMPIRICAL STUDIES

2.1. Theoretical Background

This study is grounded in three major theoretical perspectives: Relationship Marketing Theory, Commitment–Trust Theory, and Customer Loyalty Theory.

According to Morgan and Hunt (1994), the primary objective of relationship marketing is to establish, maintain, and develop long-term relationships between enterprises and customers. Within the Commitment–Trust Theory, communication is considered one of the key antecedents of trust. Information that is accurate, complete, timely, and transparent helps reduce information asymmetry, minimize uncertainty, and strengthen customers' trust in an enterprise. As trust develops, customers are more likely to maintain long-term relationships and demonstrate stronger customer loyalty.

In addition, Oliver (1999) defined customer loyalty as a deeply held commitment to repurchase or continue using a preferred product or service despite the presence of competitive influences. Customer loyalty is reflected not only in repeated purchasing behavior but also in favorable attitudes toward the enterprise, willingness to recommend it to others, and resistance to competitors' marketing efforts.

Furthermore, the Information Systems Success Model proposed by DeLone and McLean (2003) emphasizes the critical role of information quality in influencing user satisfaction and continuance intention. According to this model, high-quality information should be accurate, complete, timely, and easy to understand. Although originally developed in the field of information systems, this theoretical framework has been widely applied in customer behavior research to explain how information quality affects customer satisfaction, trust, and customer loyalty.

Drawing upon these theoretical foundations, this study proposes that four communication dimensions—communication information quality, communication appropriateness, communication clarity, and communication style—play significant roles in enhancing the quality of interactions between enterprises and customers. These communication dimensions enable customers to obtain information more easily, perceive greater concern and support from enterprises, reduce misunderstandings during communication, and strengthen trust in the enterprise. Consequently, they represent essential determinants in developing and sustaining customer loyalty.

2.2. Overview of Empirical Studies

In recent years, research on customer relationship management has gradually shifted its focus from service quality to the quality of communication between enterprises and customers. An increasing number of studies have demonstrated that communication is not merely a means of information exchange but also a critical determinant of customer trust, satisfaction, and customer loyalty.

Patma et al. (2022), in the context of e-commerce, found that information quality has a significant positive effect on customer trust and customer loyalty. Their findings indicate that when information is complete, accurate, timely, and reliable, customers perceive lower levels of risk, develop greater trust in the enterprise, and are more likely to make repeat purchases and recommend the enterprise to others.

Rosário et al. (2025) further emphasized that effective communication is a key component of relationship marketing and plays an essential role in strengthening the quality of customer–enterprise relationships. Their study revealed that maintaining frequent, personalized, and transparent communication contributes significantly to customer loyalty and long-term customer value.

Tran (2025) investigated digital communication and reported that it positively influences the relationship between customers and brands. The study found that when enterprises utilize effective communication channels, provide clear information, and maintain timely interactions, customers develop stronger brand engagement, which ultimately enhances customer loyalty and supportive customer behaviors.

Similarly, Putri and Sidharta (2025) examined communication between sales personnel and customers and concluded that an empathetic, clear, and consistent communication style enables customers to feel respected and understood. Such communication not only improves the overall service experience but also increases customers' repurchase intentions and customer loyalty.

Karo (2024), in a study of manufacturing enterprises in Indonesia, reported that marketing communication strategies positively influence customer loyalty through customer satisfaction. The findings suggest that enterprises should develop clear communication messages, tailor communication to different customer segments, and maintain continuous interactions to strengthen customers' attachment to the brand.

In the service sector, Herman et al. (2024) confirmed that both service quality and the quality of customer interactions are important determinants of customer loyalty. Their results indicate that prompt responses, clear explanations, and professional communication by employees significantly improve customers' perceptions and encourage their intention to continue using the service.

Overall, recent empirical studies consistently demonstrate that communication quality is a crucial determinant of customer loyalty. However, previous research has primarily focused on service quality, marketing communication, or digital communication, while very few studies have simultaneously examined the four communication dimensions—communication information quality, communication appropriateness, communication clarity, and communication style—within a single research framework. Furthermore, empirical evidence from

Vietnam, particularly among local enterprises in Thai Nguyen Province, remains limited. Therefore, this study seeks to address this research gap by providing additional empirical evidence on the effects of these communication dimensions on customer loyalty.

Research on the impact of politeness strategies and speech acts on customer satisfaction is:

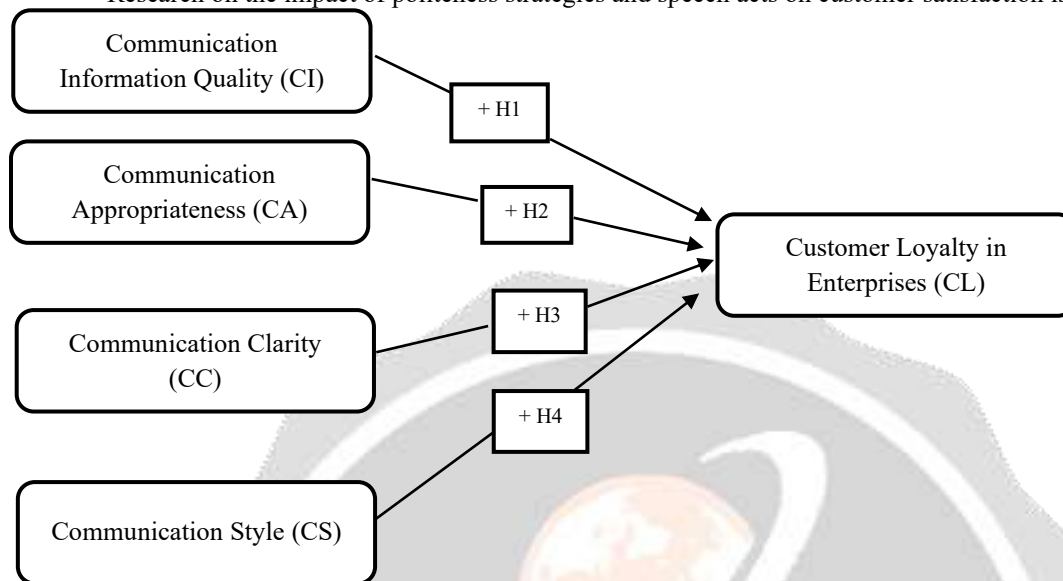


Figure 1: Proposed model

The study variables measured using the 5-point Likert scale are shown in Table 1.

Table 1. Variables in the model

Code	Items
CI1	Businesses provide complete information about products/services to customers.
CI2	The information the business provides to customers is highly accurate.
CI3	Businesses provide timely information when customers need it.
CI4	Business communication information is useful for customer purchasing decisions.
CI5	Business information provided consistently across communication channels.
CA1	Businesses that communicate in line with customer needs.
CA2	The content of the business's communication is suitable for each specific situation.
CA3	Businesses choose communication channels that are convenient for customers.
CA4	Businesses adjust the way of communication to suit each customer group.
CA5	When businesses contact or respond in line with customer expectations.
CC1	Businesses communicate information in a clear and understandable manner.
CC2	The content of business communication is presented coherently.
CC3	Enterprises clearly explain issues related to products/services.
CC4	The information provided by the business does not mislead customers.
CS1	Employees/businesses communicate with customers politely.
CS2	Employees/businesses show a friendly attitude when communicating with customers.
CS3	Employees/businesses listen to customers' opinions and feedback.
CS4	Employees/businesses show professionalism in the communication process.
CS5	The way the business communicates gives customers a sense of respect.
CL1	I will continue to purchase or use your products/services in the future.
CL2	I will prioritize choosing this business over other businesses.
CL3	I am willing to recommend this business to relatives, friends or colleagues.
CL4	I still tend to stick with the business even when there are many alternatives.
CL5	I intend to maintain a long-term relationship with the business.

3. METHODOLOGY

This study employed a structured questionnaire survey to examine the impact of communication information quality, communication appropriateness, communication clarity, and communication style on customer loyalty in enterprises in Thai Nguyen Province. The measurement scales for all constructs were assessed using a five-point Likert scale ranging from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, to (5) Strongly Agree.

To determine the appropriate sample size, this study followed the recommendation of Hair et al. (2010), who suggested that the minimum sample size should be at least five times the number of observed variables. Since the research model included 24 observed variables, the minimum required sample size was 120 respondents.

The questionnaires were randomly distributed to customers who had purchased products or used services from several representative enterprises in Thai Nguyen Province. Data were collected through both face-to-face and online surveys via email during April and May 2026. At the end of the survey period, a total of 236 valid questionnaires were obtained, exceeding the minimum required sample size and ensuring the adequacy and representativeness of the sample.

The collected data were analyzed using IBM SPSS Statistics. The analytical procedures included descriptive statistics, Cronbach's Alpha reliability analysis, Exploratory Factor Analysis (EFA), and multiple linear regression analysis to examine the relationships between the proposed communication dimensions and customer loyalty based on responses from 236 customers in Thai Nguyen City.

4. EMPIRICAL FINDINGS

Cronbach's alpha reliability assessment

Table 2. Cronbach's alpha reliability

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
CI1	12.06	19.610	.812	.923	.935
CI2	12.06	19.753	.823	.921	
CI3	12.05	19.551	.837	.919	
CI4	12.07	19.646	.828	.920	
CI5	12.04	19.390	.837	.919	
CA1	12.11	18.184	.797	.899	.919
CA2	12.06	18.439	.773	.904	
CA3	12.08	18.372	.807	.897	
CA4	12.03	18.565	.773	.904	
CA5	12.04	18.330	.799	.898	
CC1	9.03	11.186	.760	.903	.914
CC2	9.03	10.595	.817	.883	
CC3	9.04	10.492	.817	.883	
CC4	9.08	10.525	.820	.882	
CS1	11.94	17.511	.799	.897	.918

CS2	11.94	18.095	.746	.907	
CS3	11.95	17.546	.798	.897	
CS4	11.93	17.463	.766	.904	
CS5	11.95	17.104	.830	.890	
CL1	12.08	18.163	.794	.910	.925
CL2	12.06	17.559	.815	.906	
CL3	12.08	17.832	.793	.910	
CL4	12.08	18.091	.802	.909	
CL5	12.09	17.923	.817	.906	

The results of the Cronbach's Alpha reliability analysis indicate that all measurement scales exhibit excellent reliability. Specifically, the Cronbach's Alpha coefficients for Communication Information Quality (CI), Communication Appropriateness (CA), Communication Clarity (CC), Communication Style (CS), and Customer Loyalty (CL) are 0.935, 0.919, 0.914, 0.918, and 0.925, respectively, all exceeding the recommended threshold of 0.70 (Hair et al., 2010). The Corrected Item–Total Correlation coefficients range from 0.746 to 0.837, which are all greater than the acceptable threshold of 0.30. Furthermore, the Cronbach's Alpha if Item Deleted values for all observed variables are lower than the corresponding overall Cronbach's Alpha coefficients, indicating that no items should be removed from the measurement scales. Therefore, all 24 observed variables were retained for subsequent Exploratory Factor Analysis (EFA).

EFA factor analysis

After testing the reliability of the 22 scales, the study proceeded to conduct an exploratory factor analysis with the 22 scales mentioned above.

Table 3. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.917
Bartlett's Test of Sphericity	Approx. Chi-Square	3406.493
	df	171
	Sig.	.000

The results of the Exploratory Factor Analysis (EFA) indicate that the data are suitable for factor analysis. Specifically, the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy is 0.917, exceeding the recommended threshold of 0.50, indicating that the sample is highly appropriate for conducting EFA (Hair et al., 2010). In addition, Bartlett's Test of Sphericity yields a Chi-square value of 3406.493 with a significance level of 0.000 ($p < 0.05$), confirming that the observed variables are significantly correlated with one another. Therefore, the data satisfy all the necessary requirements for conducting Exploratory Factor Analysis.

Table 4. Total Variance Explained

Total Variance Explained			
Component	Initial Eigenvalues	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings

	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.813	41.120	41.120	7.813	41.120	41.120	3.990	21.000	21.000
2	2.761	14.531	55.651	2.761	14.531	55.651	3.807	20.039	41.039
3	2.355	12.394	68.045	2.355	12.394	68.045	3.791	19.952	60.990
4	1.811	9.533	77.578	1.811	9.533	77.578	3.152	16.588	77.578
5	.431	2.269	79.847						
6	.402	2.116	81.964						
7	.378	1.989	83.953						
8	.352	1.854	85.806						
9	.319	1.679	87.485						
10	.310	1.632	89.117						
11	.286	1.505	90.622						
12	.278	1.465	92.086						
13	.261	1.374	93.461						
14	.247	1.302	94.763						
15	.233	1.225	95.988						
16	.217	1.140	97.128						
17	.207	1.088	98.217						
18	.183	.962	99.179						
19	.156	.821	100.000						

Extraction Method: Principal Component Analysis.

The results of the Exploratory Factor Analysis (EFA) show that four factors were extracted, with Eigenvalues greater than 1, namely 7.813, 2.761, 2.355, and 1.811. The total variance explained reached 77.578%, exceeding the recommended threshold of 50% (Hair et al., 2010), indicating that the four factors account for 77.578% of the total variance in the data. After Varimax rotation, the explained variance of the four factors was 21.000%, 20.039%, 19.952%, and 16.588%, respectively. These results confirm that the measurement model demonstrates satisfactory convergent and discriminant validity and is appropriate for subsequent regression analysis.

Linear Regression Models

Table 5. Results of multiple regression analysis

Model Summary^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.808 ^a	.653	.647	.62261	.653	108.814	4	231	.000	1.976
a. Predictors: (Constant), CS, CA, CI, CC										
b. Dependent Variable: CL										

The regression analysis results indicate that the proposed research model demonstrates a good fit, with a correlation coefficient of ($R = 0.808$). The coefficient of determination ($R^2 = 0.653$) and the adjusted (R^2) of 0.647 indicate that the four independent variables—Communication Information Quality (CI), Communication Appropriateness (CA), Communication Clarity (CC), and Communication Style (CS)—collectively explain 64.7% of the variation in Customer Loyalty (CL). The ANOVA results further confirm that the regression model is statistically significant ($F = 108.814$, $p < 0.001$), indicating that the model is appropriate for explaining the relationship between the proposed variables. In addition, the Durbin–Watson statistic is 1.976, which is close to 2, suggesting that there is no autocorrelation among the residuals.

Table 6. ANOVA^a Analysis Results

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	168.724	4	42.181	108.814	.000 ^b
	Residual	89.546	231	.388		
	Total	258.270	235			
a. Dependent Variable: CL						
b. Predictors: (Constant), CS, CA, CI, CC						

The ANOVA results indicate that the regression model is statistically significant, with an F-value of 108.814 and a significance level of $p < 0.001$. This finding confirms that the proposed regression model is appropriate for the data and that the independent variables—Communication Information Quality (CI), Communication Appropriateness (CA), Communication Clarity (CC), and Communication Style (CS)—jointly have a significant effect on Customer Loyalty (CL).

Table 7. Regression of the model

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.226	.162		-1.394	.165		

	CI	.309	.042	.324	7.332	.000	.770	1.299
	CA	.207	.044	.209	4.748	.000	.773	1.294
	CC	.315	.045	.323	7.026	.000	.709	1.410
	CS	.248	.046	.245	5.413	.000	.732	1.366
a. Dependent Variable: CL								

The regression results indicate that all four independent variables have positive and statistically significant effects on Customer Loyalty (CL) at the 5% significance level. Specifically, Communication Information Quality (CI) has an unstandardized coefficient of $B = 0.309$ ($\beta = 0.324$, $p < 0.001$), Communication Appropriateness (CA) has $B = 0.207$ ($\beta = 0.209$, $p < 0.001$), Communication Clarity (CC) has $B = 0.315$ ($\beta = 0.323$, $p < 0.001$), and Communication Style (CS) has $B = 0.248$ ($\beta = 0.245$, $p < 0.001$). These findings indicate that improvements in communication quality significantly enhance customer loyalty.

Based on the standardized beta coefficients, Communication Information Quality (CI) exerts the strongest influence on Customer Loyalty ($\beta = 0.324$), followed closely by Communication Clarity (CC) ($\beta = 0.323$), Communication Style (CS) ($\beta = 0.245$), and Communication Appropriateness (CA) ($\beta = 0.209$). These results suggest that communication information quality and communication clarity are the two most influential determinants of customer loyalty among enterprises in Thai Nguyen Province.

Furthermore, the Tolerance values range from 0.709 to 0.773, all exceeding the recommended threshold of 0.10, while the Variance Inflation Factor (VIF) values range from 1.294 to 1.410, all well below the threshold of 2. These results indicate that multicollinearity is not a concern in the regression model. The estimated unstandardized regression equation is as follows:

$$CL = -0.226 + 0.309*CI + 0.207*CA + 0.315*CC + 0.248*CS.$$

5. CONCLUSION

The empirical findings from Thai Nguyen Province indicate that communication information quality, communication appropriateness, communication clarity, and communication style all have positive effects on customer loyalty. Based on these findings, several managerial implications are proposed.

First, enterprises should improve communication information quality by ensuring that the information provided to customers is complete, accurate, timely, and consistent across all communication channels. Enterprises should also regularly update information regarding products, services, sales policies, and after-sales support to help customers make informed decisions and strengthen their trust in the enterprise.

Second, enterprises should enhance communication appropriateness by segmenting customers and tailoring communication content, channels, and timing to meet the needs of different customer groups. Personalized communication and timely responses to customer needs can improve customer experience and foster long-term relationships.

Third, enterprises should ensure communication clarity by delivering messages that are simple, easy to understand, transparent, and consistent. In addition, enterprises should establish effective procedures for receiving and responding promptly to customer inquiries, feedback, and complaints in order to minimize misunderstandings and improve customer satisfaction.

Finally, enterprises should develop a professional communication style by providing employees with training in communication skills, customer service attitudes, active listening, and problem-solving abilities. A communication style characterized by courtesy, friendliness, professionalism, and respect for customers can strengthen customer relationships, thereby enhancing customer loyalty and improving the enterprise's competitive advantage.

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