

Post-acceptance Model of Information Systems Continuance Application on User Behavior Intention of Intelligent Somatosensory Game Console

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ABSTRACT

This study aims to understand the continuous intention of the Intelligent Somatosensory Game Console, which is Nintendo Switch, using the post-acceptance model of Information Systems (IS) continuance as the basic theoretical framework, while the integrated innovation diffusion model and perceived playfulness were used as intrinsic motivation factors. The researchers of this study distributed a total of 376 questionnaires, 363 of which were valid. The Structure Equation Model (SEM) was used to verify the fit of the model, and the results revealed that the post-acceptance model of IS continuance could partially explain the somatosensory game console Switch. While operating the Switch, users gain positive satisfaction (STA), influencing them to use the console continuously. This study concludes that users perceive Switch positively, believing using the game console improves their self-leisure behavior. Moreover, the study's findings suggest that users learn how to operate the gaming console effectively while enjoying and relaxing during the process, increasing their willingness to continue using it.

Keywords: switch, post-acceptance model of is continuance, innovation diffusion theory, perceived playfulness

I. INTRODUCTION

With the innovation of technology and the emergence of the Internet of Things (IoT), the convenience and quality of people's lives have significantly improved. As a system used to record or collect data through the network, IoT can be used in various industries, such as business, healthcare, and even personal lives. IoT improves people's quality of life by providing personal health monitoring, smart home, and smart learning (Shafique et al., 2020). Therefore, IoT gave birth to the concept of a smart lifestyle, which integrates work, life, study, and leisure. To date, relevant sports intelligence application (APP) is widely used in sports health (Lin et al., 2020; Lin et al., 2021), sports monitoring (Ho et al., 2022), and home care (Etemad-Sajadi and Dos Santos, 2021).

The innovative somatosensory game console is currently the world's most popular entertainment electronic product. As innovative technology products evolve, the types of games are now becoming more diverse, allowing users to enjoy leisure and entertainment activities. One of the most reputable companies in the game software development industry is Nintendo. In 2017, Nintendo released the Switch, an intelligent game console that bridges the gap between tablets and consoles. Switch has three modes of operation: TV, tablet, and handheld, has broken the limitations of traditional game consoles, representing a breakthrough for both consumers and the video game console industry. Through such innovative products, a new wave of game consoles successfully attracted the eyes of consumers. Although the sales volume of Nintendo Switch appears to be successful, the somatosensory game console's efficiency is not yet guaranteed as many unknown factors still affect users' behavior. Therefore, Game developers meticulously monitor dynamic market trends and discern player demands with precision to adeptly refine their gaming product designs. Their objective is to augment player experiences, consequently fostering sustainable growth and evolution for the company.

The video game industry appeals to players because of its ability to offer games where the design always prioritizes the players' game experience (e.g. well camera movement to tell the game story). Through this feature, players' neural responses can be understood as the rich sensory experience they feel while playing video games. Researchers revealed attracting users to accept new information systems is the primary factor that impacts the successful marketing of information systems (Bhattacharjee, 2001). Therefore, the post-acceptance model of IS continuance is proposed in this study. Since users' expectations change over time, game developers should pay more attention to product performance after the trial.

Previously, the Expectation Confirmation Theory (ECT) mainly explored consumers' repurchase intentions, while Technology Acceptance Model (TAM) was used to predict human behavioral intentions. In the case of Switch, not only do Switch users experience playfulness, but also the ease of operation of the entire game console whether it meets their purchase expectations, usage habits, and other personal preferences. These feelings affect the players' satisfaction and intention to continuously use the game console. Since Switch is a complete system game console, the post-acceptance model of IS continuance can be used to investigate it as this model is designed to explore information systems and technology products. Therefore, this study aims to understand the factors influencing users' willingness to use somatosensory game consoles through the post-acceptance model of IS continuance.

Aside from being lightweight, Switch offers players to experience extensive

convenience through the Nintendo Switch Online Services and e-shop online store, which allow users to carry easily and download the latest games online at any time. In addition, the introduction of Switch has broken the type of traditional game consoles, solved the product limits of traditional handheld and home game consoles, and achieved game portability by allowing players to play anytime, anywhere. Therefore, developers create game consoles to provide users with enjoyment and happiness while considering perceived playfulness as a factor that shapes users' expressions of inner feelings. One of the critical factors for the behavior intention of entertainment oriented information systems is perceived playfulness (Van der Heijden, 2004). According to a study on interpersonal interaction, if users feel higher perceived playfulness during their interaction with technology products, they feel positive emotions and higher satisfaction (Starbuck and Webster, 1991). Therefore, this study integrated perceived playfulness into the post-acceptance model of IS continuance to understand how somatosensory game consoles contribute to users' satisfaction and behavioral intentions.

Although Switch received massive attention during its launch, it is important to assess whether it meets consumer expectations after purchasing the product. Additionally, the release time is still short. During this period, known as the persuasion stage, consumers' attitudes toward the product whether they agree or disagree with it are gradually accepted by the public. Researchers asserted that the characteristics affecting individuals' adoption of innovative products are divided into relative superiority, complexity, compatibility (COM), observability, and applicability (Rogers, 2003). Meanwhile, other studies claimed that attitudes could be derived from the perceptual characteristics of innovation, of which three characteristics are related to the acceptance and use of information technology: relative superiority, complexity, and compatibility (Taylor and Todd, 1995). In this research study, Perceived Usefulness (PU) replaces relative superiority, perceived ease of use (PEOU) replaces complexity, and compatibility is defined as the degree to which a product adheres to the potential recipients' current values, past experiences, and needs. Considering that Switch's difference from traditional game consoles, it is important to investigate whether the users' values while playing Switch match their lifestyle. Therefore, this study integrated compatibility into the post-acceptance model of IS continuance to understand how somatosensory game consoles influence users' satisfaction through compatibility.

Switch users' subjective evaluation of the product affects their willingness to use it continuously after the purchase, regardless of whether the product achieves the users' expected benefits and value. Researchers suggested integrating two theories to explore the same phenomenon from two perspectives (Mayer and Sparrowe, 2013). The main purpose of ETC is to verify whether the product meets the consumers' expectations (Oliver, 1980). The innovation diffusion theory, on the other hand, is a crucial period for strengthening the persuasion stage as it confirms the consumers' attitudes towards the use of innovative technologies. From the perspective of the post-acceptance model of IS continuance (Bhattacharjee, 2001), integrating the characteristics of information technology into the model can effectively predict and explain the users' continuous intention to use the information system, making it more in line with the information system situation. The said integration also emphasizes that users' Confirmation (CON) of information technology will be affected by PU, as PU is affected by both STA and Continuance Intention (CI). As a result, PU will affect the STA, which will then influence its behavior, and STA will also influence the CI.

The behavior model of somatosensory game consoles is integrated into this study to consider three factors: perceived ease of use, perceived compatibility, and perceived playfulness. To understand consumers' feelings after actually using Switch, this study integrates the essential factors of the persuasion stage of the innovation diffusion theory with the post-acceptance model of IS continuance and uses this theoretical model as the performance basis. This study aims to investigate the adaption model of user behavior in intelligent somatosensory game consoles by using the post-acceptance model of IS continuance as a based framework. This study also explores the role of COM and PP in the behavior model. The researchers of this study are committed to exploring the continuous use behavior model of somatosensory game consoles to explain the factors influencing users' willingness to use the product continuously and to offer the research results to relevant manufacturers so that it can be used as a reference for future game software design and development.

II. LITERATURE REVIEW

A. Information Systems

The post-acceptance model of IS continuance is commonly used to explore the continuous use behavior of information system users. This model mainly emphasizes that users' "confirmation" of information technology has an impact on their "perceived usefulness", which affects their satisfaction and IS continuous use intention. Therefore, "perceived usefulness" can influence users' "satisfaction" with using technology, influencing users' behavior. This theoretical model was developed by Bhattacharjee (2001) based on Expectation Confirmation Theory (ECT) and combined Davis et al. (1989) technological acceptance model as well as Rogers' (2003) innovation diffusion theory. research on the meta-analysis of information technology continuance confirmed the relationship between confirmation (Ambalov, 2018). usefulness and satisfaction. Meanwhile, Hong et al. (2017) study on the perceived value and continuous use intention of smart watches revealed that when users' perceptions of the practical value of smartwatches are essential factors that stimulate their continuous use intention. Therefore, based on the previous studies, the researchers of this study propose the following hypotheses:

- H1: CON has a positive impact on PP.*
- H2: CON has a positive impact on STA.*
- H3: PU has a positive impact on STA.*
- H4: PU has a positive impact on CI.*

B. Innovation Diffusion Theory

Innovative characteristics are closely related to users' subjective cognition, personality traits, and experience. Additionally, innovative characteristics are essential factors affecting the spread of science and technology, thereby affecting users' final decision making. Proposed by Rogers (1983), the innovation diffusion theory is the most widely used theory to predict and explain innovation adoption and diffusion behavior. This theory is divided into five stages: Knowledge, Persuasion, Decision, Implementation and

Confirmation. According to Taylor and Todd (1995), attitudes can be derived from the perceived characteristics of innovation, while relative advantage, complexity, and compatibility are the most important characteristics affecting individuals' acceptance of innovative products. These key factors affect individuals' decision-making processes (Rogers, 1983). In addition, the innovation diffusion theory suggests that the concepts of relative advantage and complexity are very similar to the perceived usefulness and perceived ease of use in the Technology Acceptance Model (TAM), a stable theoretical model proposed (Davis et al., 1989). In their study, Taylor and Todd (1995) replaced relative advantage with perceived usefulness, and complexity was replaced with perceived ease of use. Filieri et al. (2020) survey report on the willingness to use the travel platform TripAdvisor revealed that when users' ability to quickly and easily retrieve relevant information has a positive impact on their satisfaction. Sharma et al. (2014) study on students' satisfaction with elearning shows that students' value perception of the compatibility of experiential technology systems is an essential factor that affects satisfaction. To examine the users' experience after using Switch, this study developed a methodology based on the aforementioned theories and integrated perceived usefulness, perceived ease of use, and compatibility into the post-acceptance of IS continuous model. Therefore, based on the previous studies, the researchers propose the following hypotheses:

H5: PEOU has a positive impact on STA.

H6: COM has a positive impact on STA.

H7: CON has a positive impact on PEOU.

H8: CON has a positive impact on COM.

C. Perceived Playfulness

TAM is a theoretical model commonly used to explore individuals' acceptance of technological products. This model primarily examines how users' attitudes are affected by the substantial benefits obtained after using technological products, but in theory, the perceived ease of use and perceived usefulness belong to extrinsic motivation rather than intrinsic motivation (Davis et al., 1989). Creating game consoles is primarily concerned with making users engaged and happy, thereby bringing them pleasure and joy. According to Moon and Kim (2001), perceived playfulness refers to the subjective pleasure individuals feel when using technological products, which is intrinsic motivation. On the other hand, Van der Heijden (2004) claimed that perceived playfulness is an important factor in predicting the usage intention of entertainment-oriented information systems. Based on the post-acceptance of IS continuous model proposed by Bhattacharjee (2001), Lin et al. (2005) integrated perceived playfulness into the model and found that perceived playfulness had a significant impact on satisfaction. Ifinedo (2017) study proved that students' continuous intention was positively impacted by their ability to enjoy the learning process. In addition to providing entertainment effects, Switch also provides various multimedia functions. This study infers that perceived playfulness will significantly improve Switch users' satisfaction. Therefore, based on the previous studies, the researchers propose the following hypotheses:

H9: CON has a positive impact on PP.

H10: PP has a positive impact on STA.

H11: PP has a positive impact on CI

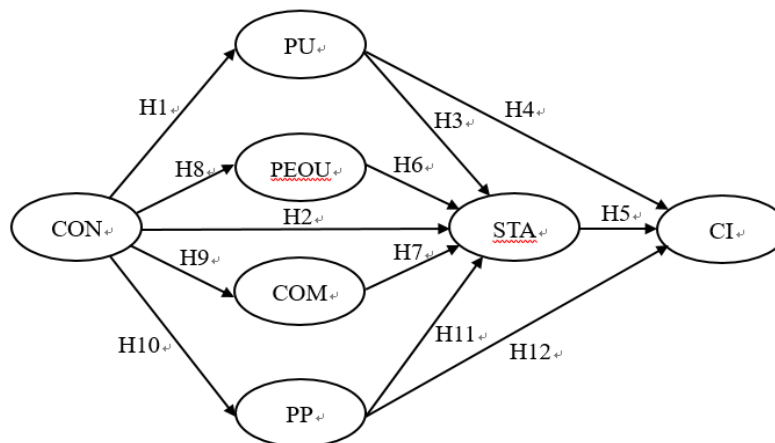
To construct the continuous intention behavior model of Switch users, this study used concepts from the post-acceptance of IS continuous model and added critical elements in the persuasion stage from the innovations diffusion theory and perceived playfulness. This paper proposes the following research model in Figure 1.

III. DATA AND RESEARCH METHODOLOGY

A. Research Subject

Taiwanese Switch users were the research subjects of this study. Questionnaires were distributed to the subjects online using Google Forms. The research subjects were chosen using snowball sampling, and the questionnaires were distributed through the available Switch related fans page and forum. In addition, Respondents who have completed the questionnaire are further invited to disseminate the questionnaire link to their friends or family members who have engaged with the Nintendo Switch. To collect data for this convenience sample, participants received self-administered questionnaires. And in the questionnaire, the purpose and anonymity of this research were emphasized. Participants are told that all information is for research purposes only, and the content is strictly confidential, so please feel free to fill in the answers. If you do not agree to conduct the questionnaire, please do not complete this questionnaire. That participation in the survey was taken as consent and that online subjects were free to withdraw during the process. A total of 376 questionnaires were distributed from March 20, 2019 to May 20, 2019, 363 of which were valid (with 286 males and 77 females), citing a 96.54% effectivity rate.

Figure 1
Conceptual framework and hypotheses



B. Measurement Instrument

The survey was divided into two parts: the demographic characteristics of the participants and 29 scale indicators associated with the research constructs. A seven-point Likert scale was utilized to measure the research model indicators, with anchors ranging from strongly disagree (1) to strongly agree (7). To achieve the purpose of this study, the model indicators, including Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Compatibility (COM) scale, were referred to from (Davis et al., 1989) and (Taylor and Todd, 1995), the primarily examines the utility of the Switch gaming console to users, evaluates its ease of operation, and assesses the alignment between users' prior experiences and current requirements ; the measurement method of (Lin et al., 2020) and Perceived Playfulness (PP) scale was referred to (Lin et al., 2005), the degree of enjoyment derived from using the Switch gaming console; the measurement method of (Van der Heijden, 2004), Confirmation (CON), Satisfaction (STA) and Continuous Intention (CI) were scales referred to (Bhattacharjee, 2001) and the measurement method of (Lee, 2010), the study elucidates users' expectations and experiences with the Switch gaming console following usage, compares these with post-experience perceptions, and examines their emotional states and willingness for continued usage.

C. Analysis Method

SEM/AMOS was used in this study to verify the causality of the proposed model. Dash and Paul (2021) suggest that CB-SEM is the appropriate research method for examining and validating a theory. Amos can produce almost the same statistical results as Mplus and LISREL, and Amos' features can directly read an SPSS data file. Therefore, this study used CB-SEM to precisely quantify the relationship between the given factors. In the behavior model of Switch users, SEM was used to explore the linear relationship between variables and to examine the overall model. The three indicators were used to measure the overall model fitness: the absolute fit index, incremental fit index, and parsimonious fit index. The criteria of the indicators in SEM were adapted (Kline, 2005), which include the Root-mean-square residual (RMR), Root-mean-square error of approximation (RMSEA), Goodness-of-fit index (GFI), the adjusted goodness of fit index (AGFI), Normed fit index (NFI), Comparative fit index (CFI), Hoelter's CN (critical N), and χ^2/df ratio (also known as "normed chi-square"). In overall model fit, RMR = .04, RMSEA = .03, GFI = .95, AGFI = .92, NFI = .95, CFI = .98, CN = 284.47, χ^2/df = 1.28. Overall, the findings showed that the scale and model of this study met appropriate statistical criteria.

IV. RESULTS

A. Normality Test

According to West, Finch and Curran (1995), the standard of each variable's skewness should be less than 2, while kurtosis should not be greater than 7. Based on the results, the variables in this study have a mean between 5.36 to 6.55, a standard deviation between 0.46 and 1.01, skewness between -1.90 and 0.41, and kurtosis between -1.41 and 6.28, all of which pass the standard of normality test. Kline (2005) pointed out that the

composite reliability (C.R.) of a multivariate normality test should be within 10. However, the value of multivariate C.R. in this study was 40.77, which fell short of the required criteria. There-fore, the overall model was modified using the bootstrap proposed by Bollen and Stine (Bollen and Stine, 1992).

B. Data Analysis for Validity and Reliability

In overall scale convergent validity, factor loading reached above .50 through confirmatory factor analysis. Perceived usefulness has a factor loading between .68-.77, perceived ease of use has between .75-.90, compatibility has between .52-.76, perceived playfulness has between .65-.94, confirmation has between .56-.82, satisfaction has between .55-.87, and willingness to use continuously has .48-.86. In addition, in the overall reliability, C.R. were .77, .91, .71, .82, .80, .80 and .65 respectively while AVE were .53, .72, .45, .61, .50, .59 and .40 respectively. Fornell and Larcker (1981) suggested that the C.R. value of latent variables reached 0.60 and above. On the other hand, Hair et al. (2006) suggested that AVE must be above the threshold of 0.5, which means that the minimum AVE needs to be greater than the standard value of .25. The values obtained in this study are all above the standard, indicating that the measurement has good validity and reliability, as shown in Table 1.

Table 1
Confirmatory Factor Analysis

Variables	Items	Factor loading	Cronbach's alpha (α)	C.R.	AVE
CON	When using Switch, I am enchanted unconsciously.	.82	.80	.80	.50
	The features and services provided by the Switch are better than I expected.	.72			
	The user experience with Switch is better than I expected.	.71			
	I feel like using Switch does exactly what I want.	.56			
PU	I think using Switch is helpful for my leisure activities.	.77	.74	.77	.53
	I think using Switch improves my leisure quality.	.74			
	I think using Switch satisfies my leisure needs.	.68			
PEOU	I think learning to operate Switch is easy.	.89	.91	.91	.72
	I think the various functions of Switch are simple to use.	.90			
	I think the interface of Switch is easy to operate.	.85			
	I think Switch is easy to use.	.75			
COM	I think using Switch fits my lifestyle.	.74	.70	.71	.45
	I think using the Switch fits my living habits.	.76			
	I think using the Switch is keeping the values of modern life.	.52			
PP	I am happy when I use Switch.	.73	.84	.82	.61
	I have fun when I use Switch.	.94			
	When using Switch, I am enchanted unconsciously.	.65			
STA	Overall, I enjoy using the Switch.	.84	.85	.80	.59
	Overall, I am happy with the Switch.	.87			
	Overall, I am satisfied with the Switch.	.55			
CI	I will continue to use Switch.	.86	.61	.65	.40
	I tend to use Switch a lot.	.48			
	I would like to invite my friends and family to use Switch together.	.48			

C. Discriminant Validity Test

This study used the confidence interval method to test the discriminant validity of the overall behavioral model. First, Pearson correlation analysis was tested, and the results showed that all variables were significantly correlated. As shown in Table 2, the correlation coefficient is between .28 - .52, indicating a positive correlation between the variables. According to Hair et al. (2021), the correlations between constructs should be lower than the square root of the Average Variance Extracted (AVE) of each construct, indicating discriminant validity between the constructs. According to Torkzadeh et al. (2003), when the interval value is less than 1 in the confidence interval test, there is no correlation between the variables, and the variables have discriminant validity. Using the bootstrap model for estimation (1000 times) in this study, the researchers discovered that the confidence level was below 95%. The results demonstrated that the upper bound of the confidence interval is between .44 - .74 while the lower bound is between .12 - .56, indicating that the model has discriminant validity.

Table 2
Correlation Analysis

	CON	PU	PEOU	COM	PP	SAT	CI
CON	.71						
PU	.47*	.73					
PEOU	.36*	.35*	.85				
PP	.38*	.33*	.40*	.67			
COM	.28*	.45*	.39*	.36*	.78		
SAT	.40*	.42*	.39*	.52*	.36*	.77	
CI	.38*	.31*	.36*	.28*	.35*	.40*	.63

Note: The diagonal are the square root vale of AVE, and the off-diagonal lines are the correlation coefficients between potential variables.

D. Demographics of Respondents

The participants of this study were mostly male (78.8%), aged between 21-30 (64.5%), student (39.7%), with an average salary below NTD20,000 (38.0%), and use Switch 2-3 times a week (41.0%). as shown in Table 3.

E. SEM Analysis

From the path coefficient of the user behavior model in Figure 2, CON had a significant impact on PU, PEOU, COM, and PP ($\beta = .72, .51, .49, .49, p < .05$). However, there is no significant impact on STA ($\beta = .15, p > .05$). Meanwhile, PU, PEOU, and PP had a significant impact on STA ($\beta = .61, .12, .32, p < .05$), while COM had no impact on STA ($\beta = .12, p > .05$). CON had an indirect effect on STA through PU, PEOU and PP ($\beta = .44, .06, .16, p < .05$), however, there is no indirect effect on COM ($\beta = .058, p > .05$). PU and STA had a significant impact on CI ($\beta = .34, .33, p < .05$), while CON had an indirect effect on STA through PU, PEOU and PP ($\beta = .42, .06, .15, p < .05$, the total indirect effect is $\beta = .66, p < .05$). PU and STA had a significant impact on CI ($\beta = .34, .33, p < .05$), and CON had an indirect effect on CI through PU ($\beta = .24, p < .05$). Furthermore, CON had an indirect effect on CI through STA ($\beta = .22, p < .05$), total effect ($\beta = .46, p$

< .05) as shown in Table 4. The framework of this study indicates that adapting the Post-acceptance Model of IS continuance with the innovation diffusion model is well fit.

Table 3
Profile of the respondents

Measure	Item	Frequency	Percentage (%)
Gender	Male	286	78.8%
	Female	77	21.2%
Age	20 or younger	82	22.6%
	20-30	234	64.5%
	31-40	34	9.4%
	41-50	10	2.8%
	Over 51	3	0.8%
Occupation	Student	144	39.7%
	Industry and Commerce	87	24.0%
	Service	91	25.1%
	Other	41	11.2%
Personal disposable income per month	Under NT\$ 20,000	138	38.0%
	NT\$ 20,001-30,000	104	28.7%
	NT\$ 30,001-40,000	86	23.7%
	NT\$ 40,001-50,000	15	4.1%
	Over NT\$50,001	20	5.5%
Usage times per week	1 times	70	19.3%
	2-3 times	149	41.0%
	4-5 times	84	23.1%
	6 times and above	60	16.5%

Figure 2

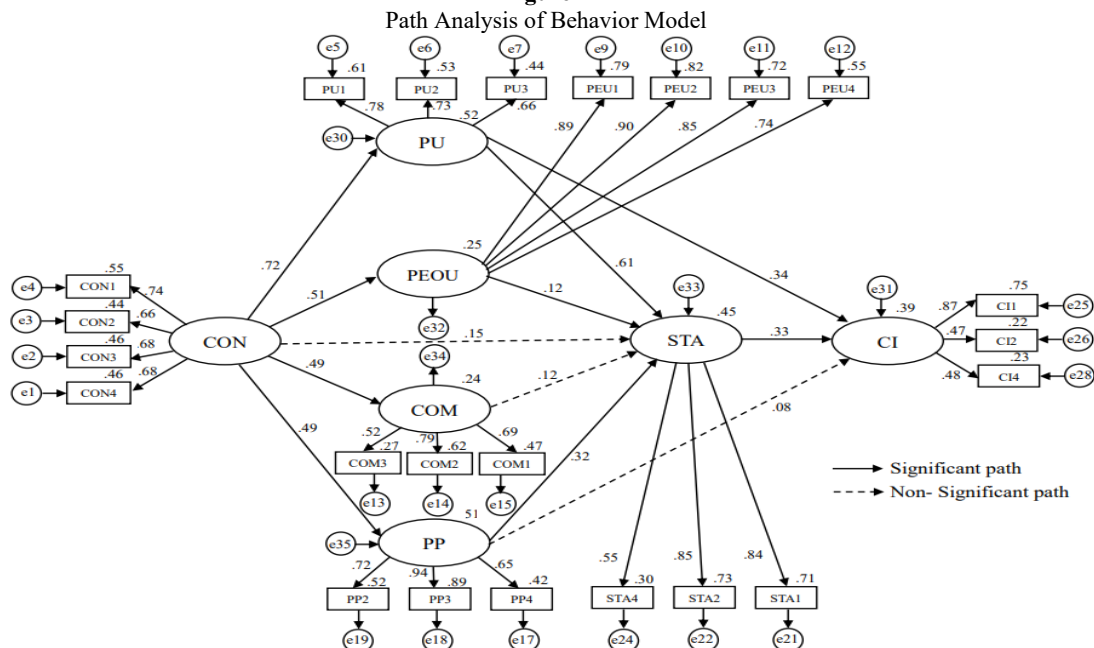


Table 4
Indirect and Total Effects of CON on STA and CI

The effect of CON to STA			The effect of CON to CI		
Antecedent variable	Mediator variable	dependent variable	Antecedent variable	Mediator variable	dependent variable
		STA			CI
	PU	.44		PU	.24
CON	PEOU	.06	CON	STA	.22
	PP	.16			
Total		.66			.46

* $p < .05$

V. DISCUSSION

The findings of this study revealed that in the Post-acceptance Model of IS continuance, CON had a significant impact on PU, PU had a significant impact on STA and CI, and STA had an impact on CI. However, CON has no significant impact on STA, indicating that after the experience, users believe that using Switch improves their leisure quality and needs and helps them achieve a relaxation effect. The pleasure and satisfaction they feel inside influence their subsequent use intentions. As a framework widely used in banking, education, health care, tourism, and the sports industry (Kim-Soon et al., 2017; Nascimento et al., 2018; Dai et al., 2020; Al-Emran et al., 2020; Franque et al., 2021), the post-acceptance model of IS continuance has a proven track record in obtaining good interpretation. Therefore, retailers may use the post-acceptance model of IS continuance to create and enhance the value of customer experience (Homburg et al., 2017) as users' experience feelings a series of their subsequent behavior intentions. Data obtained from the IoT suggest that consumers' usage needs and preferences (Verhoef et al., 2017) can be better interpreted, corrected, and adjusted. Specifically, the stronger the consumer's after use feelings about the product, the greater their inclination to repurchase it, resulting in continuous intention (Chopdar and Balakrishnan, 2020; Cunningham and De Meyer-Heydenrych, 2021). In addition, the researchers of this study discovered that the CON needs PU to influence STA. According to Eren (2021), pointed out that customer satisfaction with chatbots demonstrates the need for customers to have clear expectations and standards for products they have used, which can also be affected by external factors. User satisfaction with the product increases when the features or services offered by a game align with user needs; conversely, it diminishes (Jiang et al., 2023). When consumers use a product or commodity and perceive that its utility exceeds their expectations, and they affirm it, it leads to users' achievement of their needs and purposes. Similarly, when users experience Switch, they will compare the expected benefits (such as adjustment of body and mind and stress relief), which can affect their satisfaction and continual use behavior of different media (usefulness, ease of use, playfulness).

This study discovered that in innovation diffusion theory, CON significantly impacts PEOU and COM, and PEOU has a significant impact on STA but not on COM. It indicates that after the experience, users think that the Switch interface is easy to operate and the various functions are easy to learn, meeting their individual needs and habits. When designing an intelligent technology system, developers need to consider that it should be easy to use and simple operation as the priority (Lin et al., 2020; Chang and Chen, 2021). According to IDT theory (Rogers, 2003), compatibility is the degree to

which new technology and old systems, past experiences, and demands of potential participants conform to each other. After experiencing Switch, users believe that it matches their lifestyle and habits. In previous studies (Isaac et al., 2019; Jamshidi and Kazemi, 2020; Liao et al., 2021), compatibility influences satisfaction; however, this was not the case in this study. It may be due to the somatosensory technology constantly launching new products (such as Wii, VR, and AR, etc.) and the diverse selection of new products, influencing users' feelings toward Switch to conform to their values and lifestyle while keeping values consistency less intense. According to study, Sidharta and Rahmahwati (2023), the satisfaction with technological products is contingent upon the alignment between users and their needs, with the convenience and utility thereof influencing users' satisfaction.

Furthermore, this study found that CON positively impacted PP, and PP significantly influenced STA but not CI. This means that Switch users' experience of using the game console makes them feel that the process is interesting and enjoyable, resulting in their unconscious intoxication during playtime, thereby increasing their happiness and satisfaction. For smart technology products, developers should strengthen the interesting functions so that users can get more experience from them, helping them enhance and improve their behavioral intentions (Lin et al., 2018). Considering the global repercussions of COVID-19 in recent years and the resultant shifts in people's lifestyles, leisure activities, and entertainment preferences, commercial video games have been identified as pivotal instruments that promote positive affect and contribute to favorable psychological states among individuals. The Nintendo Switch features multiplayer capabilities, facilitating increased group identification and fostering positive experiential outcomes through gameplay. This enhances user engagement and contributes to sustained usage intentions (Krath et al., 2021; Jiang et al., 2023). Social network connection and interaction through video games have also shown improved benefits associated with soothing mental health (Kowal et al., 2021). Related studies proved that individuals' feeling while playing video games comes from their subjective feelings (Lin et al., 2005). Satisfaction has a mediating effect between perceived playfulness and continuous intention because the higher hedonic benefit users perceived, the relative improvement of their satisfaction and continuous intention (Akel and Armağan, 2022). To summarize, when users experience pleasure and fun, they generate a follow-up satisfaction level, which promotes their behavioral willingness to use the console continuously.

VI. CONCLUSION

A. Theoretical Implications

The results of this study suggest that the post-acceptance model of IS continuance, which was integrated with innovation diffusion theory and perceived playfulness, can partially explain users' behavior toward somatosensory game consoles.

An evaluation model for game console use was constructed for this study. Firstly, in the overall model, it can be found that CON has no significant impact on STA in the post-acceptance model of IS continuous, which is different from the results suggested by Bhattacharjee (2001). From this result, researchers observed that Switch users' expectations for the game console and their feelings after the experience will not directly affect STA but will affect their willingness to continue using it through PU. The

evaluations and feelings obtained by Switch users are as expected and good as the before and after expectations. Switch users believe that using the game console improves their leisure behaviors and increases their satisfaction, thus strengthening their willingness to Switch continuously.

The innovation diffusion theory used in this study suggests that CON has a positive impact on PEOU and STA, PEOU has a positive impact on STA, while COM has no impact on STA. Since the subject of this study is mainly users who have used Switch for half a year, they belong to the early stage of persuasion, as suggested by Rogers' (2003) innovation diffusion theory. During this stage, users experience a degree of recognition of the innovative products. They are an essential period to confirm their consumption attitudes. The degree of fit between their past usage experience of Switch and their current needs establishes a weighted comparison of product recognition and attitudes, causing COM to be unable to impact STA significantly. Therefore, Switch users' feelings after using playing the game were as expected, confirming that it is easy to operate and highly fit in terms of their personal values, past experiences, and needs. The users can get psychological pleasure and satisfaction from the ease of operation of the game, but whether or not it conforms to their personal lifestyle has no effect on their psychological feeling.

The PP section in the research model illustrates that CON has a positive impact on PP, and PP has a positive impact on STA but no impact on CI. Lin et al. (2005) Using proposed post-acceptance model of IS continuous based on Bhattacharjee (2001) and combined their integrated perceived playfulness to extend the model framework in the study of website user satisfaction, the researchers of this study discovered that perceived playfulness had a significant impact on STA and CI. Switch users generated fun and entertainment through the use of the game consoles, and their willingness to use it continuously was completely affected by their increased satisfaction. Based on the essential factors of the post-acceptance model of IS continuous and the persuasion stage of innovation diffusion theory, this study provides a research model suitable for Switch users' behavior.

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