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Freemium Users' Push-Pull Motivation and Willingness to Pay for Conversion Intent from Free to Premium

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Abstract

Purpose: In the field of trade and freemium services, this study adds to the body of research on switching intentions by examining the direct and moderating effects of willingness-to-pay and push-pull motivations on conversion intention. These effects differ from the mooring effect in the original push-pull-mooring (PPM) framework. **Research design, data and methodology:** A systematic literature study was conducted using VOSviewer as a bibliometric tool to cluster keywords and determine the extent of research on switching behavior in freemium services. To test the predicted relationships, this study used partial least squares structural equation modeling (Haenlein & Kaplan, 2004) and the latest SmartPLS software. A non-probability quota sampling approach was used to select 619 respondents who were highly representative. The sample quota was determined by considering the proportional distribution of age groups and genders among Vietnamese Internet users. **Results:** The research found that the option to trial the premium version had a greater impact on conversion intention than perceived advertising intrusiveness in the free version. **Conclusions:** The analysis showed that an effective advertising plan can outperform a limited-use strategy to push the free version. In pull motivation, clients' desire to pay moderates their conversion intentions more than in push motivation does in the trade context.

Keywords: Freemium, Push-Pull Motivation, Conversion Intent, Willingness To Pay, OTT, OTT Trade

JEL Classification Code: M11, M21, M37, O32

1. Introduction

The freemium business model is used by online businesses and smartphone application developers to provide users with free basic features of a digital product and access to premium functionality for a subscription fee (Kumar, 2014). The freemium business model has recently become one of the most dominant business models in online markets, significantly influencing trade dynamics within the digital economy (Holm & Günzel-Jensen, 2017).

OTT (Over-the-top) digital platforms are services that stream audiovisual content over the Internet that subscribers can use through various devices (Chakraborty et al., 2023). OTT is also known as a service that provides content on telecommunications networks (over-the-top content) (Ganuzza & Viecens, 2014). OTT platforms have become increasingly popular in recent years because of technological advances and behavioral changes in consumers' online video viewing, texting, and calling habits (Dhiman, 2023). OTT platforms can be classified into three

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2.2. Operant Conditioning Theory

Operant Conditioning Theory (Skinner, 1937) based its principles of behavior control on the fundamental premise that activities that are reinforced will continue to be promoted. In contrast, behaviors that result in punishment or unfavorable outcomes will decrease or be discontinued in subsequent instances (Figure 2).

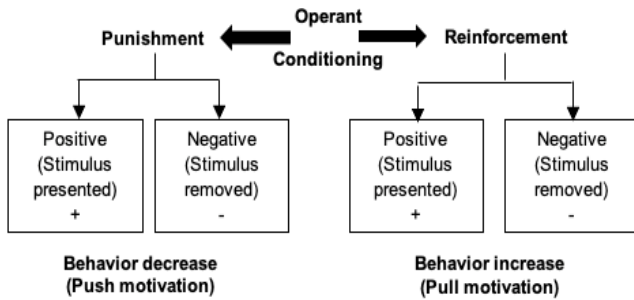


Figure 2: Operant Conditioning Theory (Skinner, 1937)

2.3. Perceived Value Theory

Perceived Value Theory (Zeithaml, 1988) describes how consumers perceive the value of a product or service. According to Zeithaml (1988), consumers determine value in four ways: (1) as a perceived low price, (2) as what they desire for a product, (3) as an assessment of quality proportional to the price paid, and (4) as a comparison of what they receive versus what they spend.

Suryana et al. (2018) examined research from Scopus data sources from 2009 to 2018 and statistically demonstrated that Zeithaml's (1988) Perceived Value Theory is the most widely utilized among value theories. According to Souza and Baldanza (2018), the most acknowledged and extensively used methodology for researching customer transfer intentions is consumers comparing what they receive to what they must spend. Comparing transitioning between the two free and premium versions, the altering intention of consumers of freemium services is therefore related to evaluation. Li and Cheng (2014) discovered that users are willing to pay for online content when it is available for free, because they perceive a difference in value between free and paid content. The researchers therefore use Zeithaml's (1988) fourth approach viewpoint on perceived value to ascertain the user's inclination to switch by examining the influence of their willingness to pay.

2.4. Hypotheses Development

2.4.1. Push motivation and the OTT freemium user' conversion intent from free to premium

The impact of perceived usage limits on OTT freemium service users' conversion intent from free to premium.

User gains are lost when a service or product is used beyond its perceived limit (Liu et al., 2022). The freemium business model requires usage limits to create initial conditions for users to experience for free, but they are not satisfied with long-term use because they believe that the features (functions, capacity, duration, etc.) required in the free version have been removed (Kato & Dumrongsiri, 2022). Operant Conditioning Theory (Skinner, 1937) states that usage restriction is a punishment, because it removes things from the unrestricted version that the subject wants to experience to motivate, promote conversion intent, and convert freemium users to premium. Virtual reality users who know their limits tend to switch to another solution (Kim et al., 2019). Kim et al. (2019) found, like Permatasari and Prajanti (2018), Bolz (1998), and Maican and Lixandroiu (2016), that a service's limited use makes it accessible but less appealing to consumers, which is why they switch services. Danckwerts and Kenning (2019) found that feature limits drive free online music users to paying services. Additionally, Liu et al. (2022) revealed that usage constraints reduce consumers' video viewing experiences. This allows viewers to buy premium services. Therefore, we propose the following hypothesis:

H1a: Perceived usage limits increase the conversion intent from free to premium among OTT freemium service users.

The impact of perceived advertising intrusiveness on OTT freemium service users' conversion intent from free to premium

Advertisements that block a user's activities are considered intrusive (Cho, 2004). Li et al. (2002) examined viewers' unfavorable views on advertising and perceived advertising intrusiveness. According to McCoy et al. (2008), the intrusiveness of Internet advertising causes discomfort and bad user perceptions. Advertising is vital to providers' income under the freemium model, yet online customers often find it bothersome (Li & Cheng, 2014). Operant Conditioning Theory (Skinner, 1937) states that advertising adds a negative aspect that urges customers to upgrade to a premium version of a freemium service. Nagaraj et al. (2021) showed that OTT users switched to paying for ad-free experiences. Streamed data researchers Camilleri and Falzon (2020) find that advertising intrusion encourages users to improve their services for more control and enjoyment. Tsai (2023) found that perceived advertisement interference increases consumers' switching intentions when testing OTT services. The authors propose the following hypotheses:

H1b: Perceived advertising intrusiveness increases conversion intent from free to premium among OTT freemium service users.

2.4.2. Pull motivation and the OTT freemium users' conversion intent from free to premium

The impact of trialability on OTT freemium service users' conversion intent from free to premium

User trialability indicates that viable competing alternatives are accessible and can be tested (Jones et al., 2000). To eliminate uncertainty about novel technologies or items, Weiss and Dale (1998) and Shah Alam et al. (2008) discovered that the capacity to try is essential for transmitting intents. Freemium is an experienced service, and customers cannot predict its worth before using it (Caves, 2003; Shapiro & Varian, 1998). Sample premium versions allow consumers to correctly assess the premium service to which they must subscribe (Bowman & Ambrosini, 2000; Priem, 2007; Rietveld, 2016). Operant Conditioning Theory (Skinner, 1937) evaluates trialability by including reinforcers to promote customer switching. According to Hsieh (2021), these reinforcers provide fully featured trial opportunities and trial intervals long enough for users to detect changes and boost transfer intent. According to Pham and Ho (2015), Zhou (2016), and Hsieh (2021), trialability also favorably affects consumers' switching intentions. These arguments lead to the following hypothesis:

H2a: Trialability increases the conversion intent from free to premium among OTT freemium service users.

The impact of alternative attractiveness on OTT freemium service users' conversion intent from free to premium

Singh and Rosengren (2020) and Zhang et al. (2012) found that alternative attractiveness is a pull incentive scale in an online service transition behavior study. Tsai (2023) also states that alternate appeals drive OTT services. Owing to their freemium approach, OTT services such as Spotify and YouTube are driven by alternative appeals. According to this paradigm, alternative attractiveness is analyzed using reinforcers (Skinner, 1937) to boost consumers' switching intentions. Alternative attractiveness is one of the best indicators of user conversion rates, and is strongly connected to them (Shah Alam et al., 2008; Rogers, 1995; Tan & Teo, 2000; Tang & Chen, 2020). Freemium enterprises may earn money by providing premium products to consumers who want more features (Gu et al., 2018). Thus, we propose the following hypotheses:

H2b: Attractiveness alternatives increase the conversion intent from free to premium among OTT freemium service users.

2.4.3. The impact of willingness to pay on OTT freemium service users' conversion intent from free to premium

The academic literature focuses on user switching intention, which involves people switching from one system

to another (Zengyan et al., 2009), switching service providers (Bansal et al., 2005; Jung et al., 2017), and negative outcomes. Ye and Potter (2011) define user switching intention as product discontinuation. Meanwhile, people look for items that meet their needs.

In contrast, Kim et al. (2006), Danckwerts and Kenning (2019), Yoon and Lim (2021), and Xu et al. (2021) found that switching intention in this study indicates positive consequences from consideration, planning, and a high likelihood of switching, not negative consequences, such as customers switching service providers. Siriwardena and Silva (2017) found that customers' willingness to pay high prices influences their switching intent. Hsu and Lin (2015) stated that purchasing intent is defined by the desire to buy. Choe et al. (2009) define willingness to pay a premium as customers' willingness to spend more than the average price for a product. This encourages buyers to spend more (Nguyen et al., 2022). Choe et al. (2009), Zhang et al. (2018), and Hou et al. (2019) find that customers are prepared to spend more to minimize ambiguity, which boosts their decision-making confidence. In another study on safe food with traceability, Nguyen et al. (2022) found that customers' willingness to pay a high price favorably affects their intent to switch from non-origin to traceable goods. Osterwalder and Pigneur (2010) define premium service type as a corporation offering a free basic product and a premium product with extra features. Distributing free items swiftly and drastically increases the client base. The goal is to attract a large user base so that some may upgrade to the premium version, thus earning income for the firm. Freemium offerings are easy to build when products are configurable and user behavior data are collected. A company that wants to use a freemium model must balance the attractiveness of the basic offer and the profitability of the premium version (Osterwalder & Pigneur, 2010) while not charging for upgrades and giving users enough incentive to upgrade (Seufert, 2013). The foregoing considerations suggest the following hypothesis:

H3: Willingness to pay increases conversion intent from free to premium among OTT freemium service users.

2.4.4. The moderating role of willingness to pay on the impact of perceived usage limits on OTT freemium service users' conversion intent from free to premium

Limited utilization makes users doubt the worth of a service (Cheng & Liu, 2012). Halmenschlager and Waelbroeck (2014) show that imposing limits on Spotify and Deezer's free versions might boost premium subscribers. Halmenschlager and Waelbroeck (2014) suggested segmenting customers by their inclination to pay for digital music to reduce the effect of supply restrictions on freemium online music streaming users' switching intentions. An online platform must balance deleting functionality, which

loses users, and acquiring new (paying) users to obtain platform advantages to maximize profitability. If the user pays for the transformation, the balancing act changes (Liu et al., 2022). Wagner et al. (2014) found that premium price perception moderates users' ability to switch between free and premium services by examining how feature limitations affect free service evaluation. Thus, we propose the following hypothesis:

H4a: Willingness to pay has a moderating role in enhancing the impact between perceived usage limits and the conversion intent from free to paid among OTT freemium service users.

2.4.5. The moderating role of trialability on the impact of perceived advertising intrusiveness on OTT freemium service users' conversion intent from free to premium

Digital platforms have reduced free news service advertising income compared with the early Internet (Flew, 2021). They must also explore new approaches to customer involvement approaches (Farzin et al., 2022). Users will turn to social media sites such as Facebook or Google Pages or freemium service models, in which the premium version provides uncensored news without ads (Flew, 2022). In freemium services such as healthcare (Strombom et al., 2002) and mobile apps (Choi & Lee, 2016), the desire to pay moderates user knowledge and behavioral intention. Tan et al. (2019) examined user responses to undesired ad interference that occurs when a user is looking for product information and ad displays. The findings show that Internet consumers who feel violated would dislike businesses feature on websites and online ads. Many users switch from free membership to premium membership to avoid commercials (Gundlach & Hofmann, 2017; Nagaraj et al., 2021). Thus, we propose the following hypothesis:

H4b: Willingness to pay has a moderating role in enhancing the impact between perceived advertising intrusiveness and the conversion intent from free to paid among OTT freemium service users.

2.4.6. The moderating role of willingness to pay on the impact of trialability on OTT freemium service users' conversion intent from free to premium

Consumers such as freemium services can try premium services for free (Kircova et al., 2020). The freemium business model allows consumers to properly test their goods and remove obstacles to adopting new technologies, products, and services. Choe et al. (2009) defined willingness to pay as customers' willingness to spend more than the average price for a product. Nguyen et al. (2022) find that customers' inclination to pay positively affects their buying intentions. In free services, firms may provide a free

trial of a premium version with full features and no advertising, if customers are likely to pay. Reporting infringements are high-quality services that meet customers' demands and improve their behavior. When clients are willing to pay, using trial features to determine whether the service satisfies their quality expectations influences their choice to upgrade. Nguyen et al. (2022) find that willingness to pay a high price moderates the relationship between perceived product quality and user intention to switch from buying food of unknown origin to traceable food via traceability technology applications. Users are willing to pay for a premium service, which increases their conversion intent. The following arguments are assumed:

H4c: Willingness to pay has a moderating role in enhancing the impact between trialability and the conversion intent from free to paid among OTT freemium service users.

2.4.7. The moderating role of willingness to pay on the impact of attractiveness alternative on OTT freemium service users' conversion intent from free to premium

Prior research on switching behavior between two providers has studied the moderating influence of perceived value, in addition to the link between alternative attractions and consumers' switching intentions. Users are willing to pay more for premium products and services associated with socially oriented causes (CSR promotion, environmental sustainability, health relevance, organic food) (Diallo et al., 2021; Shin et al., 2017; Wilson & Lusk, 2020), product quality (Rao & Monroe, 1996), brand reputation, premium customer experience (Augusto & Torres, 2018; Kiatkawsin & Han, 2019), and clear origin. Rao and Monroe (1996) find that customers are willing to pay more for items with hard-to-control quality to offset their risk aversion. Many writers agree with this study's conclusion that buyers pay high costs to boost their selection confidence. According to Rao and Monroe (1996), Augusto and Torres (2018), and Kiatkawsin and Han (2019), freemium services improve product quality and give customers a premium experience by combining the free basic version with the attractive premium version. The desire to spend more time is a key factor. Thus, hypothesized:

H4d: Willingness to pay has a moderating role in enhancing the impact between attractiveness alternatives and the conversion intent from free to paid among OTT freemium service users.

The conceptual model provided in this study is shown in Figure 3.

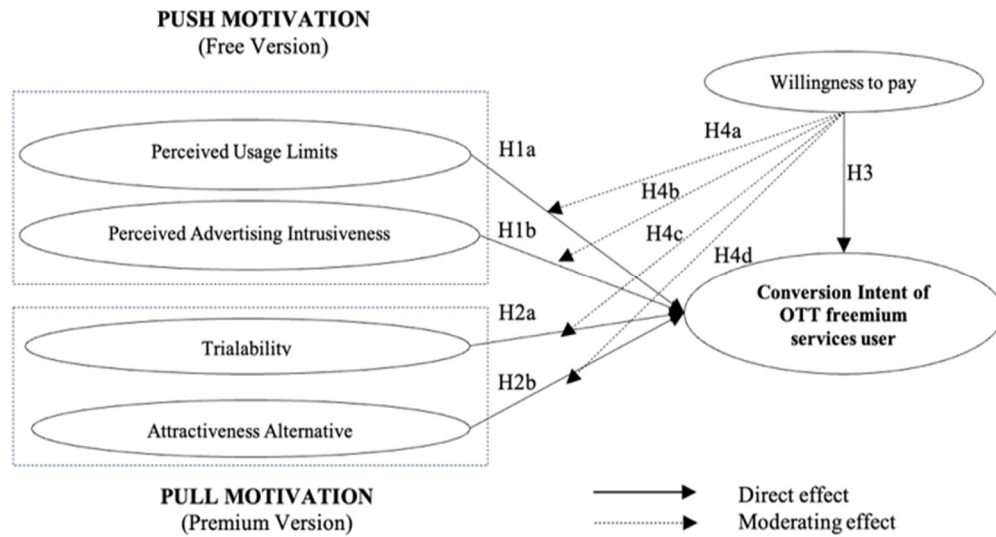


Figure 3: The conceptual model by the author

3. Methodology

3.1. Research Method

A systematic literature study was conducted using VOSviewer as a bibliometric tool to facilitate keyword clustering. This investigation aimed to determine the extent to which research has been conducted on the phenomenon of switching behavior in relation to themes pertaining to freemium services. Scopus, a frequently used search tool (Birkle et al., 2020; Singh et al., 2021), was selected to facilitate comparison and further investigations.

This study employed partial least squares structural equation modeling (Haenlein & Kaplan, 2004) and the most recent iteration of the SmartPLS software to examine the hypothesized correlations. Analysis of the measurement model was conducted first, followed by an analysis of the structural model in a two-step procedure. To evaluate the importance of route coefficients and loadings, a bootstrapping technique was used, including 5000 resamples.

3.2. Sampling Method and Size

The survey was produced and disseminated directly to a diverse group of individuals aged 18 and older across various areas. The survey performed interviews consist of three segments with same information as originally designed. Part 1 comprises a series of inquiries designed to screen participants, ensuring they meet the criteria of being Vietnamese citizens, aged 18 or older, and possessing knowledge about freemium OTT services. Part 2 explores

the principal facets of the issue using survey questions employing a 5-point Likert scale. Part 3 utilizes personal data regarding the demographic attributes of responders. The outcome is 638 responders; after excluding invalid ones, 619 responders remain. The sample size aligns well with the minimum requirement and the thesis tests, hence the study utilizes all 619 responders.

The core age group of the research sample is 25–54, which accounts for more than 80% of the sample structure by age. This age group's distribution reflects the characteristics of general Internet users and freemium OTT services in particular. This age group, which is over 18 years, has the most complete shopping capacity and payment ability in reality, as they are already employed and not yet retired. The distribution by gender represents the trend of the proportion of Internet users, with a higher proportion of women than men (50.6% > 49.4%), but it is also approximately the same, without much difference.

3.3. Research Scale

This study applied the scales of push factors, including Perceived Usage Limits inherited from Kim et al. (2019) and Perceived Advertising Intrusiveness from Tan, Brown & Pope (2017). The scales of pull factors include the trialability inherited from Hsieh (2021) and Alternative Attractiveness scale inherited from Singh and Rosengren (2020). In addition, the willingness to pay scales by Dwivedi, Nayeem, and Murshed (2018) and the Conversion Intent scale are inherited from Tsai (2023).

4. Findings

4.1. Measurement Model

Construct reliability (Cronbach’s Alpha and CR) and Average Variance Extracted (AVE) were used to validate the constructs (dos Santos & Cirillo, 2023). To determine convergent validity, the CR and AVE should be equal to or higher than 0.5. Table 1 illustrates that the CR and AVE are both greater than 0.5. Data analysis was based on the accepted criteria of a factor loading greater than 0.7 (Hair et al., 2021) and a well-explained factor structure (Nawaz & Guribie, 2022). As shown in Table 1, no items were eliminated from this study.

Table 1: Measurement Model Results

Items	Loadings	Cronbach’s alpha	CR	AVE
Perceived Usage Limits - PL				
PL1	0.873	0.819	0.892	0.734
PL2	0.856			
PL3	0.839			
Perceived Advertising Intrusiveness - PI				
PI1	0.852	0.896	0.923	0.705
PI2	0.874			
PI3	0.859			
PI4	0.824			
PI5	0.786			
Trialability - TA				
TA1	0.848	0.861	0.915	0.782
TA2	0.895			
TA3	0.909			
Alternative Attractiveness - AA				
AA1	0.852	0.868	0.909	0.714
AA2	0.888			
AA3	0.839			
AA4	0.797			
Willingness to Pay - WP				
WP1	0.734	0.849	0.897	0.686
WP2	0.803			
WP3	0.892			
WP4	0.874			
Conversion Intent - CI				
CI1	0.879	0.910	0.937	0.787
CI2	0.890			
CI3	0.907			
CI4	0.872			

Fornell and Larcker (1981) assert that the square root of the Average Variance Extracted (AVE) exceeds the correlation coefficient with other constructs. The discriminant validity analysis reveals that the cross-loading

values (refer to Table 2) demonstrate that the loading factor values for each indicator of the latent variables are not superior than the loading values of other variables. Table 2 fulfills the criteria for discriminant validity, indicating that such validity has been attained.

Table 2: Discriminant Validity (Fornell-Larcker criterion)

	AA	CI	PI	PL	TA	WP
AA	0.845					
CI	0.226	0.887				
PI	0.209	0.217	0.839			
PL	0.147	0.202	0.064	0.856		
TA	0.070	0.223	0.002	0.020	0.884	
WP	0.166	0.212	0.079	0.076	0.020	0.828

4.2. Structural Model

After adequately evaluating and confirming the outer model, structural equation analysis was employed to assess the study hypotheses. Five thousand samples, 0.05 significance level (α), and two-tailed test type bootstrapping approach were conducted in SmartPLS 4 (Ringle et al., 2022) to repeat the 619 responses to evaluate the regression weights, T statistics (T-values), and P values of the direct and moderating impacts. In this study, we assumed five direct and four moderating hypotheses, as shown in Table 3.

Table 3: Study Tested Hypotheses

Tested Hypotheses	Beta	T-value	p-value	Results	
Direct impacts					
H1a	PL → CI	0.141	4.177	0.00	Significant
H1b	PI → CI	0.183	5.014	0.00	Significant
H2a	TA → CI	0.215	6.193	0.00	Significant
H2b	AA → CI	0.158	4.290	0.00	Significant
H3	WP → CI	0.240	5.561	0.00	Significant
Moderating impacts					
H4a	WP x PL → CI	0.141	3.546	0.00	Significant
H4b	WP x PI → CI	0.154	4.263	0.00	Significant
H4c	WP x TA → CI	0.196	5.711	0.00	Significant
H4d	WP x AA → CI	0.237	6.933	0.00	Significant

The first findings from the direct impact analysis (Table 3) indicate that WP, TA, PI, AA, and PL exhibit a positive correlation with CI, with varying degrees of influence ranging from high to low ($\beta_{WP} = 0.240 > \beta_{TA} = 0.215 > \beta_{PI} = 0.183 > \beta_{AA} = 0.158 > \beta_{PL} = 0.141$). This supports Hypotheses H1a, H1b, H2a, H2b, and H3.

For the moderating effect, hypotheses H4a–H4d postulated the presence of a moderating influence of WP on the associations between TA, PI, AA, PL, and CI, as shown in Table 4.

Table 4: Inner VIF Model Values

Variable	Conversion Intent (CI)	
	R ²	R ² – adjusted = 0.339
Direct impacts	VIF	f²
PL → CI	1.032	0.033
PI → CI	1.054	0.053
TA → CI	1.009	0.077
AA → CI	1.100	0.038
WP → CI	1.073	0.090
Moderating impacts		
WP x PL → CI	1.074	0.030
WP x PI → CI	1.257	0.038
WP x TA → CI	1.014	0.067
WP x AA → CI	1.351	0.093

The VIF values should be less than 3.33, according to Diamantopoulos & Siguaw (2006), and must be less than 5, and it is desirable to assess collinearity (Haier et al., 2017). Table 4 shows that the construct's VIF was between 1.009 and 1.257. Therefore, multicollinearity was not prevalent in the model.

Aguinis et al. (2005) demonstrated that when assessing the justifications for implementing moderating impacts, moderation tests revealed an average effect size of only 0.009. Subsequently, Kenny (2015) suggested that values of 0.005, 0.01, and 0.025 might be seen as more pragmatic benchmarks for denoting minor, medium, and high degrees of influence, respectively. Kenny (2015) also illustrated the favorable nature of these levels when applied to a specific scenario indicated by Aguinis et al. (2005). The findings of this research support the notion that the WP variable has a significant moderating function (f -squared > 0.025) in influencing the link between independent factors and the CI variable. Specifically, the regulatory order from strongest to weakest is WP × AA (0.093), WP × TA (0.067), WP × PI (0.038), and WP × PL (0.030).

5. Discussion and Conclusion

The research affirms the significant impact of push motivation, which includes perceived usage limits and perceived advertising intrusiveness, on the free version of the OTT platform within the trade of digital services. Additionally, pull motivation, which encompasses trialability and alternative attractiveness, plays a crucial role in the free version. Furthermore, WTP influences the conversion intention of users of the OTT freemium platform. These variables have a low degree of influence ($0.02 \leq f^2 < 0.15$) on conversion intention, ranked in order of impact from strongest to weakest. The order of factors in terms of their effect sizes, from highest to lowest, was as follows: willingness to pay (f^2 WP = 0.090), trialability (f^2 TA =

0.077), perceived advertising intrusiveness (f^2 PI = 0.053), alternative attractiveness (f^2 AA = 0.038), and perceived usage limits (f^2 PL = 0.030). The findings are in parallel with research conducted by Tsai (2023), indicating that the perception of advertising intrusion serves as a driving force, while the allure of alternative appeal acts as an attractive force. Both factors positively influenced the intention of freemium service customers to switch.

With respect to the pull motive associated with the premium version, the findings of the study indicate that the opportunity to experience the premium version will have a more significant influence on fostering the desire to convert compared to the perception of intrusive advertising in the free version. The value of f^2 TA (0.076) is greater than that of f^2 PI (0.051). This finding corroborates the findings of Ramadhan and Belgiawan (2023), which suggest that the approach of offering existing YouTube users a one-month trial of YouTube Premium yields more favorable outcomes than traditional advertising methods. This is attributed to the fact that allowing users to assess a product through firsthand experience rather than relying solely on advertising information can lead to conversion effects.

Regarding push motivation for the free version, the impact of perceived advertising intrusiveness on users' conversion intention, however, is greater than the effect of perceived usage limits (f^2 PI = 0.053 > f^2 PL = 0.033). This outcome is consistent with Wagner et al.'s (2013) assessment of freemium services. The free version is also a marketing tool for the premium version, which may influence users to consider switching. Therefore, restricting oneself too much may not be the best idea. In addition to corroborating the findings of Li et al. (2018), a successful advertising approach may win over a restricted-use strategy.

Furthermore, the findings of the examination of the moderating influence of willingness to pay on the effects of push motivation (PL, PI) and pull motivation (TA, AA) on the intention to switch indicate that the interaction between willingness to pay and AA (f^2 = 0.093) has a greater effect size than the interaction between willingness to pay and TA (f^2 = 0.067), the interaction between willingness to pay and PI (f^2 = 0.038), and the interaction between willingness to pay and PL (f^2 = 0.030). Consequently, it is evident that the moderating effect of willingness to pay is more pronounced in influencing consumers' switching intentions in relation to pull incentives than push motivation in trade strategies.

6. Managerial Implications, Limitations, and Future Research

6.1. Managerial Implications

In terms of pull motivation, the research found that the option to test the premium version is more important than

the perceived advertising intrusiveness in the free version in promoting conversion. Thus, providers should let clients try the premium version before restricting them and switching to the free version during a free service. If the service is new, provide a week, month, or longer free trial of the premium version. Users will have full access to the premium features and benefits of this edition. Users switch to the free basic version when the premium version's perks expire. Limitations are applied when software functions or access are completed. This encourages customers to upgrade to maintain their premium experience. Start premium features to increase value comprehension and conversion intent. The analysis showed that an effective advertising plan can outperform a limited-use strategy to push the free version. Freemium service administrators must evaluate advertising tactics during the free version launch and analyze the effectiveness of advertising campaigns to change the frequency, interruption location, and ad length. Motivation is needed to boost the conversion rates and enhance trade effectiveness by encouraging users to make the switch.

The moderating impact of customers' willingness to pay on their conversion intentions is more prominent in the context of pull motivation than pushing motivation. Business enterprises that provide freemium services must prioritize the development and implementation of premium versions. This should be accompanied by a strategic emphasis on effectively deploying premium trial alternatives with the aim of encouraging customers to transition from the free tier to the premium tier, thereby improving trade dynamics within the digital marketplace.

6.2. Limitations and future research

This study predicted switching intention without testing the behavior. Future studies can reveal more details about how push, pull, and readiness to pay alter as intentions become actions. To ensure sample representativeness, this study used quota non-probability sampling to collect 619 valid observations based on the proportion of Internet users grouped by age and gender in Vietnam, but the author did not consider the effect of age and gender on switching intentions. Thus, future research should evaluate how positive factors affect switching intentions or control characteristics. The user's personality changes with each freemium service to create more diverse real-life scenarios, make connections, and exploit differences in each learning setting.

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Appendixes

Appendix 1: Path Analysis of Structural model

