The Influence of Perceived Product Innovativeness on Customer Commitment: An Empirical Study of TPB Theory

Zichen Wang[a]

College of Innovation and Management, Suan Sunandha Rajabhat University, Bangkok, Thailand

Keywords: Perceived Product Innovativeness, Customer Commitment, Theory of Planned Behavior.

Abstract: The study analyzes the elements that contribute to increased customer commitment in China, with the Chinese brand Vivo as a case study. The advancement of information technology has enabled an increasing number of people to enjoy the conveniences of the Internet at any time and from any location; the population of online users is growing; demand for online shopping is increasing, and an increasing number of customers are gathering information via social media platforms. At the moment, new consumer growth has stalled, and the expense of acquiring new customers is constantly growing. Therefore, if businesses intend to succeed in the market, they must focus on their existing target groups, preserve stickiness, and encourage existing client devotion. After doing data analysis using SmartPLS 3 and SPSS, this study discovered that consumers' perceived innovativeness of a product would have a positive and statistically significant influence on customer commitment. The findings of this study are used to develop practical recommendations for e-commerce platform-based operations and future research initiatives in this area.

1 INTRODUCTION

While the market potential is vast, the new Internet purchasing scene is more dynamic and evolving, competition is getting more complicated and tough, and the introduction of a variety of social media sources has provided shoppers with more alternatives (Anshari, Almunawar, Lim, Al-Mudimigh, 2019). Businesses must develop a loyal consumer base to maintain a competitive advantage in a dynamic, competitive environment because it is far less costly to retain a loyal client than it is to acquire a new one. This ensures a steady stream of earnings for the firm, enabling it to compete more successfully in a competitive market. Customers' ability to participate in the enterprise value chain circulation process has a direct impact on a business's performance in today's competitive market (Wang 2021). This study sought to quantify the association between perceived product innovation and customer commitment. Whether perceived product innovativeness has an impact on consumer commitment is the question under investigation in this study.

2 LITERATURE REVIEW

2.1 Theory of Planned Behavior

According to the theory of planned behavior, whether a consumer will engage in an activity is determined by the customer's own motivation and ability (Hsu, Chang, Yansritakul, 2017). As seen in Figure 1. The theory of planned behavior evolved from rational behavior theory and is now frequently utilized to investigate customers' behavioral intentions and actual conduct.
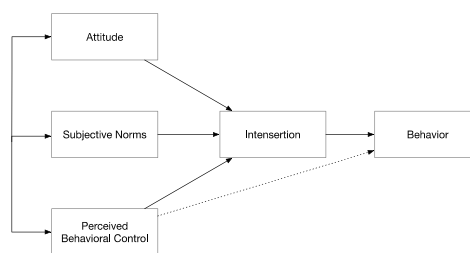

Figure 1: Main variables of the theory of planned behavior.

2.2 Perceived Product Innovativeness

Zhang, Sun, Liu, and Chang (Zhang, Sun, Liu, Chang, 2020) investigated China's inventive toy industry. Zhang et al. analyze the methods through which consumer innovation results in consumers' willingness to pay via perceived product innovation and perceived value. Zhang et al. (Zhang, et al., 2020) discover that perceived product innovation and consumer innovation contribute to willingness to pay.

Perceived product innovation and perceived social value are mediating factors in the link between consumer innovation and consumer willingness to pay. Additionally, research into the actual innovation process has proved unequivocally that the success or failure of new product creation is not simply determined by the corporation but also by the subjective opinions of customers about the product's innovative dimension. Table 1 highlights the definitions of perceived product innovation obtained from prior academics in this research.

Table 1: Perceived product innovativeness definations.

eference	Definition
Kim, Kim, and Hwang (2021)	The subjective view or evaluation of creative conduct based on the subjective perception of the customer is known as consumer perceived innovativeness.
Lowe and Alpert (2015)	It is the degree to which customers see a product as original and enhanced over current alternatives that are referred to as perceived product innovation.
Al-Jundi, Shuhaiber, and Augustine (2019)	Consumer perception of product innovativeness analyzes the differences in product innovation from the consumer's viewpoint, unlike objective study on innovative behavior.
Flores and Jansson (2021)	Perceived innovativeness refers to consumers' subjective views of product innovation.

2.3 Consumer Commitment

Various scholarly definitions of customer commitment are summarized and categorized in Table 2. Even more intriguingly, the definitions of commitment in marketing seem to be consistent from the outset, unlike in the area of organizational behavior, where psychological and behavioral approaches disagree.

Table 2: Customer commitment definations.

Reference	Definition
Hur, Kim, and Kim (2018)	Customer commitment is a pledge to continue a commercial connection between two or more trading partners, whether implicit or explicit.
Iglesias, Markovic, and Rialp (2019)	In contrast to other brands, consumer commitment may be characterized as an emotional or psychological bond with a brand within a product category.
Rather, Tehseen, Itoo, and Parrey (2019)	In business and organizations, customer commitment refers to the goal of developing and maintaining a long-term, stable relationship with a company or organization.
Jacoby and Kyner (1973)	Customer commitment is defined as the long-term psychological reaction to a brand that occurs after customers have considered one or more competing products or services.

2.4 Hypotheses

Hypotheses are presented in this study based on the research objective and a review of the literature.

Hypothesis: Perceived product innovativeness has a positive impact on customer commitment.

3 METHODOLOGIES

3.1 Research Structure

In accordance with Figure 2, the structure was developed in accordance with a prior literature analysis and the theory of planned behavior. The framework incorporates two variables: perceived

product innovativeness and customer commitment, as well as a hypothesis concerning the link between the two variables and the hypothesis. Because of the logical foundation of the idea offered in this research, it is simpler to understand.
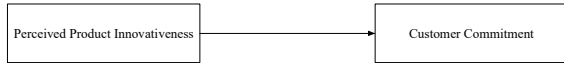

Figure 2: The conceptual framework of research.

3.2 Research Design

The data for this research was collected via the use of a self-administered questionnaire. Everything from 1 (strongly disagree) to 7 (strongly agree) on a Likert scale was evaluated for each of the following constructs (strongly agree).

4 RESEARCH FINDING AND DISCUSSION

4.1 Descriptive Statistics

The quantitative research method was used to disseminate and collect online questionnaires using social media platforms on the Internet in this study. This research sent 150 questionnaires, and after removing those that took less than 30 seconds to complete, 98 legitimate questionnaires remained, with a valid recovery rate of 65.33 percent. Table III and Figure 3 indicate that females outnumbered men by a little margin, with 48 males (48.98 percent of the total) and 50 females (51.02 percent of the total number).

According to Table 3 and Figure 4, the age distribution of Vivo brand smartphone users is dominated by consumers aged 40-49, with 36 individuals accounting for 36.7 percent of the total number, and by consumers under the age of 20, with only nine individuals accounting for 9.2 percent of the total number.

Table 3: The Gender Distribution of Samples.

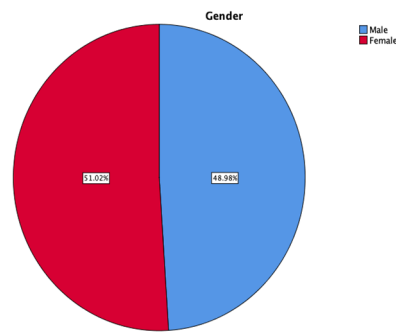| Gender	Number	Percentage（%）
Male	48	48.98
Female	50	51.02

Figure 3: The gender distribution of samples.

Table 4: The age distribution of samples.

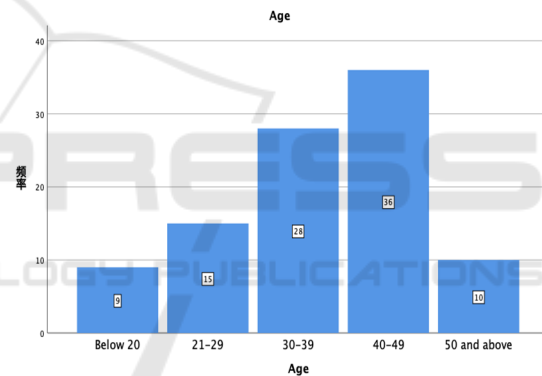| Age	Number	Percentage（%）
Below 20	9	9.2
21-29	15	15.3
30-39	28	28.6
40-49	36	36.7
50 and above	10	10.2

Figure 4: The age distribution of samples.

4.2 Measurement Model

As shown in Table 5, all item loadings were more than the suggested threshold of 0.6 (Hair, Sarstedt, Ringle, Gudergan 2018). As shown in Table I, the results of the construct reliability test indicate that the CR values of all items are more than the intended threshold of 0.7. The average variance extracted (AVE) value exceeds the suggested threshold of 0.5 for the total amount of variation in the indicators accounted for by the latent construct (Hair, et al., 2018). In summary, the measuring scale used in this investigation is valid for convergence. The square root (diagonal value) of the AVE for each structure is larger than the associated correlation coefficient, indicating that the structure has the proper discriminant validity. The factor loadings and cross-

loadings of the measurement model are shown in Table 7.

Table 5: Validity and reliability for constructs.

Constructs	Items	Loadings	Cronbach's alpha	CR	AVE
Customer commitment	CC5	0.829	0.890	0.932	0.822
	CC6	0.944			
	CC7	0.941			
Perceived Product Innovativeness	PCI1	0.797	0.759	0.861	0.673
	PCI10	0.802			
	PCI2	0.861			

Table 6: Discriminant validity.

Constructs	C1	C2
Customer commitment	**0.970**	
Perceived Product Innovativeness	0.759	0.821

a. Values on the diagonal (bolded) are the square root of the AVE, while the off-diagonals are correlations.

Table 7: Factor Loadings and Cross Loadings for the Measurement Model.

Items	Customer commitment	Perceived Product Innovativeness
CC5	**0.829**	0.750
CC6	**0.944**	0.650
CC7	**0.941**	0.642
PCI1	0.684	**0.797**
PCI10	0.517	**0.802**
PCI2	0.644	**0.861**

a. Values on the diagonal (bolded) are the square root of the AVE, while the off-diagonals are correlations.

4.3 Structural Model

The findings of the data analysis performed using SmartPLS are shown in Figures 5 and 6, respectively. In the case of the structural model, as indicated in Figures 5 and 6, the results of hypothesis testing may be obtained by a study of the model. In this study, the relationship between the components is studied.

Table 8 summarizes the findings of the structural route analysis performed using SmartPLS. Customer commitment was favorably and significantly impacted by perceived product innovativeness ($\beta = 0.759$; $t = 17.265$; $p < 0.001$). As a result, hypothesis 1 was validated.

Table 8: The structural path analysis result.

Constructs Relationship	Beta	T Value	f^2	P Values
Perceived Product Innovativeness -> Customer Commitment	0.759	17.265	1.360	0.000

Table 9: Predictive relevance (Q^2).

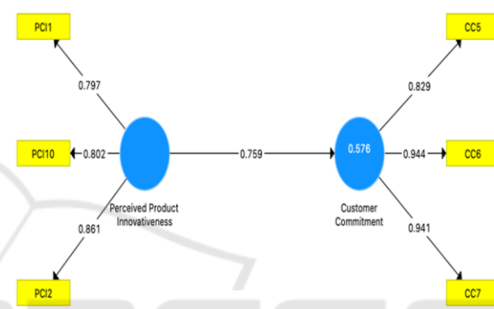|	SSO	SSE	Q^2 (=1-SSE/SSO)
Customer Commitment	354.000	139.273	0.607
Perceived Product Innovativeness	354.000	234.048	0.339

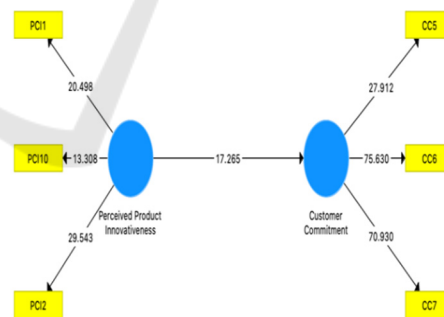Figure 5: Structural model assessment

Figure 6: Effect size.

5 CONCLUSIONS

This research aims to determine if there is a correlation between product innovation and customer commitment as perceived by customers of Vivo-branded smartphones. As a consequence of the data

breakdown described above, this chapter discusses the results and management implications before giving appropriate suggestions and pointing to future study topics. According to the conclusions of this study's data analysis, brand reputation is known to impact consumer commitment. This conclusion is consistent with Foroudi, Jin, Gupta, Foroudi, Kitchen (Foroudi, Jin, Gupta, Foroudi, Kitchen, 2018) and other researchers' findings, indicating that companies with a strong brand reputation are more likely to generate significant customer loyalty and recurrent purchases of the brand's goods and services (Foroudi, et al., 2018). Since regular customers not only help businesses perform better they also reduce marketing expenses, companies can increase customer loyalty by actively innovating their product lines. This will give them an advantage over other brands of similar products and give customers a stake in the service delivery process. As a way to enhance the company's own value benefits and competitiveness, businesses nurture loyal customers as part of their human resource management strategy.

Research limitations and suggestions are included in this study, which aims for rigor in its approach design but is still vulnerable to external influences.

It is proposed that future studies might look at other brands or sectors in order to further understand the link between perceived product innovation and consumer loyalty, even though this study focuses on Vivo-branded smartphones.

REFERENCES

Anshari, M., Almunawar, M. N., Lim, S. A., & Al-Mudimigh, A. (2019). Customer relationship management and big data-enabled: Personalization & customization of services. *Applied Computing and Informatics*, *15*(2), 94-101.

Boisvert, J., & Khan, M. S. (2021). Toward a better understanding of the main antecedents and outcomes of consumer-based perceived product innovativeness. *Journal of Strategic Marketing*, 1-24.

Foroudi, P., Jin, Z., Gupta, S., Foroudi, M. M., & Kitchen, P. J. (2018). Perceptional components of brand reputation: Configuring the Symmetrical and Asymmetrical Paths to brand fidelity and brand purchase intention. *Journal of Business Research*, *89*, 462-474.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.

Hsu, C. L., Chang, C. Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of Retailing and Consumer Services*, *34*, 145-152.

Hur, W. M., Kim, H., & Kim, H. K. (2018). Does customer engagement in corporate social responsibility initiatives lead to customer citizenship behaviour? The mediating roles of customer-company identification and affective commitment. *Corporate Social Responsibility and Environmental Management*, *25*(6), 1258-1269.

Iglesias, O., Markovic, S., & Rialp, J. (2019). How does sensory brand experience influence brand equity? Considering the roles of customer satisfaction, customer affective commitment, and employee empathy. *Journal of Business Research*, *96*, 343-354.

Jacoby, J. & Kyner, D. B. (1973). Brand fidelity vs. repeat purchasing behavior. *Journal of Marketing Research*, *10*(1), 1-9.

Rather, R. A., Tehseen, S., Itoo, M. H., & Parrey, S. H. (2019). Customer brand identification, affective commitment, customer satisfaction, and brand trust as antecedents of customer behavioral intention of loyalty: An empirical study in the hospitality sector. *Journal of Global Scholars of Marketing Science*, *29*(2), 196-217.

Wang, Z. (2021). Experiential marketing: Will it affect customer citizenship behavior? An empirical study of multiple mediation model in Thailand. *Journal of Community Psychology*, 49(6), 1767-1786.

Zhang, F., Sun, S., Liu, C., & Chang, V. (2020). Consumer innovativeness, product innovation and smart toys. *Electronic Commerce Research and Applications*, *41*, 100974.