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The Technology Affordance for Enhancing Gen Zs' Flow Experience, Satisfaction and Continuance Usage of TikTok in Thailand

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Abstract

Purpose: Among TikTok users 1 billion worldwide, Thailand will have around 39.5 million users in 2022, ranked eighth globally. Therefore, this paper aims to identify the role of technology affordance leading to the continuance usage of Generation Z TikTokers in Thailand. The conceptual framework determines the relationship between perceived recommendation accuracy, perceived recommendation serendipity, perceived effortlessness, flow experience, user satisfaction, and continuance usage. **Research design, data, and methodology:** The sampling techniques involve judgmental, stratified random, and convenience sampling. The Item Objective Congruence (IOC) Index was used to ensure content validity by three experts. Cronbach's Alpha of the pilot test (n=50) was conducted to ensure internal consistency and reliability. Based on 500 valid responses collected from a survey questionnaire, confirmatory factor analysis (CFA) and structural equation modeling (SEM) methodologies were employed to examine the research model. **Results:** All hypotheses are approved. Perceived recommendation accuracy, perceived recommendation serendipity, and perceived effortlessness significantly influence flow experience. Flow experience significantly influences user satisfaction and continuance usage. User satisfaction significantly influences continuance usage. **Conclusions:** TikTok is in its growth stage in Thailand. Thus, the results contribute to improving short-video sharing applications or other related social network platforms.

Keywords : Online Learning, Trust, Perceived Value, Satisfaction, Loyalty

JEL Classification Code: E44, F31, F37, G15

1. Introduction

TikTok was developed by ByteDance, a Chinese internet technology company headquartered in Beijing. Launched in 2016, TikTok has come to penetrate some of the world's most populous countries across various continents. TikTok is "a popular social media app that allows users to create, watch, and share 15-second videos shot on mobile devices or webcams. With its personalized feeds of quirky short videos set to music and sound effects, the app is notable for its addictive quality and high levels of engagement" (D'Souza, 2023).

According to D'Souza (2023), TikTok is available in over 150 countries, such as the United States, Indonesia, Brazil, Russia, Mexico, Vietnam, Thailand, and many more. In 2022, the number of global users is approximately 1 billion daily. It has gained the most popularity in the United States, with the largest number of users of 140.6 million in 2022. In Asia, most users were from Indonesia, with about 106.9 million users.

Fannin (2019) reviewed that TikTok emerged during the fierce competition among social network and streaming platforms such as YouTube, Snapchat, Netflix, Instagram, and Facebook. Only two years after its launch, the application has gained 1 billion downloads and 75 languages

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worldwide due to the uniqueness of homemade video, and fast-moving content has hooked young users around the globe (Fannin, 2019).

In China, where TikTok was developed, the application reaches its audiences successfully beyond other popular Chinese apps, such as the WeChat messaging app of Tencent ByteDance has elevated from the homegrown to the next level and is open to competing in the international market, where the users' penetration in the United States has flown up like a skyrocket. The strategy of TikTok to acquire the international market is its business model innovation and the venture out outside its home. In 2018, the valuation of ByteDance from the emergence of TikTok was $78 billion and stamped to be one of China's 86 "unicorns" (Fannin, 2019).

As Thailand took up around 39.5 million users in 2022, ranked 8th in the world, and ranked third in South East Asia. it has yet to investigate the technology affordance and continuance usage of TikTokers in Thailand. Thus, this study can be pioneer research that can bring significant and valuable literature among modern-world social, marketing, and technology studies. The researcher aims to address Thailand as it is one of the countries where short-video sharing platform is very popular and could bring new ideas to academic and business stakeholders.

Based on the data that TikTok users in Thailand by age are between the ages of 19 to 25 or Generation Z, with nearly 39.91%, Generation Z is an influential group to be examined on how they are motivated to continue using TikTok or other short-video sharing apps. Accordingly, this research would provide new knowledge to academic and business practitioners. The findings can contribute to academic researchers determining technology affordance on the continuance usage behavior. Additionally, tech startups and solution providers can explore the determinants sustaining their businesses. Therefore, this paper aims to identify the role of technology affordance leading to the continuance usage of Generation Z TikTokers in Thailand.

2. Literature Review

2.1 Technology Affordance

Technology affordance is conceptualized as the "user's psychological response to the influence of technology" (Shao et al., 2020). Gibson (1986) originally proposed affordances as "the action possibilities enabled by an environment in an ecological psychology context." The theory of technology affordance can be an appropriate investigation to understand the behavioral intentions of users or audiences towards the research of "psychology, media and communications, design, and information technology" (Zhao & Wagner, 2022). Zhao et al. (2013) also addressed that "the significant role of Video apps as a health information source can determine perceived affordance in the entangled relationship between information system users and IT artifacts (e.g., platforms, interfaces, IT services, etc.) in social media interactions." Consequently, this study focuses on the theoretical lens of affordance led to the continuance usage of TikTok. The elements of technology affordance in this study are perceived recommendation accuracy, perceived recommendation serendipity, and perceived effortless.

2.2 Perceived Recommendation Accuracy

Perceived recommendation accuracy is "the degree to which recommended content is accurately customized to a user's preferences" (Roudposhti et al., 2018; Wang et al., 2020; Zhao & Wagner, 2022; Zhu et al., 2018). According to Zhao and Wagner (2022), TikTok's "famous hyper-accurate algorithms have attracted substantial attention. Nevertheless, the company keeps such technology proprietary and confidential." Therefore, perceived recommendation accuracy is implied as "TikTok's smart recommendation system, recognizing that TikTok content is fed automatically to users through its recommendation algorithms" (Zhao & Wagner, 2022).

Ma et al. (2021) investigated how the platform has attracted many users through a mechanism of preference match. Therefore, Lu and Cheng (2020) suggested the flow theory, which determines "experiences that can presumably be applied to the short-video platform context." Zhao and Wagner (2022) assumed that perceived recommendation accuracy significantly influences flow experience. Accordingly, a hypothesis is proposed:

H1: Perceived recommendation accuracy has a significant influence on flow experience.

2.3 Perceived Recommendation Serendipity

Perceived recommendation serendipity can be described as "considerations drawn from discussions of the overfitting problem, including introducing recommendation serendipity" (Matt et al., 2014). Zhao and Wagner (2022) identified that "TikTok's recommendation system more significantly determines user experience than search-oriented mechanisms because the application automatically serves users recommended content." Therefore, perceived recommendation serendipity is that users feel that the recommendation algorithm of TikTok matches their interests in serving the content.

Lu and Cheng (2020) confirmed that perceived recommendation serendipity enhances pleasure feelings which predicts flow experience. In the social media context,

unexpected recommendations significantly influence the user flow experience (Zhao & Wagner, 2022). Chen et al. (2018) also pointed out in the case study of Pokemon games that "random and unexpected factors are favorable in gamified settings because a certain degree of uncertainty drives users to become deeply immersed in an activity, a phenomenon that TikTok takes advantage of." Therefore, this study proposes that the degree to which users believe that the videos recommended to them are serendipitous significantly influences the flow:

H2: Perceived recommendation serendipity has a significant influence on flow experience.

2.4 Perceived Effortless

Perceived effortless refers to "the extent to which users believe that they can interact with a product or application with little or no cognitive load, reflecting the product's simplicity and intuitiveness." In addition, perceived effortless captures "how content is presented to users is easy to engage" (Diefenbach & Ullrich, 2015). Zhao and Wagner (2022) elaborated that perceived effortlessness is similar to perceived ease of use of the technology acceptance model (TAM) and effort expectancy of the unified theory of acceptance and use of technology (UTAUT). According to Wang (2019), perceived effortlessness considers "how users consume its content; TikTok's extremely simple and intuitive operation process represents another critical component of the platform's success." This statement can be further explained by the fact that "TikTok automatically begins playing the recommended short videos while a user browses, not impacting their cognitive load by making them decide what to watch based on a lengthy suggestion list.

Perceived effortlessness can determine the flow experience of users in using TikTok. Technology affordance is an appropriate theory lens to generalize the successful adoption because "user believes that they can interact with a product or application without sacrificing substantial cognitive load" (Diefenbach & Ullrich, 2015). To support this statement, Zhao and Wagner (2022) agreed that perceiving effortlessly can enable user flow experience. "TikTok users perceive an effortless operating process INTR that significantly impacts flow experience." Harris et al. (2017) denoted that perceived effortlessness is a crucial factor that drives user flow experience. Based on previous studies, a notion that has led to a hypothesis:

H3: Perceived effortless has a significant influence on flow experience.

2.5 Flow Experience

Flow experience is "the holistic sensation that people feel when they act with total involvement, which determines that TikTok users become fully immersed in a given activity, and the experience itself is so enjoyable that changes in their surroundings go unrecognized" (Zhao & Wagner, 2022). Triberti et al. (2021) signified that flow experiences are related to the quality or how well a new interactive technology performs and serve users' interest. In addition, *flow* is defined as "a state characterized by: a seamless sequence of responses facilitated by machine interactivity, intrinsic enjoyment, a loss of self-consciousness, and self-reinforcement" (Hoffman & Novak, 1996). Shang et al. (2022) explicated flow as habit, immersion, and intoxication. Using the flow theory, Liu et al. (2020) addressed users' behavior mechanisms. Zhang et al. (2020) mentioned that flow experience has been widely discussed among scholars on social apps, such as Twitter, YouTube, Facebook, Sina Weibo, and WeChat, since 2019.

This research pinpointed the causal relationship between flow experience and user satisfaction. Lee et al. (2018) presented that the flow experience generates pleasure for users in engaging with social networks. Kim and Hall (2019) verified that "information technology is often accompanied by a flow experience, which affects user satisfaction and usage behaviors." Shang et al. (2022) examine factors affecting continuance usage. The study addressed that "four technical characteristics and six content characteristics affect the three aspects of perceived value, which affect both flow and continuance usage." It is proposed that TikTok is entertaining, fun, and positive for daily use. Additionally, TikTok has been recorded to relate flow experience and continuance usage. Shang et al. (2022) also assessed Chinese knowledge apps that users' flow experience mainly drives continuance usage. Wang and Lin (2021) considered that flow experience determines continuance usage. Consequently, two hypotheses are suggested:

H4: Flow experience has a significant influence on user satisfaction.

H5: Flow experience has a significant influence on continuance usage.

2.6 User Satisfaction

Mou et al. (2021) defined satisfaction in the use of a short-form video APP that users demonstrate positive sentiment toward such use. In this study, user satisfaction is "the sum of people's feelings or attitudes toward various factors affecting the situation, which determine how TikTokers psychologically evaluate the pleasure with the use of an application" (Mou et al., 2021). Bhattacherjee (2001) identified satisfaction as "a psychological or affective state related to and resulting from a cognitive appraisal of the expectation–performance discrepancy." User satisfaction is defined as "when customer usage of the service along with its perceived performance matches the customer

expectations" (Murali et al., 2016).

Lee (2010) posited that online learners' satisfaction predicts their continuance usage of online learning systems. Hong et al. (2008) mentioned that users' continuance usage differs from the behavioral intention to use more sustainably. Chen et al. (2009) found that user satisfaction significantly and positively affects continuance intention. Mou et al. (2021) also synopsized that it is vital to point out the impact of user satisfaction on users' willingness to continue using. Subsequently, the following hypothesis can be claimed satisfaction significantly influences continuance usage:

H6: User satisfaction has a significant influence on continuance usage.

2.7 Continuance Usage

Continuance usage is determined as "the overall assessment of the user's use of a particular information technology (IT) or TikTok, led to the initial willingness to use the app to achieve ultimate success such use" (Bhattacherjee et al., 2008). Continuance usage is a process of adoption, which means that "users have begun to be willing to use an app and continuance." Nevertheless, continuance behavior is difficult to infer due to the de facto occurrence, and it cannot be guaranteed if that actual behavior will happen (Shang et al., 2022). Xu and Du (2018) stated that continuance usage is the willingness of users to continue using TikTok. The continuance usage is similar to continuance intention to use but differs from the behavioral intention to use because continuance usage is more sustained and solid. It determines as a vital foundation in influencing the overall users' evaluation and behavior towards a particular system and technology (Hong et al., 2008).

3. Research Methods and Materials

3.1 Research Framework

The conceptual framework in this study is developed from three previous research models. First, Zhao and Wagner (2022) focused on the technology affordance theory in facilitating user experience to determine the behavior of users in using the short-video-based application TikTok. Second, Shang et al. (2022) addressed the importance of continuance usage of users towards mobile applications. Based on this study, the mechanism that contributes to the continuance usage behavior. Third, the quantitative of Wang and Lin (2021) study is applied due to the study focused on factors impacting the continuance usage of mobile learning applications. Integrating the expectation-confirmation theory and flow theory has gained widespread attention among scholars. Accordingly, a conceptual framework and six hypotheses are developed, as shown in Figure 1.

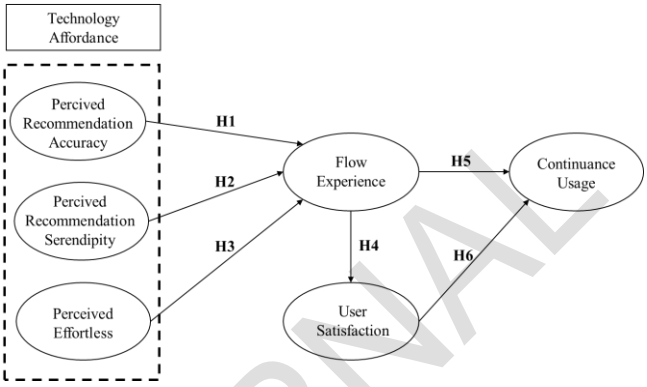

Figure 1: Conceptual Framework

H1: Perceived recommendation accuracy has a significant influence on flow experience.
H2: Perceived recommendation serendipity has a significant influence on flow experience.
H3: Perceived effortless has a significant influence on flow experience.
H4: Flow experience has a significant influence on user satisfaction.
H5: Flow experience has a significant influence on continuance usage.
H6: User satisfaction has a significant influence on continuance usage.

3.2 Research Methodology

The research applied quantitative study. The target population involves 500 Generation Z aged 19-25 using the TikTok application in Thailand. The developed questionnaire was designed in three parts: screening questions, measuring items in the 5-Likert Scale, and demographic information. The researcher applied probability and nonprobability sampling techniques, which are judgmental, convenience, and snowball sampling.

Before collecting the data, three experts used the Item Objective Congruence (IOC) Index to ensure content validity. Cronbach's Alpha of the pilot test (n=50) was conducted to ensure internal consistency and reliability. Based on 500 valid responses collected from a survey questionnaire, confirmatory factor analysis (CFA) and structural equation modeling (SEM) methodologies were employed to examine the research model.

In the methodology of expert rating, the Index of Item–Objective Congruence (IOC) is highly recommended with the evaluation by experts in validating measuring items of the questionnaire. IOC allows experts or professionals will give a score to each item, ranging from 1 (or measuring), -1

(clearly not measuring), or 0 (the degree to which it measures the content area is unclear) for each objective. The findings are that all 19 items were passed at a score of 0.6 and higher. Consequently, no measuring items are required to be removed or revised.

Pilot testing is an important step for preliminary data analysis. Cooper and Schindler (2011) recommended that the pilot group should be between 25 to 100 people. In this study, Cronbach's Alpha (CA) was conducted to test the reliability of constructs among the pilot test of 50 participants. According to Shi et al. (2012), the value of Cronbach's Alpha equal to or above 0.6 is acceptable. The constructs include perceived recommendation accuracy (α = 0.677), perceived recommendation serendipity (α = 0.779), perceived effortless ((α = 0.653), flow experience (α = 0.677), user satisfaction ((α = 0.782), and continuance usage (α = 0.656).

3.3 Population and Sample Size

According to Hair et al. (2010), the target population is a key identifier for the research purpose, determining the group of participants with specific or common characteristics, interests, and experiences. Based on the data, TikTok users by age are between the ages of 19 to 25 or Generation Z, with nearly 39.91%. Therefore, this group can greatly represent the target population. According to Soper (2023), online statistical software offers sample size calculations based on the parameter values of SEM. There are six latent variables and 19 observed variables. The formula involves "the anticipate effect size is 0.2," "desired statistical power level is 0.8," and "the probability level is 0.05." As a result, the minimum sample size is required at 403 samples. Nevertheless, the data collection aims at 500 participants who are TikTok users between the ages of 19 to 25 or Generation Z.

3.4 Sampling Technique

This study employed quantitative sampling, using surveys to "generate descriptive numerical statistics that can be used to describe various characteristics found within the population" (Davies et al., 2008). This research's sampling techniques focus on non-random or nonprobability sampling, which is judgmental, convenient, and snowball sampling. Judgmental sampling is to select Generation Z participants, aged 19-25, who have been using the TikTok application in Thailand. This study applied convenience sampling to distribute electronic questionnaires to TikTokers via line chat applications and social media to achieve the research objectives in a limited time. Snowball sampling is to encourage participants to refer to other similar users' characteristics to complete the online questionnaire.

4. Results and Discussion

4.1 Demographic Information

The demographic results in Table 1 showed that. 57.8 percent were female, and 42.2 percent were male. For Gen Z, most respondents are 19-20 years old, accounting for 33.2 percent, followed by 23-24 years old at 25 percent, 21-22 years old at 23.8 percent, and 25 years old at 18 percent. Regarding educational background, below Bachelor's Degree acquires the largest group, 57 percent. In addition, the results reflect that most Gen Z are currently students, accounting for 44.6 percent, and 38.4 percent of Gen Z spends 1-2 hours per day on TikTok.

Table 1: Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Gender	Male	211	42.2%
	Female	289	57.8%
Age	19-20 Years Old	166	33.2%
	21-22 Years Old	119	23.8%
	23-24 Years Old	125	25.0%
	25 Years Old	90	18.0%
Education	Below Bachelor's Degree	285	57.0%
	Bachelor's Degree	136	27.2%
	Master's Degree	77	15.4%
	Doctorate's Degree	2	0.4%
Occupation	Student	223	44.6%
	Corporate Employee	102	20.4%
	Government Employee	57	11.4%
	Self-Employed/Entrepreneur	81	16.2%
	Unemployed	23	4.6%
	Others	14	2.8%
Frequency Use of TikTok	1-2 hours/ day	192	38.4%
	3-4 hours/day	133	26.6%
	5-6 hours/day	109	21.8%
	Over 6 hours/day	66	13.2%

Source: Constructed by author

4.2 Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) is "a statistical technique used to test a hypothesized factor structure of a set of observed variables. Table 2 confirms the convergent and discriminant validity of CFA; Cronbach's Alpha (CA) was conducted to test the reliability of constructs. Shi et al. (2012), the value of Cronbach's alpha equal to or above 0.6 is acceptable. Hamid et al. (2017) attested that "the factor loading indicators on the assigned construct have to be higher than all loading of other constructs with the condition that the cut-off value of factor loading is higher than 0.50." Additionally, Fornell and Larcker (1981) indicated that "CR should be equal or greater than 0.7, showing that each item's reliability was good and reinforcing the allocation for each item on the specified latent construct. Indirectly, it supported

convergent validity." Also, most research accepts average variance extracted (AVE) at the value equal to or above 0.4, indicating good reliability of the model.

Table 2: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
1. Perceived Recommendation Accuracy (PRA)	Zhao and Wagner (2022)	3	0.763	0.698-0.743	0.765	0.520
2. Perceived Recommendation Serendipity (PRS)	Zhao and Wagner (2022)	4	0.812	0.670-0.797	0.813	0.521
3. Perceived Effortless (PEF)	Zhao and Wagner (2022)	2	0.653	0.688-0.706	0.654	0.486
4. Flow Experience (FE)	Zhao and Wagner (2022)	4	0.777	0.633-0.725	0.781	0.472
5. User Satisfaction (US)	Mou et al. (2021)	3	0.882	0.823-0.881	0.881	0.712
6. Continuance Usage (CU)	Zhou (2014)	3	0.883	0.816-0.882	0.883	0.716

According to Marsh et al. (2019), CFA begins with a hypothesized factor structure in which the observed variables are grouped into factors based on theoretical or empirical grounds. If the model fits the data well, the CFA results can be used to assess the validity and reliability of the latent constructs and the observed variables. According to Table 3, the statistical values of the measurement model are acceptable fit, where CMIN/DF=1.261, GFI=0.964, AGFI=0.951, NFI=0.962, CFI=0.992, TLI=0.990, and RMSEA=0.023.

Table 3: Goodness of Fit for Measurement Model

Index	Acceptable Values	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	172.732/137 = 1.261
GFI	≥ 0.90 (Hair et al., 2006)	0.964
AGFI	≥ 0.90 (Hair et al., 2006)	0.951
NFI	≥ 0.90 (Arbuckle, 1995)	0.962
CFI	≥ 0.90 (Hair et al., 2006)	0.992
TLI	≥ 0.90 (Hair et al., 2006)	0.990
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.023
Model summary		**In harmony with empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker–Lewis index, and RMSEA = Root mean square error of approximation.

Fornell and Larcker (1981) indicated that "the examination of discriminant validity is of utmost importance in research that involves latent variables along with the use of several items or indicators for representing the construct. Therefore, the researcher needs to establish the discriminant validity beforehand." Hair et al. (2014) suggested that "discriminant validity compares the square root of the average variance extracted (AVE) with the correlation of latent constructs. Consequently, the square root of each construct's AVE should have a greater value than the correlations with other latent constructs, as shown in Table 4. Furthermore, the factor correlations did not surpass 0.80. As a result, the problem of multicollinearity is not issued (Studenmund, 1992).

Table 4: Discriminant Validity

	FE	PRA	PRS	PEF	US	CU
FE	**0.687**					
PRA	0.658	**0.721**				
PRS	0.278	0.265	**0.722**			
PEF	0.680	0.549	0.177	**0.697**		
US	0.672	0.540	0.314	0.562	**0.844**	
CU	0.638	0.561	0.293	0.542	0.745	**0.846**

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

4.3 Structural Equation Model (SEM)

In SEM, a set of observed variables are measured and then modeled as latent constructs or factors. These constructs are then modeled as interrelated equations representing the hypothesized relationships among the constructs. According to the structural model, the goodness of fit index is acceptable, as shown in Table 5. The results of the statistical values are CMIN/DF=2.049, GFI=0.940, AGFI=0.922, NFI=0.933, CFI=0.965, TLI=0.958, and RMSEA=0.046.

Table 5: Goodness of Fit for Structural Model

Index	Acceptable Values	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	299.198/146 = 2.049
GFI	≥ 0.90 (Hair et al., 2006)	0.940
AGFI	≥ 0.90 (Hair et al., 2006)	0.922
NFI	≥ 0.90 (Arbuckle, 1995)	0.933
CFI	≥ 0.90 (Hair et al., 2006)	0.965
TLI	≥ 0.90 (Hair et al., 2006)	0.958
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.046
Model summary		**In harmony with empirical data**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker–Lewis index, and RMSEA = Root mean square error of approximation.

4.4 Research Hypothesis Testing Result

The regression or standardized path coefficient (β) and t-value test hypotheses with significant values at p<0.05. As shown in Table 6, all six hypotheses are supported.

Table 6: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-Value	Result
H1: PRA→FE	0.525	8.683*	**Supported**
H2: PRS→FE	0.178	3.796*	**Supported**
H3: PEF→FE	0.567	7.636*	**Supported**
H4: FE→US	0.675	10.966*	**Supported**
H5: FE→CU	0.161	2.820*	**Supported**
H6: US→CU	0.722	11.931*	**Supported**

Note: * p<0.05
Source: Created by the author

According to Table 6, the results are clarified as follows:

H1 supports that perceived recommendation accuracy significantly influences flow experience, demonstrating standardized path coefficient (β) and t-value of 0.525 and 8.683, respectively. In this study, perceived recommendation accuracy is described as "the degree to which recommended content is accurately customized to a user's preferences," which determines the flow experience of TikTokers (Zhu et al., 2018).

H2 validates the relationship between perceived recommendation serendipity and flow experience. The standardized path coefficient of H2 is 0.178, and the t-value is 3.796 hypotheses with a significant value at p<0.05. This supports previous research by Lu and Cheng (2020) and Zhao and Wagner (2022) that perceived recommendation serendipity enhances pleasure feelings which predict flow experience.

In H3, perceived effortless strongly and significantly influences flow experience, with a standardized path coefficient of 0.567 and a t-value of 7.636. The study aligns with previous assumptions that perceiving effortlessly can enable user flow experience. TikTok users perceive an effortless operating process INTR that significantly impacts the flow experience (Zhao & Wagner, 2022).

H4 shows that flow experience influences user satisfaction, with a standardized path coefficient of 0.675 and a t-value of 10.966. Rose et al. (2012) provide evidence that flow experience is an attribute of enjoyment that drives user satisfaction.

H5 confirms the significant influence of flow experience on continuance usage. The standardized path coefficient of H5 is 0.161, and the t-value is 2.820. O'Cass and Carlson (2010) highlighted that "flow may also promote continuance usage as users expect to obtain this optimal experience again in the future."

Finally, H6 approves the strongest and most significant relationship between user satisfaction and continuance usage, with a standardized path coefficient of 0.722 and t-value of 11.931, which is consistent with the previous studies that satisfaction directly and positively affects the continuance intention of users (Wang & Lin, 2021; Zhao & Khan, 2022).

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

This research is conducted in Thailand, where TikTok is growing. Thus, the results must be generalized to other countries that have developed short-video sharing applications or other related social network platforms. The significance of this study reveals the effects of technology affordance, such as perceived recommendation accuracy, perceived recommendation serendipity, and perceived effortlessness via the flow experience and user satisfaction, to enhance Gen Z TikTok users' continuance behavior. The purpose of this paper has been met to identify the role of technology affordance leading to the continuance usage of Generation Z TikTokers in Thailand. Based on 500 valid responses collected from a survey questionnaire, confirmatory factor analysis (CFA) and structural equation modeling (SEM) methodologies were employed to examine the research model. The results show that all six hypotheses are supported.

The findings point out that in the foundation of technology affordance, perceived recommendation accuracy, perceived recommendation serendipity, and perceived effortlessness significantly influence flow experience. Zhao and Wagner (2022) assumed that perceived recommendation accuracy significantly influences flow experience. Lu and Cheng (2020) confirmed that perceived recommendation serendipity enhances pleasure feelings which predicts flow experience. Additionally, perceived effortless consideration or how TikTok's content is an extremely simple and intuitive operation process represents another critical component of the platform's success, which can enhance the flow experience of users (Wang, 2019).

They were agreed by Lee et al. (2018) and Kim and Hall (2019) that the flow experience generates pleasure for users in engaging with social networks, which verifies that the use of TikTok is often accompanied by a flow experience, which affects user satisfaction and continuance usage behaviors. Thus, flow experience significantly influences user satisfaction and continuance usage. This study also proves that user satisfaction predicts their continuance usage of TikTok (Chen et al., 2009; Hong et al., 2008; Lee, 2010). Therefore, it can be concluded that user satisfaction significantly influences continuance usage.

5.2 Recommendation

TikTok is a social media platform that has become increasingly popular recently, particularly among Gen Z users. It allows users to create and share short-form videos set to music or sound bites, with a wide range of editing tools and effects available to enhance the content. Gen Z has embraced TikTok to express creativity, share humor, and stay connected with friends and peers. Many see it as a more authentic and diverse alternative to other social media platforms, focusing on user-generated content rather than curated feeds. TikTok is in its growth stage in Thailand. Thus, the results contribute to improving short-video sharing applications or other related social network platforms.

For short-video and related social media developers, it is crucial to focus on the technology affordance and its attributes; perceived recommendation accuracy, perceived recommendation serendipity, and perceived effortlessness via the flow experience and user satisfaction. The algorithm needs to be improved to provide more accuracy and needs recommendations. The responsiveness can endorse the simpleness of the system and platforms. Therefore, flow experience and user satisfaction occur during the engagement. Furthermore, continuance usage can be encouraged by the flow experience and user satisfaction.

While there are some concerns about the privacy and safety of using social media apps, TikTok has implemented various measures to protect its users. For instance, users can set their accounts to private, limit who can see their content, and report inappropriate behavior. In this sense, TikTok can be a fun and creative platform for Gen Z to express themselves, connect with others, and discover new content. However, using the app responsibly and being aware of potential privacy and safety risks is important. Therefore, the recommendation for future study can explore more on perceived privacy and trust to completely understand the significant factors affecting the continuance usage of TikTok.

This study provides recommendations for Gen Z, the primary user group for TikTok, and many enjoy using the app because of its unique features and content. Here are some reasons why Gen Z recommends using TikTok: to enhance creativity, social connection, entertainment, and learning. The developers of the short-video app should also be concerned with the business ethic and provide positive, useful, and beneficial content to such groups as young adults. This could encourage and sustain business in long-term and well as increase the rate of adoption and continuance usage of particular social platforms.

5.3 Limitation and Further Study

The future study can exploit the limitations of this study to explore further the technology affordance for enhancing Gen Zs' flow experience, satisfaction, and continuance usage of TikTok and other similar social platforms. First, the sample group of this study is limited to Gen Z in Thailand. The data shows that Generation Y (26-37 years old) and Generation Z (19-25 years old) have shown similar growth. Regarding gender, females are the major group of 75%, while males account for 25% of Thai TikTokers. Therefore, future research should extend to other demographic groups. Second, the conceptual framework was scoped to perceived recommendation accuracy, perceived recommendation serendipity, perceived effortlessness, flow experience, user satisfaction, and continuance usage. There are some interesting variables, such as perceived privacy and trust to be considered. Last, the qualitative approach is recommended as it can be a way to discuss the details in the form of a focus group or in-person interview.

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