IMPACTS OF MARKETING 4CS ON CUSTOMER'S PURCHASING INTENTION IN THE AIR CONDITIONING INDUSTRY IN VIETNAM

KHOA QUOC BUI

Mas. Lecturer, Van Lang University, DBA Student, Swiss Institute of Management & Innivation (SIMI), Switzerland. Email: khoa_bq@yahoo.com.

NGUYEN THI CUC HONG

PhD, Lecturer, Economics & Finance University, Postdoc Student, Swiss Institute of Management & Innovation (SIMI), Switzerland. Email: hongntc@uef.edu.vn.

THAO LE TRAN THACH

DBA, Academic Director, London Academy of Sciences VN (LAS Vietnam). Email: thaoltt@outlook.com.

SEYED MOHAMMADREZADREZA GHADIRI

Professor, Dr. Chancellor (Swiss Information and Management Institute). Email: rezaghadiri@simiswiss.ch & smrgh1@gmail.com

THUY THU LY

MPP. Lecturer, Academy of Politics Region II. Email: thuylythu2510@gmail.com.

HAI BA LE

PhD, Visiting Lecturer, Economics & Finance University, Postdoctoral Researcher, Swiss Institute of Management & Innovation (SIMI), Switzerland. Email: hai.lebavn@gmail.com.

LAM VAN TRAN

EDBA, Lecturer, Binh Duong University and Vice President, Institute for Research, Training and Development Culture, Ecotourism. Email: philliplamevents@gmail.com.

Abstract

In the context of a rapidly expanding economy and the rising demand for air conditioning in Vietnam, it is crucial to understand the factors that influence consumers' purchasing decisions. This understanding is essential for businesses to develop effective marketing strategies. The main focus of this dissertation is to investigate the impact of the 4Cs factors (Customer Value, Cost, Convenience, Communication) on the purchasing intention of Vietnamese consumers toward air conditioners. By conducting surveys, analyzing data, and drawing inferences, this study provides valuable insights into consumer buying behavior, which can assist manufacturers and enterprises in the Vietnamese air conditioning sector. The author utilizes both qualitative and quantitative methodologies. The qualitative methodology involves interviews with a panel of 20 experts, while the quantitative methodology involves data analysis using SPSS 20.0 software. The research findings reveal the influence of various factors on purchasing intention, including (1) Cost, (2) Corporation Image, (3) Convenience, (4) Communication, and (5) Consumer factors. This paper presents the results of the research by analyzing the collected data.

Keywords: Marketing 4Cs, Purchasing Intention, Air Conditioning Industry.

1. INTRODUCTION

1.1 Practical context

The estimation for the Global Air Conditioning Market size to reach USD 201.78 billion by 2024 is projected to escalate to USD 259.49 billion by 2029, exhibiting a Compound

Annual Growth Rate (CAGR) of 5.15% within the period of 2024-2029 (mordorintelligence.com, 2024). The escalating global temperatures and humidity levels have led to a shift in the perception of air conditioners from a luxury item to a necessity. Howarth, Camarasa, Lane & Risquez Martin (2023) highlighted in IEA's report of the rapid surge in demand for air conditioners in emerging and developing economies, where a lesser percentage of households own such appliances. For instance, the ownership rate exceeds 90% in the United States and Japan, while in Southeast Asia, it stands at a mere 15%, and in India and Africa, it plummets to 5%. Consequently, there is a substantial global upsurge in the demand for air conditioning, particularly in Southeast Asia.

In Vietnam, a nation situated in the tropical climatic zone, characterized by high temperatures and boasting a population nearing 100 million, the demand for air conditioning units is substantial. A report from Euromonitor International (2021) identifies air conditioners as the most rapidly growing industry in 2021, with an impressive growth rate of 85%. Consequently, the Vietnamese refrigeration sector holds significant potential within Southeast Asia. Projections indicate that by 2023, the market size in Vietnam could soar to 2.4 billion USD (Vietdata, 2022). Presently, Vietnam has attracted the involvement of renowned international brands such as Samsung, Panasonic, Casper, Daikin, LG, Toshiba, Sharp, alongside domestic brands like REE, Hoa Phat, Sunhouse, among others.

1.2 Theoretical context

Despite the challenges posed by the Covid-19 pandemic and its economic consequences, there have been significant changes in consumer shopping behaviors (Eger et al., 2021). Studies have shown that the pandemic has had a lasting impact on consumer buying habits, with online shopping becoming the dominant trend (Dwivedi et al., 2020). Additionally, research has revealed notable shifts in product preferences (Sim & et al., 2022), purchase motivations (Vázquez-Martínez, Morales-Mediano & Leal-Rodríguez, 2021), and spending priorities (Sheth, 2020; Vázguez-Martínez et al., 2021). As a result, refrigeration brands must adapt their marketing strategies to effectively persuade consumers to choose their air conditioner brand, especially in the competitive Vietnamese market. One effective approach that businesses can adopt is the 4Cs marketing strategy, which has been shown to improve competitiveness (Manafzadeh & Ramezani, 2016). Numerous studies have demonstrated the positive impact of the 4Cs marketing strategy, which focuses on customers, costs, convenience, and communication, on business marketing effectiveness and growth (Idris, 2021). Therefore, this article will explore and utilize the 4Cs marketing strategy to encourage customers in Vietnam to purchase air conditioners.

2. LITERATURE REVIEW

2.1 Purchasing Intention Theory

Numerous scholars have defined purchase intention over the course of decades to describe the willingness of consumers to buy goods (Wu, Yeh, & Hsiao, 2011). However, for clarity, purchase intention can be understood as a consumer's inclination to purchase

a product, with a higher level of purchase intention indicating a stronger desire to acquire the product or service (Schiffman & Kanuk, 2000). This concept has been supported by Mullet & Marvin (2003) in their research.

Currently, purchase intention is influenced by various factors in the realm of e-commerce platforms (Donni et al., 2018). In essence, consumer purchase intention is closely linked to their behavior towards products and services (Rahadi & Mulyano, 2021), and businesses are interested in understanding it as it helps predict the purchasing tendencies of individuals (Sarah, 2021). Therefore, a deeper understanding of consumer behavior and purchasing strategies can lead to more effective and successful marketing efforts in highly competitive markets.

2.2 Marketing 4Cs Theory

The theoretical framework of the 4C marketing mix, originally formulated by an American scholar R.F. Lauterborn (1990), has become a prominent model within the capitalist economies of liberal nations and has been researched by many researchers by centuries (Kubicka, 2016) especially in the digital era, the social marketing strategies are also applied 4Cs model to implement marketing campaigns (Akba, Lawson & Turner, 2023). In fact, this innovative model serves as a modern alternative to the traditional 4Ps marketing mix theory. While the established 4Ps framework focuses on a company's marketing strategy centered on the product, price, place, and promotion, the 4Cs marketing mix theory highlights the crucial role of customers by placing them at the core of the marketing paradigm.

In the domain of 4C marketing, marketers are encouraged to employ the segmentation, targeting, and positioning (STP) process to develop compelling marketing strategies. Central to this approach is the utilization of the 4Cs - communication, consumer needs, cost, and convenience - to participate in meaningful conversations with customers (Londhe, 2014). Furthermore, the emphasis is on identifying and fulfilling the actual purchasing needs of consumers, optimizing the overall purchasing expenditure in line with customer preferences, and ensuring the availability of products and services, thereby enhancing consumer convenience. Undeniably, the primary principle of the 4Cs marketing mix strategy is centered on prioritizing customers, recognizing their essential roles and distinct characteristics. In today's competitive environment, the 4C marketing mix or relationship marketing exerts a significant influence on consumers' buying choices, aligning with the values they actively pursue. By advocating for customer-centric qualities such as value, cost, communication, and convenience, the 4C marketing mix plays a crucial role in fostering positive and enduring relationships with customers (Babaei et al., 2022).

In summary, the 4C marketing mix theory signifies a progression in marketing strategy, firmly placing customers at the forefront of marketing efforts and emphasizing the importance of establishing customer-centric relationships that resonate with modern consumer preferences and values.

2.3 Corporate Image Theory

Le Roux (2012) defines corporate image, stating it as the endeavor of a business to instill vision and optimism within the community. Similarly, Christelle (2012) posits that corporate image is intricately linked to the quality of products and services, organizational conduct, corporate ethos, and communication strategies. Establishing a company's image is a byproduct of its operational undertakings encompassing environmental stewardship and social welfare initiatives. As indicated by research conducted by Maduro, Fernandes & Alves (2018), corporate image, alongside reputation, emerges as a crucial intangible asset within the realm of university administration. Another scholarly investigation postulates that corporate image transcends mere product and service representations, encompassing attributes that hold significance in consumer purchase determinations (Rahayu & Zanky, 2018).

The corporate image serves as a testament to triumph in business and public relations engagements. Particularly, the portrayal of a business's image becomes a pivotal subject communicated among clientele through positive and negative word-of-mouth interactions, underscoring the imperative of investment in fortifying and upholding customer contentment towards the brand (Nguyen & Ghadiri, 2021). Moreover, in the contemporary landscape shaped by technological advancements, consumers are faced with a plethora of product options, hence, pricing and brand identity emerge as critical determinants influencing consumer purchase choices, especially on e-commerce platforms such as Shopee (Norvadewi et al., 2023).

Consequently, the significance of brand identity cannot be overstated, with empirical evidence demonstrating that while brand experience and viral marketing do not significantly impact brand loyalty, the brand image wields a positive influence on fostering brand allegiance (Philip & Pradiani, 2024).

3. HYPOTHESES DEVELOPMENT AND MODEL

3.1 Consumer factor

Constantinides (2002) has demonstrated that customers hold a paramount position in the business growth of an enterprise, highlighting the crucial role of the customer care or service department in formulating effective strategies. Marketers are advised to implement the findings by concentrating on enhancing service quality and addressing customer concerns. This approach can lead to heightened consumer satisfaction and loyalty towards the product, as asserted by Juanamasta (2019). Notably, substantial investments in customer care services enable businesses to comprehend the "want to buy" demands of customers, thereby facilitating the anticipation and fulfillment of their needs. Enhancements in the shopping cart system, ensuring product availability, can boost the persuasiveness of the shopping experience and drive customer purchases, as suggested by Jarad (2020). A recent study by Maulidah et al. (2024) has underscored the significant influence of "consumer solution" in fostering sustainable marketing practices and influencing consumer decisions to purchase environmentally friendly products. This

underscores the critical nature of the business-consumer relationship in the contemporary landscape of competitive business expansion.

Consequently, the author introduced hypothesis H1 in the study to elucidate the impact of consumer-related factors and purchasing intentions on air conditioning products in Vietnam.

Hypothesis H1: Consumer factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

3.2 Cost factor

Pricing products effectively across various sales channels such as online platforms and brick-and-mortar stores, while implementing promotional strategies, is currently identified as a cost-effective approach for consumers (Wang, 2019). It is an evident that opting to purchase a product above its listed price can result in significant additional expenses associated with the acquisition of the product or service. These additional costs may encompass not only the actual purchase price but also time expenditures, transportation costs, advertising expenses, production outlays, among others (Jarad, 2020). Therefore, it is imperative to maintain stable pricing that does not lean towards being overly expensive, while simultaneously ensuring that the quality of the marketed goods is perceived positively by consumers. Another perspective presented by Idris (2021) asserts that the pricing of products or services should be reasonable and aligned with prevailing market conditions, with the services offered to customers reflecting their perceived value. Furthermore, a recent study conducted by Maulidah et al. (2024) underscored the substantial impact of "cost solutions" in encouraging the purchase of environmentally friendly products in Indonesia.

Consequently, the focus of this research is on a specific product category which is air conditioners. Given the nature of this product as a bulky and high-value item, it is essential for administrators to meticulously consider consumer preferences and associated expenses when determining the pricing strategy for this product. So, the hypothesis H2 should be:

Hypothesis H2: Cost factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

3.3 Convenience factor

Convenience in this 4Cs marketing mix concept means the convenience for customers to receive the goods and services they need (Stylianou, 2013). Convenience also refers to the ease of providing a service or location of purchasing a product. These factors are important in attracting consumers to use the services provided or purchase products provided by the company.

If 4Ps marketing only stops at providing customers with easy access to product services based on the location that is most convenient for the business, then 4Cs marketing offers a better choice for customers, and client. With the 4Cs marketing mix, customers'

advantages include the fact that they can easily access products and services both physically and on the online business and e-commerce platforms.

According to Kar (2011), the convenience of service location is one of the factors contributing to a company's success in marketing. In addition, with conveniences such as home delivery, consumers will be more interested in buying products because it saves them time (Barska, 2018). Sharma (2015) found that quality, convenience, and reasonable price are important factors that create customer loyalty. So the hypothesis H3 should be:

Hypothesis H3: Convenience factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

3.4 Communication factor

Stanton (2017) posits that effective communication between companies and consumers plays a crucial role in attracting consumers toward utilizing a particular product or service. As noted by Kar (2011), employing suitable communication channels to engage with users can lead to the triumph of a marketing campaign, representing one of the most potent marketing strategies in history. It is imperative for marketers to implement two-way communication between entrepreneurs and consumers, fostering the exchange of ideas and enhancing the quality of services rendered (Stylianou, 2013). The feedback loop between customers and businesses not only aids in fortifying trust but also enables businesses to better cater to customer demands, consequently bolstering business profits and cultivating loyal customers (a pivotal aspect for business sustainability).

Hence, it is discernible that within the 4Cs marketing mix framework, the communication strategy stands out as a paramount form of two-way marketing communication between enterprises and customers. This approach aims to heighten customer engagement with the products offered by the business, as expounded by Cheng (2017). Particularly within the realm of agriculture, the communication variables wield a direct impact on repurchase intention, while consumer satisfaction variables directly influence repurchase intention. (Rasyid et al., 2023)

In essence, through endeavors to communicate product attributes to customers, marketers can effectively sway customers towards acknowledging the superiority of the product and its exceptional offerings (Muttaqin, 2022). Hypothesis H4 was formulated to scrutinize the impact of the "communication" element within the 4Cs marketing mix strategy on customers' intent to purchase air conditioners in Vietnam.

Hypothesis H4: Communication factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

3.5 Corporate image factor

Customers not only make choices about products based on their quality but also consider the overall impression of the business. This aspect is particularly crucial as the impact on the business's overall image is shaped by information and feedback from customers (Chien & Chi, 2019; Yu, et al., 2021). In a separate study, Lestari et al. (2021) have

highlighted the significant influence of corporate image factors, serving as an intermediary variable once customers have knowledge about the product and develop their intention to purchase.

Based on the evaluation and measurement findings of previous researchers, there is a strong recommendation to incorporate hypothesis H5 into the research model to investigate and assess the impact of corporate image factors on air conditioner companies and brands operating in Vietnam, while also examining their effect on current consumer purchasing intentions. So the last hypothesis should be:

Hypothesis H5: Corporate image factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

Consumer H1(+) Cost H2(+) Cost H3(+) Convenience H4(+) H5(+) Corporate Image

3.6 Conceptual model

Figure 1: Conceptual model (Source: Authors)

Hypothesis H1: Consumer factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

Hypothesis H2: Cost factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

Hypothesis H3: Convenience factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

Hypothesis H4: Communication factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

Hypothesis H5: Corporate image factor has a positive influence on customers' purchase intention of air conditioners in Vietnam.

Table 1 presents a comprehensive overview of the 28 observed variables, which have been disseminated to the audience as part of the survey scales for the research.

Observed variables							
CON	CONSUMER						
CON1	Consumers own the full functionality of the product						
CON2	Consumers get to experience the latest version of the product						
CON3	Consumers always receive quality value and good service						
CON4	Products bring emotional value to consumers						
CON5	Products bring social value to consumers						
COS	COST						
COS1	Products have competitive prices						
COS2	Product's price is consistent with quality value						
COS3	Businesses has many promotional programs						
COS4	Businesses support costs other than product prices						
COV	CONVENIENCE						
COV1	Consumers can easily access products across many stores						
COV2	Consumers can easily find product information on the online platform						
COV3	Consumers can easily pay through many forms (cash, online payment)						
COV4	Convenient home delivery of products						
COV5	Convenient warranty and repair policy						
COM	COMMUNICATION						
COM1	Products are widely promoted on channels (direct and online platform)						
COM2	Consumers can actually experience products at sales events						
COM3	Consumers always receive enthusiastic and complete consulting support						
COM4	Businesses always listen to suggestions from customers						
COM5	New products are always perfect versions based on customer comments						
COI	CORPORATE IMAGE						
COI1	The enterprise has a reputation in the field of air conditioning business						
COI2	Businesses always participate in community work						
COI3	Businesses always care about users' problems						
COI4	Businesses always care about users' problems						
COI5	Businesses are always trusted by users						
PUI	PURCHASE INTENTION						
PUI1	I intend to purchase an air conditioner for my family						
PUI2	I will consider buying products from businesses that have many good policies for customers						
PUI3	I am willing to purchase products from businesses that have a good corporate image						
PUI4	To have good care and warranty service, I will buy products from reputable businesses						

Table 1: Synthesize observed variables

4. DATA ANALYSIS

4.1 Scale Reliability

In Table 2, the findings from the reliability assessment utilizing Cronbach's Alpha for the 5 independent variables and 1 dependent variable are described. The range of Cronbach's alpha coefficients, spanning from 0.792 to 0.862, serves as a robust indicator of the considerable reliability exhibited by the measurement scales under scrutiny. The result was obtained during the third analytical iteration: the observed variables of COM4 and COM5 were implemented to optimize Cronbach's alpha metric attributed to the Communication (COM) factor, culminating in an enhanced value of 0.792. Furthermore, a discerning approach was employed which led to the removal of COI1, strategically

conducted to bolster the Cronbach's alpha about the Corporate Image (COI) factor to a heightened level of 0.814 in the ensuing phase of analysis.

Factor	Observed variables	Cronbach's Alpha
Consumer (CON)	CON1, CON2, CON3, CON4, CON5	0.862
Cost (COS)	COS1, COS2, COS3, COS4	0.856
Convenience (COV)	COV1, COV2, COV3, COV4	0.853
Communication (COM)	COM1, COM2, COM3	0.792
Corporate Image (COI)	COI2, COI3, COI4, COI5	0.814
Purchase Intention (PUI)	PUI1, PUI2, PUI3, PUI4	0.860

Table 2: Cronbach's Alpha of Factors

4.2 Exploratory Factor Analysis (EFA)

Following the KMO and Bartlett's tests in factor analysis, the results indicate significant intercorrelations among observed variables in the population (Sig. coefficient = 0.000 < 0.05) and a robust KMO coefficient of 0.826 (> 0.5), affirming the presence of substantial correlations among the observed variables. These findings validate the suitability of conducting an Exploratory Factor Analysis (EFA) in this context. Furthermore, the Eigenvalues of all factors surpass the threshold value of 1, with the 5th factor exhibiting the lowest Eigenvalue of 1.560, still exceeding the criterion (> 1). Moreover, the total variance extracted amounts to 67.964%, surpassing the recommended threshold of 50%. This implies that 67.964% of the data's variability is accounted for by the 5 identified factors. In Table 3, the outcomes of the EFA analysis reveal the extraction of 5 distinct independent factors, underscoring the nuanced structure and interrelation among variables unearthed through the analytical process. Then there were only 20 observed variables left and were divided into 05 groups as follows:

Variances	Factor Loading						
Variances	1	2	3	4	5		
CON2	.824						
CON4	.818						
CON3	.812						
CON5	.768						
CON1	.734						
COV3		.841					
COV2		.823					
COV1		.816					
COV4		.732					
COS3			.808				
COS2			.801				
COS4			.800				
COS1			.782				
COI2				.813			
COI3				.782			
COI5				.746			
COI4				.734			
COM2					.837		
COM1					.831		
COM3					.783		

Table 3: Result of Exploratory Factor Analysis

4.3 Correlation Analysis

The correlation coefficient matrix presented above reveals that the sub-variable "Air conditioner purchase intention (PUI)" exhibits correlations with all 5 independent variables, with significant coefficients between variable pairs (< 0.01). While there is an observable correlation among the independent variables themselves, the coefficients are notably low, indicating a minimal likelihood of encountering autocorrelation. Consequently, it is reasonable to infer that the independent variables are suitable for inclusion in regression analysis to assess their impact on the intention to purchase air conditioners, given the lack of substantial autocorrelation concerns and the significant correlations observed between the variables of interest.

		PUI	CON	COV	COM	COS	COI
	Pearson Correlation	1	.346**	.480**	.377**	.552**	.529**
PUI	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	329	329	329	329	329	329
	Pearson Correlation	.346**	1	.147**	.248**	.207**	.242**
CON	Sig. (2-tailed)	.000		.008	.000	.000	.000
	Ν	329	329	329	329	329	329
	Pearson Correlation	.480**	.147**	1	.270**	.388**	.340**
COV	Sig. (2-tailed)	.000	.008		.000	.000	.000
	Ν	329	329	329	329	329	329
	Pearson Correlation	.377**	.248**	.270**	1	.252**	.202**
СОМ	Sig. (2-tailed)	.000	.000	.000		.000	.000
	Ν	329	329	329	329	329	329
	Pearson Correlation	.552**	.207**	.388**	.252**	1	.405**
COS	Sig. (2-tailed)	.000	.000	.000	.000		.000
	Ν	329	329	329	329	329	329
	Pearson Correlation	.529**	.242**	.340**	.202**	.405**	1
COI	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	Ν	329	329	329	329	329	329
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 4: Correlation coefficient matrix between variables

4.4 Regression Analysis

The findings from the regression analysis reveal that the model yields an R2 coefficient of 0.516, with the adjusted R2 coefficient standing at 0.508. This signifies a noteworthy correlation between the independent and dependent variables, falling within the range indicative of a substantial relationship (0.5<R2<0.8). The adjusted R2 coefficient illustrates that the 5 independent variables incorporated in the regression model succinctly account for 50.08% of the variation observed in the dependent variable. Table 5 below will show clearly the result number.

Table 5: Model summary table

Model	Model R R Square		Adjusted R Square	Std. Error of the Estimate	Durbin-Watson		
1	1 ,718 ^a ,516 ,508 ,57828		2,101				
a. Predictors: (Constant), COI, COM, CON, COV, COS							
b. Dependent Variable: PUI							

Testing the phenomenon of multicollinearity between independent variables shows that the coefficient, 1<Durbin-Watson =2.1<3, satisfies the condition. This coefficient is in the range that accepts the hypothesis of no first-order serial correlation (the residuals do not have first-order serial correlation with each other).

At the same time, the variance magnification factor VIF < 2 shows that the independent variables are not closely related to each other, so there is no multicollinearity phenomenon.

Upon conducting the research hypotheses testing, it is evident that all variables exhibit a significance level denoted by Sig < 0.05, thereby leading to the acceptance of hypotheses H1, H2, H3, H4, and H5. Consequently, this outcome signifies that the entire set of 5 independent variables within the model, which encompasses "Consumer", "Cost", "Convenience", "Communication", and "Corporate Image", uniformly exert influence on customers' intention to purchase air conditioners within the Vietnamese consumer environment.

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		В	Std. Error	Beta		_	Tolerance	VIF
1	(Constant)	-,540	.232		-2.325	.021		
	CON	.162	.044	.151	3.685	.000	.893	1.120
	COV	.216	.045	.210	4.812	.000	.785	1.275
	COM	.178	.048	.154	3.705	.000	.865	1.156
	COS	.311	.048	.290	6.472	.000	.746	1.341
	COI	.302	.049	.272	6.180	.000	.773	1.293
a. Dependent Variable: PUI								

Table 6: Statistical parameters of regression model

Based on the results of Multiple Linear Regression which also showed the function of Multiple Regression such as:

Customer's Purchasing Integrity (PUI) = 0.290 x Cost (COS) + 0.272 x Corporation Image (COI) + 0.210 x Convenience (COV) + 0.154 x Communication (COM) + 0.151 x Consumer (CON)

In conclusion, the standardized results of the multiple linear structural model show that 5 factors influence customers' intention to buy air conditioners in Vietnam as follows: "Cost" factor is a strongly influential factor.

Highest (standardized regression weight is 0.290); ranked second is "Corporate Image" (standardized regression weight is 0.272); third is "Convenience" (standardized regression weight is 0.210); fourth is "Communication" (standardized regression weight is 0.154); and finally, "Consumer" (standardized regression weight is 0.151).

Thus, hypotheses H1, H2, H3, H4, and H5 are all accepted with 95% confidence (the order levels of impact of all factors are shown in the below table 7).

No	Variables	Standard. Beta	Percent %	Level of impact
1	Cost (COS)	0.290	29.00%	1
2	Corporation Image (COI)	0.272	27.20%	2
3	Convenience (COV)	0.210	21.00%	3
4	Communication (COM)	0.154	15.40%	4
5	Consumer (CON)	0.151	15.10%	5

 Table 7: Determine the importance of independent variables in percentage

5. DISCUSSION

Based on the findings derived from the research and the comprehension of the theoretical framework, a comprehensive research model has been constructed for the purpose of this study. The model underwent empirical testing utilizing a sample of 329 surveys encompassing both business and individual consumers who have acquired and utilized air conditioning units across three distinct regions in Vietnam. The insights garnered through this investigation have yielded significant contributions to the domain of management practice.

Regarding the scale employed in this analysis, the research model integrates factors drawn from the 4Cs Marketing Mix theoretical framework, which includes: Consumer, Convenience, Cost, and Communication, in addition to an innovative factor, namely Corporate Image, introduced into the model. Notably, this model has not been previously utilized in the context of examining the determinants influencing the purchase intention of air conditioning systems in Vietnam. Concurrently, the results obtained indicate that the entire scale utilized in this research demonstrates reliability (Cronbach's Alpha>0.7) and possesses applicability for future studies. Within the summary table of the thesis's research model, the adjusted R-squared coefficient R2 is recorded at 0.508, indicating that the five independent variables corresponding to the factors "Cost," "Corporate Image," "Convenience," "Communication," and "Consumer" exert a substantial influence on consumers' intention to purchase air conditioning units in Vietnam.

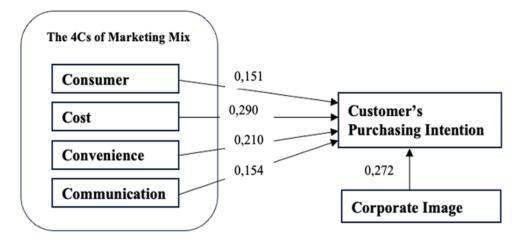


Figure 2: Research Model (Final) (Source: Authors)

In conclusion, the outcomes of the research corroborate the existence of five factors that significantly impact the intention of consumers in Vietnam to acquire air conditioning units. The influence of these factors is evaluated through a detailed analysis of observed variables, which positively affect consumers' purchasing intentions in the following ascending order: "Cost," "Corporate Image," "Convenience," "Communication," and "Consumer".

6. MANAGERIAL IMPLICATIONS

Based on the empirical research outcomes, the paper presents management implications intended to assist enterprises and distributors in augmenting the caliber of sales services, with a specific concentration on the determinants that affect consumers' purchasing intentions regarding air conditioners in Vietnam.

The primary managerial recommendations emphasize the enhancement of the independent variable that exhibits the most substantial influence on the dependent variable (as indicated by the Beta coefficient), in conjunction with the amelioration of observed variables that display low average measurement values within each independent variable.

Corporate Image: The manuscript accentuates the critical importance of establishing unequivocal core values, nurturing an ethical corporate culture, and adopting corporate social responsibility. It advocates for the allocation of resources towards technological advancements, the promotion of CSR initiatives, and the development of consumer trust through the provision of transparent information disclosures.

Convenience: Strategic initiatives are directed towards prioritizing expeditious delivery and installation services, offering the expertise of mobile technicians, establishing showrooms in areas of high population density, and facilitating flexible payment options to enhance customer convenience.

Cost: The document advocates for the implementation of competitive pricing strategies, the development of promotional programs, the efficient management of marketing expenditures, and the communication of price advantages grounded in value to effectively address the cost dimension.

Consumer: The thesis posits the importance of utilizing market research to comprehend customer demographics and to accentuate emotional and social benefits within marketing initiatives to influence consumer purchasing behavior.

Communication: Sales managers are counseled to adopt an omni-channel sales framework, which integrates a cohesive shopping experience across both physical and online platforms. Furthermore, the marketing team is encouraged to leverage the capabilities of social media networks such as Instagram and Zalo to directly engage with customers, thereby facilitating accessible search and shopping experiences.

7. LIMITATIONS AND PROPOSED DIRECTIONS OF THE RESEARCH

Although the subject matter addresses the research objectives, this investigation has certain limitations that should be noted. Firstly, the study only focused on factors related to the theoretical framework of Marketing 4Cs and the "Corporate Image" variable. This means that there are likely other factors that influence consumers' purchasing intentions for air conditioners that were not explored in this study.

Future research should consider examining these additional determinants. Additionally, the current research only explains approximately 50% of the variability in consumer purchasing intentions, indicating that there are still other factors at play. Secondly, due to time constraints, the survey was conducted using an online convenience sampling approach. This means that the demographic representation may not be diverse or objective, and therefore, the sampling methodology should be improved in future studies to ensure the quality of the findings.

References

- 1) Akbar, M. B., Lawson, A., & Turner, N. (2023). Extending Lauterborn's 4Cs for Social Marketing. In *The Palgrave Encyclopedia of Social Marketing* (pp. 1-8). Cham: Springer International Publishing.
- Babaei, M. R., Mostakhtemi, R., & Esmaili, S. (2022). Identifying the effect of marketing mix 4C's on customers' satisfaction of life insurance (Case study: Pasargad insurance offices in Tehran). *Agricultural Marketing and Commercialization Journal*, 1(1), 43-53.
- 3) Barska, A. (2018). Millennial consumers in the convenience food market. *Management*, 251-264.
- Blasco, V. J. V., Sellés, P. M., Folgar, M. I., Silvestre, V. V., Blay, P., & Martínez, A. V. (2021). Impacto de las medidas de confinamiento durante la pandemia de Covid-19 en el consumo de riesgo de alcohol. *Revista Española de Salud Pública*, (95), 140.
- 5) Cheng, T. (2017). Research on Marketing Strategy of Electronic Components. 4th International Conference on Education, Management, Arts, *Economics and Social* Science (ICEMAESS 2017), pp. 236-240. Atlantis Press.
- 6) Chien, L., & Chi, S. (2019). Corporate image as a mediator between service quality and customer satisfaction: difference across categorized exhibitors. *Heliyon*, 5(3).
- 7) Constantinides, E. (2002). The 4S Web-Marketing Mix Model. *Electronic Commerce Research and Applications*, 1(1), 57-76.
- Donni, R., Dastane, O., Haba, H. F., & Selvaraj, K. (2018). Consumer perception factors for fashion M-commerce and its impact on loyalty among working adults. *Business and Economic Research*, 8(2), 168-192. Available at: https://doi.org/10.5296/ber.v8i2.13044
- 9) Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., & Upadhyay, N. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International journal of information management*, *55*, 102211.
- 10) Eger, L., Komárková, L., Egerová, D., & Mičík, M. (2021). The effect of COVID-19 on consumer shopping behaviour: Generational cohort perspective. *Journal of Retailing and consumer services*, *61*, 102542.
- 11) Gary M. Mullet & Marvin Karson (2003). Analysis of Purchase Intent Scales.

- 12) Howarth, N., Camarasa, C., Lane, K., Risquez Martin, A. (2023). Keeping cool in a hotter world is using more energy, making efficiency more important than ever. *The International Energy Agency*. https://www.iea.org/commentaries/keeping-cool-in-a-hotter-world-is-using-more-energy-making-efficiency-more-important-than-ever
- 13) Idris, J. (2021). Marketing mix 4Cs: Impact on small and medium Entrepreneurs (SMEs) marketing performance. *In Proceeding of the 8th International Conference on Management and Muamalah* (pp. 221-226).
- 14) Jarad, G. A. (2020). Application of the 4Cs marketing mix in the digital environment. *International Journal of Psychosocial Rehabilitation*, 24(10), 2117.
- 15) Juanamasta, I.G., Wati, N.M.N., Hendrawati, E., Wahyuni, W., Pramudianti, M., Wisnujati, N.S., Setiawati, A.P., Susetyorini, S., Elan, U., Rusdiyanto, R. and Astanto, D. (2019). The Role of Customer Service through Customer Relationship Management (CRM) to Increase Customer Loyalty and Good Image. International Journal of Scientific and Technology Research, 8(10), 2004-2007
- 16) Kar. (2011, 08 14). 4 Cs of Marketing The Marketing Mix. *Retrieved from Business Fundas: http://www.business-fundas.com/2011/4-cs-of-marketing-the-marketingmix*
- 17) Kubicka, A. (2016). Personalized information management by online stores in 4c model. Case study. *Foundations of Management*, 8(1), 53-68.
- 18) Lauterborn, R. (1990). New marketing litany: 4Pc pass; C-words take over. Advertising Age, 1990, 26.
- 19) Le Roux, C. (2012). An assessment of the role of corporate brand identity in corporate brand image formation (*Doctoral dissertation*).
- Lestari, E. R., Septifani, R., & Nisak, K. (2021). Green awareness and green purchase intention: The moderating role of corporate image. In IOP Conference Series: *Earth and Environmental Science* (Vol. 924, No. 1, p. 012051). *IOP Publishing*.
- 21) Londhe, B. R. (2014). Marketing Mix for Next Generation Marketing. Procedia Economics and Finance, 11, 335–340. https://doi.org/10.1016/s2212-5671(14)00201-9
- 22) Maduro, S., Fernandes, P. O., & Alves, A. (2018). Management design as a strategic lever to add value to corporate reputation competitiveness in higher education institutions. Competitiveness Review: *An InternationalBusiness Journal*, 28(1), 75–97
- 23) Manafzadeh, E., & Ramezani, A. (2016). Identifying and prioritizing the effect of marketing mix from the customer's perspective (4C) on the competitiveness of insurance companies using DEMATEL technique: A case study of Tehran Insurance Companies. *Marketing and branding research*, 3, 86-96.
- 24) *Market Size of Global Air Conditioner Industry.* (n.d.). Mordor Intelligence. Retrieved June 8, 2024, from https://www.mordorintelligence.com/industry-reports/air-conditioner-market/market-size.
- 25) Maulidah, S., Ekawati, A. D., Faizal, F., Nasikh, Sahro, H., & Shaleh, M. I. (2024). The effect of sustainable marketing analysis on purchasing decisions with buying intention as a mediation: evidence from zero waste shop in Indonesia. *Business: Theory and Practice*, 25(1), 278–285. https://doi.org/10.3846/btp.2024.19317
- 26) McCarthy, E. (1964). Basic Marketing. A Managerial Approach. Homewood: Irwin.mstar. (2020) Belanjawan 2021: Keusahawanan, PKS berpotensi rancakkan ekonomi negara. *Retrieved from m.Star: https://www.mstar.com.my/lokal/*
- 27) Muttaqin, I. (2022). Purchasing Decisions Through the 4C Marketing Mix (To Customers of The Gade Coffee & Gold Bogor). *Management*, 7(01).
- Nguyen, T. T., & Ghadiri, S. M. (2021). Factors Affecting Student's Word of Mouth (WOM) Behavior in Sharing University Branding-Case of Private Universities in Ho Chi Minh, Vietnam. *Design Engineering*, 83-98.

- 29) Norvadewi, N., Ferdinandus Sampe, Rian Ardianto, & Muhammad Yusuf. (2023). The Impact of Brand Image And Price Online Product Purchase Decisions At Shopee. *Asian Journal of Management, Entrepreneurship and Social Science*, *3*(01), 336-351.
- Philip, L., & Pradiani, T. (2024). Influence Brand Experience, Viral Marketing and Brand Image to Brand Loyalty to Service Users Streaming Spotify in Indonesia. *ADI Journal on Recent Innovation*, 5(2), 127-135.
- 31) Rahadi, R.A and Mulyano, Y. (2021) 'Qualitative Study on Millennials' Housing Preferences in Jakarta, Indonesia' International Journal of Innovation, Creativity and Change, 15(5), pp. 369382.
- 32) Rahayu, F. A., & Zanky, M. N. (2018). The effects of corporate image, user image, and product image towards purchasing interest of Suzuki Motorcycle. *KnE Social Sciences*, 104-113.
- 33) Rasyid, A., Yudiandri, T. E., Nurhab., M. I., Papilaya, F., Heryadi, D. Y. (2023). The Effect of Marketing Mix on Repurchase Intention of Hydroponic Farm Vegetable Products. *JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi)*, 9(2), 376–381.
- 34) Sarah, P. (2021, April 13). Customer purchase intention: Definition, why (+ how) to measure & convert. Namogoo. *Retrieved September 10, 2022, from https://www.namogoo.com/blog/consumer-behavior-psychology/customer-purchaseintention/*
- 35) Schiffman LG, Kanuk LL. Consumer Behavior (7th ed.). Wisconsin: Prentice Hall, 2000.
- 36) Sharma, I. K. (2015). Service Quality, Service Convenience, price and fairness, customer loyalty, and mediating role of customer satisfaction. *International Journal of Bank Marketing, 1-27.*
- 37) Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die? *Journal* of business research, 117, 280-283.
- 38) Sim, J., Cho, D., Hwang, Y., & Telang, R. (2022). Frontiers: virus shook the streaming star: estimating the COVID-19 impact on music consumption. *Marketing Science*, *41*(1), 19-32.
- 39) Stanton, R. (2017). Communicating with employees: Resisting the stereotypes of generational cohorts in the workplace. *IEEE Transactions on Professional Communication*, *60*(3), 256-272.
- 40) Stylianou, A. (2013, 101). Lauterborn's 4C's. The Marketing Mix. SmartFarmer.
- 41) Vázquez-Martínez, U. J., Morales-Mediano, J., & Leal-Rodríguez, A. L. (2021). The impact of the COVID-19 crisis on consumer purchasing motivation and behavior. *European research on management and business economics*, *27*(3), 100166.
- 42) Vietnam's refrigeration market: Japanese brands lead the game. (2022, August 28). Vietdata. Retrieved from https://www.vietdata.vn/post/vietnam-s-refrigeration-market-japanese-brands-leadthe-game
- 43) Wang, S. (2019). The Innovative Study of Marketing Strategy for E-commerce Case Taobao. *Thesis, University of Applied Science*.
- 44) Wu, P. C. S., Yeh. G. Yeong-Yuh, & Hsiao, Chieh-Ru. (2011). The effect of store image and service quality on brand image and purchase intention for private label brands. *Australasian Marketing Journal*. 19(1) 30-39. https://doi.org/10.1016/j.ausmj.2010.11.001
- 45) Yu, W., Han, X., Ding, L., & He, M. (2021). Organic food corporate image and customer co-developing behavior: The mediating role of consumer trust and purchase intention. *Journal of Retailing and Consumer Services*, 59, 102377.