The Impact of Quality of Subscription-based OTT Services on Continuous Intention to Use - The Moderating Effect of Switching Costs

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Abstract:

The emergence of Over The Top services has led to the continuous development of communication technologies and rapid changes in the worldwide media market. It is meaningful for this study to analyze the intention of continued usage of OTT subscription services by applying the information system success model and the value-satisfaction-loyalty model. Through the summary of the literature, that there is still a lack of research on switching cost of OTT. This study collected data by surveying customers who have used subscription-based OTT platform services, checking data using SPSS as analysis tools, and applying structural equation modeling as an analysis method to analyze results and test hypotheses.First, among the lower elements of subscription-based OTT platform quality, system quality, information quality, and service quality all have a positive (+) effect on perceived value. Second, among the lower elements of subscription-based OTT platform quality, system quality and information quality have a positive (+) effect on satisfaction, but service quality does not have a positive (+) effect on satisfaction. Third, perceived value has a positive(+) effect on customer satisfaction and intention for continued use, and customer satisfaction has a positive(+) effect on intention for continued use. Finally, the moderating effect of switching costs when perceived value and customer satisfaction influence continued use intention. The practical significance of this study is that it predicted the diversity and scalability of consumption areas using the economy and suggested strategic directions.

Keywords: Over The Top; Online subscription-based services; satisfaction; Continuous use of intention

1. Introduction

The subscription economy is an economic model in which products and services are provided by paying a subscription fee for a specific period (Lee & Kim, 2021). An online subscription service is an online business, a type of economy in which companies regularly send customized boxes of goods to customers for a weekly or monthly fee (Ramkumar & Woo, 2018). During the development of the subscription economy, various entertainment industries, such as online video streaming services such as over-the-top (OTT), and primary life-related industries such as consumers' food, clothing, and housing, are multiplying due to the acceleration of digital technologies (Chen et al., 2017). Subscription to OTT services has become an essential by-product of digital media expansion and exploration. By 2026, the global OTT services are expected to reach 88.6 billion people (Markets & Markets, 2020). Thus the potential value of the global OTT services is very high, and there is a need for research.

In 2016, Netflix introduced its service in Korea with expectations as an innovative service but had concerns about the invasion of the local industry. Netflix devoted itself to strategies for securing and producing local content in the Korean market, where local content is strongly favored relative to other countries. Netflix could in hopes of securing market power and large audiences. Netflix made waves in the Korean media industry as it brought upon competition that would significantly impact the global media market and service providers. Quality has been defined by various scholars based on multiple subject-measured constitutive instruments and is, therefore, difficult to define in one. However, according to prior studies related to web and mobile shopping sites and content, it is composed of system quality, information quality, and service quality in the majority of cases (Park et al.,2017).

As the level of consumer expectations for OTT subscription services has increased compared to the past, not only has satisfaction with existing OTT subscriptions decreased, but some consumers have switched to other OTT subscription services (yna news, 2021). As mentioned earlier, it can be said that the OTT subscription services have passed the growth period and have entered a period of intense competition. Therefore, it is expected that the service switching of subscribers will be very active. As seen previously, most of the existing research on OTT subscription services has centered on the acceptance or satisfaction of OTT and the exploration of factors that impact their intention to continue using it. Considering the current situation where competition among OTT operators continues to increase, exploring factors influencing the switch to OTT subscription services has practical implications in expanding the outreach of OTT subscription research. The importance of OTT service research is also increasing as global OTT service, like Netflix, expands their influence in the local media industry. In particular, Korea is essential in distributing and producing K-movies, K-dramas, and K-pop songs in East Asia (Kanozia & Ganghariya, 2021). Nevertheless, research on OTT services is centered on business models and methods for business expansion (Park, 2019; Wayne & Castro, 2020). In Korea, user-centered research is being carried out due to the emergence of various OTT services and the increase in the number of users (Choi & Kim, 2020; Yi & Chon, 2020), but the result is based on the Uses and Gratification Theory and Technology Acceptance Model.

Therefore, it is meaningful for this study to analyze the intention of continued usage of OTT subscription services by applying the information system success model and the value-satisfaction-loyalty model. However, variables need to be further explored in capturing the persistent usage intentions of newly expanded OTT

subscription services. The cost of switching variable is added in this study, and although there are not many studies on quality, there are various requirements not only for the quality of the platform but also the switching cost is an essential factor we need to consider in order to get ahead in a highly competitive environment—money cost, time cost, and energy cost, etc. Through the summary of the literature,   that there is still a lack of research on switching cost of OTT. Therefore, this study provides a new direction to improve the competitiveness of OTT subscription services by analyzing the various factors that influence the intention to use OTT subscription services consistently.

2. literature Review

2.1 Online subscription-based OTT services

The term subscription was used in the 17th century to refer to purchasing a book's signature. However, since then, the business of prepaying consumers and delivering books after printing, a type of transaction specific to the publishing field, has been applied not only to books but also to products and services, a category all referred to as subscription services (Cronbach, 1951). The subscription economy, first proposed by Tien Tzuo, founder of Zuora, in 2018, is a business model that has evolved thanks to the development of digital technology and changes in lifestyle and consumer behavior (Han & Lee, 2021). The subscription economy is a system that pays a certain amount for a fixed period without purchasing a product or service (Mccarthy et al., 2017). To maintain this regular consumption, companies must convert short-term purchases into long-term paid subscriptions (Tzuo & Weisert, 2018). Companies using subscription services are introducing various business models, such as a recurring model with multiple deliveries to the home after paying a monthly subscription fee, a subscription model with unlimited use, and a rental model that can be used to replace items (KISO, 2021). The subscription economy operates in a wide range of industries and is divided into three main categories based on the type of service: recurring delivery, rental, and access, or a membership type is added to this (Janzer, 2020).

Membership-based subscription services are characterized by access to discounts on a variety of products and additional services (Han & Lee, 2021). Since the beginning of the 21st century, digitization has led to the re-emergence of subscription models driven by purely digital products, such as multimedia streaming services (e.g., Netflix). Furthermore, Netflix has gone beyond simply being a video content platform and continues to actively invest in producing its own content based on the tastes of its subscribers, through which it has become one of the most popular OTT subscription services in the world (Rudolph et al., 2017). In this subscription economy, various entertainment industries, such as the OTT industry such online video streaming services, due to the accelerated development of digital technologies. Other essential life-related industries, including consumer food, clothing, and housing, are experiencing rapid growth (Chen et al., 2017).

2.2 Information Systems Success Model

OTT services combine IT technologies such as recommendation algorithms, interfaces, compatibility, and streaming technologies on multiple devices, such as PCs and mobile devices. In order to successfully deliver OTT services, information quality factors and system quality factors need to be obtained in the field of information systems research.DeLone & McLean (1992) proposed six performance variables that lead to system quality and information quality, information system usage and user satisfaction, and organizational impact and

individual influence on this. However, at the time of DeLone & McLean's (1992) original information system success model was proposed, the service aspect of information systems was ignored because the mainframe was the main goal (Sim, 2019). The information systems success model is shown in Figure 1.
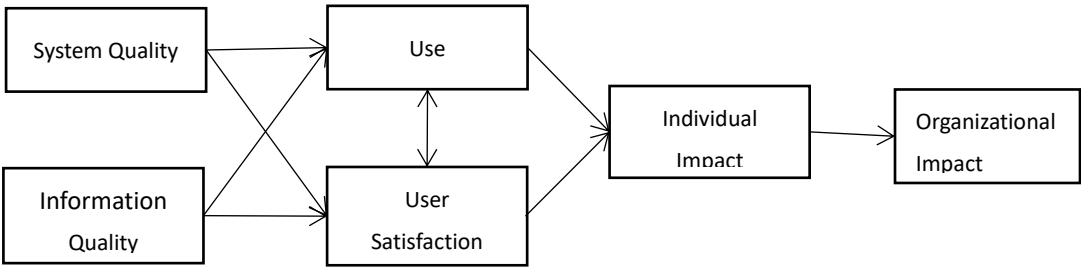

Figure 1.D&M Information Systems Success Model (1992).

Pitt et al. (1995) proposed to add service quality, which means "the quality of service provided by the information system," to the information systems success model of DeLone & McLean (1992). In addition, they asserted that service quality is a valuable tool for measuring information system success through a 1-year longitudinal study and that service quality significantly impacts user satisfaction (Sim, 2019). The DeLone & McLean model has been cited in most information system outcome studies since it was modified in 2003. The DeLone & McLean model divides information systems' quality domains into three categories, consequently impacting user satisfaction and usage. Each measurement variable can be defined as follows:

- Information Quality is the quality of the information provided by the information system.
- System Quality is the performance, convenience, etc. of H/W and S/W.
- Service Quality is the quality of services provided by the system.

In addition, Intention to Use can be defined as the information system utilization of end users, User Satisfaction can be defined as the information system satisfaction of end users, and Net Benefit can be defined as the financial and non-financial results available to individuals and organizations (Hwang, 2020). The modified DeLone & McLean Model is in Figure2.
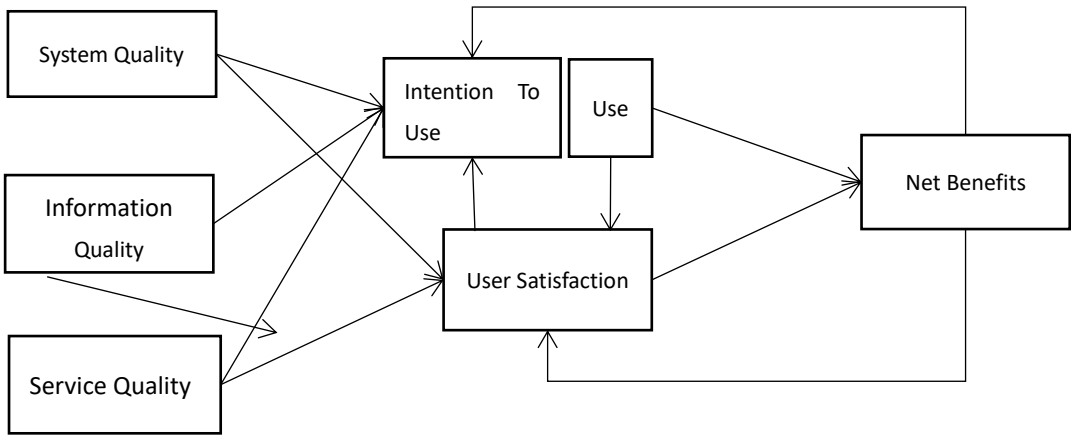

Figure2. D&M Information Systems Success Model (2003)

This study aims to classify quality characteristics into system quality, information quality, and service quality, as well as to derive subquality factors that are appropriate for the characteristics of OTT service platforms and use them in the study.

2.3 value-satisfaction-loyalty chain

Based on the process that leads to cognitive-affect-behavior (Lazarus, 1991), Lam et al. (2004) proposed a model that leads to customer value-satisfaction-loyalty in the context of B2B services. Based on Weiner's (1986) argument, Lam et al. (2004) proposed that customer value affects customer satisfaction and, thus, customer loyalty. Generally, customer value is defined as the ratio of the cost of acquiring a particular product/service to the benefit obtained through that product/service (Buzzell & Gale, 1987). Customer satisfaction refers to the positive emotional state resulting from evaluating a product/service (Geyskens et al., 1999). Customer value is a cognitive-based construct that identifies the difference between sacrifice and benefit, while customer satisfaction is a variable that represents affective and evaluative responses (Oliver, 1993). Finally, customer loyalty implies recommending more products/services to other customers and repeated use of products/services (Dwyer et al., 1987). The customer value-satisfaction-loyalty model is recognized as an essential theoretical framework for explaining customers' intention to repurchase and continuous use of specific products/services (Chitturi et al., 2008). IS researchers introduced a value-satisfaction-loyalty model and applied it in various IT situations (Choi, 2013). Lin and Wang (2006) confirmed the significant relationship results leading to customer value-satisfaction-loyalty (Continuous Intention to Use) in the mobile shopping situation. Chitturi et al. (2008) subdivided customer value into practical and hedonic values categories in the value-satisfaction-loyalty (Continuous Intention to Use) model and investigated the effect of value on satisfaction and loyalty. In particular, as customer value was emphasized as a key leading variable in determining customer satisfaction and loyalty, researchers attempted to classify customer value into various types and analyze its individual effects (Chitturi et al., 2008).

Venkatesh et al. (2012) theorized to include additionally perceived values while expanding the UTAUT model proposed by Venkatesh et al. (2003), and to have a direct and significant effect on the behavioral variables (i.e., behavioral intention/actual behavior) of mobile Internet consumers. Verhagen et al. (2019) verified that both economic and entertainment values increase customer satisfaction with the virtual world, and entertainment values act as preceding variables of economic value. Kim et al. (2010) suggested that value acts as a moderating variable in the relationship between usefulness and intention to use in a study on the use of smartphone app stores. Kwon and Chae (2009) attempted to expand the model by applying the perceived value-satisfaction-loyalty (i.e., continuous use intention) model in a study on the intention to continue using smartphone terminals and adding additional device attachment variables. As such, the customer value-satisfaction-loyalty (Continuous Intention to Use) model provides valuable theoretical evidence for explaining how various values pursued by individuals affect behavioral intentions and actual behavior through customer satisfaction. This study intends to examine the perceived value-satisfaction- Continuous Intention to Use by applying it.

3. Research framework and hypothesis development

3.1 Model of the study

In this study, to verify the factors of OTT services platform quality that affect the intention of continuous use, the following model of Figure 3. was set up, and the influence relationship between variables was identified.
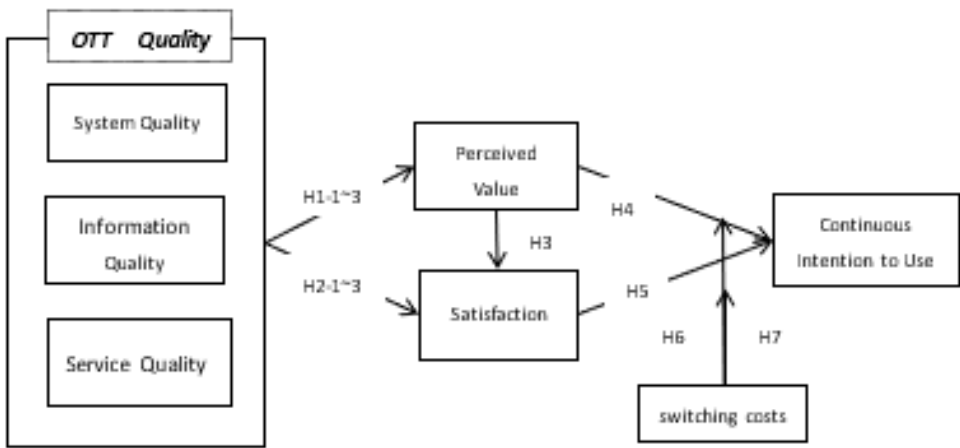
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Figure 3. Reach Model

3.2 Establishing a hypothesis

Information quality is considered a significant factor in users' perceived value and an essential predictor of

consumer decision-making behavior (Bailey & Pearson, 1983). The findings of 이욱(2019) showed that

information quality influenced the value of gratification and tardiness. That is, the video displayed on display

impacts the consumer's decision to purchase intention by providing not only up-to-date and adequate

information but also the aspect of stable system processing speed plays a role in increasing the perceived value

of the user (Paek, 2019). Because value is strongly related to price or quality, perceived value will also increase if

service quality is improved (Rust et al., 1996). The following hypotheses were set based on the literature review.

H1:OTT platform quality will have a positive (+) effect on perceived value.

H1-1: System quality will have a positive (+) impact on perceived value.

H1-2:Information quality will have a positive (+) impact on perceived value.

H1-3:Service quality will have a positive (+) impact on perceived value.

From the viewpoint of Kano's (1984) quality model, if OTT provides a variety of content services as a matter

of course (Must-be) quality, users will not feel particular satisfaction if the taken-for-granted quality is satisfied.

However, if it is not satisfied, users will feel dissatisfied, and the possibility of abandoning the use will increase.

An and Kim (2008) empirically verified the effect of website customization quality on users' attitudes by

analyzing the usage patterns of airline websites. Lee and Lee (2006) showed that the quality of information on

the website (comprehension possibilities, accuracy, usefulness, Etc.) had a meaningful impact on user satisfaction.

Park et al. (2010) stated that in digital media-based interfaces, in order to convey information accurately, not only

Usability but also the emotional impact of the user must be considered, and emphasize the intuitive

comprehension possibilities that occur in the process of visualization of information. As observed in previous

studies, the quality of the information provided by OTT services will be an essential factor in users' continued

use of the service, as suggested by DeLone & McLean's (2003) model of information system success. In

addition, Park (2004) study asserts that in an online shopping environment, the easier it is to provide adequate

information related to products, the quicker the screen change, and the easier it is to read the content of the notice, the higher the user's satisfaction will be. That is, service quality plays a significant role as a primary variable of customer satisfaction (Liao & Cheung, 2002).

H2: OTT platform quality will have a positive (+) effect on customer satisfaction.

H2-1: System quality will have a positive (+) impact on customer satisfaction.

H2-2:Information quality will have a positive (+) impact on customer satisfaction.

H2-3: Service quality will have a positive (+) impact on customer satisfaction.

Perceived value is a powerful means of increasing customer satisfaction and loyalty, predicting customer consumption behavior, and determining post-purchase consumer behavior such as publicity, revisit intent, and repurchase intent (Kim & Niehm, 2009). However, perceived value in various types, emotional and functional values, are chosen as value factors suitable for predicting the intention to continue subscribing to a subscription platform. Emotional value refers to the utility of feelings induced from products and services and emotional states such as pleasure and satisfaction experienced in the consumption process and influences product and service selection as a pleasure-seeking consumer value in the consumption process (Sheth et al, 1991). Both functional and emotional values positively influence customer satisfaction, intention to reuse, and intention to recommend in the study by Lee and Kim (2019). The following hypotheses in this study are based on the aforementioned prior studies.

It is known that perceived value is an essential factor influencing user choice and behavior, as well as a reason for choosing brands and products (Noh and Jang, 2011). In a study by Yang et al. (2016), that the higher the perceived value of the wearable device, the higher the consumer's willingness to continue using it; in a study by Wang (2014), that the utility and cost of mobile government services have a significant impact on the continuity of services through perceived value (Lee, 2018). In a study by   Yu (2019), when the factors influencing satisfaction and intention to continue using OTT services among Chinese people, satisfaction was found to have a significant effect on the intention to continue using. Behavioral intention or actual behavior was higher when consumers were satisfied with products and services. In addition, satisfaction has to affect system success significantly, attitude toward technology, and acceptance of the system during the use of information systems (Wixom & Todd, 2005). Oliver (1980) verified that customer satisfaction affects post-purchase attitudes, affecting repurchase intentions accordingly. Furthermore, it was found that the perceived satisfaction of OTT service users positively impacts the intention to continue using (Kim and Park, 2016). The following hypothesis was set through the preliminary study.

H3:Perceived value will have a positive (+) effect on satisfaction.

H4: Perceived value has a positive (+) impact on Continuous Intention to Use.

H5: Satisfaction will have a positive (+) impact on Continuous Intention to Use.

Switching costs are defined as the cost incurred by consumers when changing services (Porter, 1980). As such, it is known that Switching costs have a direct negative effect on conversion behavior but also play a moderating role by changing the influence of other factors in many cases (Burnham et al., 2003). Existing studies have

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consistently reported that conversion cost hurts conversion behavior. The higher the switching costs, the smaller the effect of job satisfaction on turnover intention. Similarly, it has been reported that the effect of customers' satisfaction with using a hotel restaurant on their intention to leave another restaurant by the switching costs (Bae et al., 2010). Kim(2021) reported that the higher the Switching costs, the less likely it is to switch to other OTT services.

H6: The effect of perceived value on the intention to continue use will differ depending on the conversion cost.

H7: The effect of satisfaction on the intention to continue use will differ depending on the conversion cost.

3.3 Variables were defined and measured

Each variable was defined based on literature studies and a questionnaire was developed for each variable and measured on a 7-point Likert scale. The definitions and questionnaires for the variables designed in this study are shown in Table 1.

Table 1.Definitions and questionnaires

Variables	Definitions and questionnaires	Researchers
System Quality	● Speed, configuration, integrity, and stability of OTT services processing speed is fast/ well organized/ Hard to spot errors/ Not difficult to use/ We believe that the security of personal information will be maintained when used	DeLone& McLean(1992), Rai et al.(2002), Petter et al.(2013)
Information Quality	● Necessity, comprehension, timeliness, and usefulness of OTT services It gives the information I need/ The information provided is easy to understand/ The information provide usefully/ Provides up-to-date content/ Provide content tailored to taste	DeLone & McLean(1992), Seddon(1997), Petter et al.(2013)
Service Quality	● Information linkage, consideration, reliability, and promptness of OTT services Provides the service I expect/ Provides a menu to facilitate service inquiries/ The services/menu provided easy to each other/ When there is a problem with use, it tells how to solve the problem/ Quickly respond to customer needs (complaints/customer opinions)	Pitt et al.(1995), DeLone & McLean(2003), Petter et al.(2003)
Perceived Value	● Degree of evaluation of expectations and values for products and services perceived through the use of OTT services Provides much value/ It offers a variety of benefits/ Can get differentiated content/ The content provided is valuable/ Feel useful	Sirdeshmukh(2002) Singh and Sabol(2002); Kim(2007); Chan and Gupta(2007)
Satisfaction	● Perceived satisfaction of users with OTT services experience Overall satisfied with the use/ It satisfies needs/ It is a wise choice to use/ Satisfied with the content provided/ Satisfied with customer service (user information/customer inquiry)	Shin and Kim(2012); Son and Kim(2018)
Continuous Intention to Use	● Intention to continue using OTT services Willing to continue to use/ Willing continue to use it if possible/ Willing recommend it to people around/ will speak positively (good) about the service to the people around me	Fishbein and Ajzen(1975), Venkatesh et al.(2003); Joe (2015); Kim (2018)
Switching	● switching costs other than monetary costs such as time and cognitive costs incurred by	Burnham, Thomas

costs	consumers in the process of changing OTT services	A.(2003);
	(if service changes)	Frels and Judy K.(2003);
	It seems that the cost to be paid at the beginning will be burdened/ It seems that it will take a long time to use the new service/ It seems that they are not used to using the new service/ Think using the service will take a lot of time and effort/ We need a lot of information and knowledge about using new services.	Mahajan, Vijay(2003);

3.4 Research Methodology

This study conducted a survey of customers using OTT in Korea through online links. A survey was conducted for two weeks and a total of 274 surveys were collected. Of these, 10 cases of insincere responses and missing values were removed, and 264 cases were used as the final effective sample. Table1 summarize the analysis results.

The measurement tool for empirical analysis of the research model was constructed according to the purpose of this study based on previous studies. The questionnaire was supplemented according to the context of this study based on the questionnaire whose validity was verified in previous studies. In addition, only valid measurement items were finally used in this study by determining the accuracy of variables measurement.

The demographic survey of the users included five categories: gender, age, education level, occupation and career. In terms of gender, 110 cases (41.7%) were male and 154 cases (58.3%) were female. In terms of age, 69(26.1%) are under the age of 29, while 84（31.8%）are between 30 and 39. 62 people aged 40-49 and above, accounting for 23.5%; 41 people aged 50-59, accounting for 15.5%; 8 people aged 50 or above accounted for 3%. It can be seen that the majority of budget customers using OTT are 30-39 years old. In terms of education level, 8% of customers are high school or lower (21), 27.7% are junior college (73), 45.8% are bachelor degree (121), and 18.6% are master degree or above (49). The OTT services user source specialized college and above education level accounted for the vast majority. In terms of career, user with career of students are the most, accounting for 25%; 64 people with professional trades, accounting for 24.2%; 21.6%, or 57, are company staff; There are 49 users with career in the range of self-starting, accounting for 18.6%; There are 28 users with career in the range of other(Housewives, etc.）, accounting for 10.6%.

The statistical survey of users' primary usage includes two categories, frequency of use and leading OTT platforms. In terms of frequency of use, 11 people accounted for 4.2% of the total number of users from once to twice a month; 36 people (13.6) from three to four times a month; 73 people (27.7) from once to twice a week; 72 people (27.3) from three to four times a week; 72 people (27.3%) who used almost every day. Overall the most significant proportion of people used three to four times a week and above. Among the leading OTT platforms used, the survey results show that YouTube has the highest number of users with 100 (37.9%), followed by Netflix with 95 (36%), TVing with 39 (14.8), Watcha with 28 (10.6), and other platforms with 2 (0.8%).

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Table 2. Demographic characteristics of the sample

(N=264)

Sortation		Frequency	Percentage	Sortation		Frequency	Percentage
Gender	Male	110	41.7	Usage frequency	1 to 2 times per month	11	4.2
	Female	154	58.3		3 to 4 times per month	36	13.6
Age	Less than or equal to 29 years old	69	26.1		1 to 2 times per week	73	27.7
	30-39 years old	84	31.8		3 to 4 times per week	72	27.3
	40-49 years old	62	23.5		almost every day	72	27.3
	50-59 years old	41	15.5	Mainly used websites	Netflix	95	36
	Greater than or equal to 50 years old	8	3.0		YouTube	100	37.9
Education	Less than high school or High School	21	8.0		Watcha	28	10.6
	Junior college	73	27.7		TVing	39	14.8
	Bachelor degree	121	45.8		Other	2	0.8
	Master degree or above	49	18.6				
Career	Company Staff	57	21.6				
	Professional Trades	64	24.2				
	Self-starting	49	18.6				
	Students	66	25.0				
	Other	28	10.6				

4. Methodology

4.1 Validation of the reliability and validity of the measurement instruments

Next, the reliability and validity of the measurement instruments in this study were verified. First, reliability validation was based on Cronbach's Alpha coefficient, which determines the scale's internal consistency, and if it is above 0.6, the scale's reliability is guaranteed. In addition, exploratory factor analysis was conducted to verify the validity of the component concepts. For the factor analysis, principal component analysis and orthogonal rotation (Varimax) were used to extract the compositional factors and simplify the factor loadings. The KMO (Kaiser-Meyer-Olkin) was significant if the eigenvalues were above 1.0 and the factor loading values were above 0.4.

Table3. Results of reliability and feasibility tests

	1	2	3	4	5	6	공통성	Cronbach's α
SVQ5	**.838**	.206	.082	.023	.035	.177	.784	
SVQ2	**.836**	.132	.115	.079	.051	.172	.769	
SVQ4	**.798**	.188	.108	.018	.008	.252	.748	.901
SVQ3	**.759**	.106	.137	.217	.126	.123	.684	
SVQ1	**.668**	.138	.278	.127	.193	.181	.629	
PEV4	.214	**.794**	.114	.170	.185	.038	.754	
PEV5	.238	**.773**	.155	.132	.118	.054	.712	
PEV3	.217	**.753**	.092	.112	.080	.192	.678	.875
PEV2	.032	**.728**	.187	.110	.163	.190	.641	
PEV1	.076	**.661**	.194	.212	.118	.227	.590	
INQ1	.162	.242	**.807**	.014	.100	.118	.761	
INQ2	.013	.119	**.793**	.053	.168	.108	.685	
INQ5	.189	.112	**.788**	.104	.152	.058	.707	.884
INQ4	.101	.043	**.787**	.153	.157	.081	.686	
INQ3	.261	.205	**.677**	.138	.229	.130	.656	
SAT2	.068	.151	.134	**.811**	.170	.177	.763	
SAT1	.019	.024	.162	**.788**	.150	.177	.702	
SAT4	.236	.428	.052	**.640**	.310	.077	.753	.872
SAT3	.139	.403	.093	**.636**	.311	-.008	.692	
SAT5	.285	.428	.042	**.580**	.208	.066	.650	
CIU2	.096	.171	.218	.129	**.796**	.079	.743	
CIU4	.089	.209	.159	.193	**.789**	.184	.770	.857
CIU3	.142	.106	.172	.291	**.781**	.084	.763	
CIU1	.024	.163	.260	.185	**.634**	.137	.550	
SYQ4	.051	.191	.093	.104	.191	**.763**	.678	
SYQ5	.470	.111	.051	.089	.020	**.661**	.680	
SYQ1	.391	.188	.216	.260	.109	**.638**	.721	.866
SYQ3	.414	.131	.103	.069	.129	**.637**	.627	
SYQ2	.438	.194	.276	.166	.164	**.620**	.745	
eigen-value	4.297	3.819	3.596	2.962	2.938	2.708		
분산설명(%)	14.817	13.170	12.398	10.215	10.131	9.339		
Kaiser-Meyer-Olkin Measurement	**.912**							

Bartlett's Sphericity Test (Probability of significance)	.000	

System Quality (SYQ), Information Quality (INQ), Service Quality (SVQ), PEV: Perceived Value, SAT: Satisfaction, CIU:

Continuous Intention to Use

4.2 Correlation analysis

The correlations between the constructs' concepts were analyzed. The analysis resulted in positive (+) correlations between each of the variables. The empirical analysis was judged to be reasonable. The results of the correlation analysis are summarized in Table 4.

Table 4. Results of correlation analysis

	SYQ	INQ	SVQ	PEV	SAT	CIU
SYQ	1					
INQ	.429**	1				
SVQ	.662**	.398**	1			
PEV	.482**	.427**	.451**	1		
SAT	.459**	.375**	.393**	.581**	1	
CIU	.412**	.492**	.318**	.460**	.584**	1

** Correlation is significant at 0.01 level (both sides).

System Quality (SYQ), Information Quality (INQ), Service Quality (SVQ), PEV: Perceived Value, SAT: Satisfaction,

CIU: Continuous Intention to Use

4.3 Hypotheses Test

The hypothesis test results are as follows. First, as a result of analyzing the relationship between platform quality and perceived value of OTT platform, it is found that System Quality(t=3.604, p=.000), Information Quality(t=4.222, p=.000), Service Quality(t=2.648, p=.009)appear to have a positive effect on perceived values. Second, as a result of analyzing the relationship between platform quality and customer satisfaction of OTT platform, it is found that System Quality(t=3.996, p=.000), Information Quality(t=3.360, p=.001) appear to have a positive effect on customer satisfaction. and Service Quality(t=1.633, p=.104) appears to have no significant effect on perceived value. Third，as a result of analyzing the relationship between perceived value and customer satisfaction of OTT platform, it is found that perceived value(t=11.554, p=.000)appear to have a positive effect on customer satisfaction. Fourth，as a result of analyzing the relationship between perceived value and intention for continued use of OTT platform, it is found that perceived value(t=8.376, p=.000)appear to have a positive effect on intention for continued use. Fifth，as a result of analyzing the relationship between customer satisfaction and intention for continued use of OTT platform, it is found that perceived value(t=11.653, p=.000)appear to have a positive effect on intention for continued use. Lastly, a moderating effect analysis was conducted to verify that switching costs plays a moderating role. As a result of the analysis, in the case of moderated switching costs (perceived value * switching costs), the significance probability (p=.002)

is found to be a meaningful result value. Therefore, switching costs has a moderating effect on the relationship between perceived value and intention for continued use. In the case of moderated switching costs (customer satisfaction * switching costs), the significance probability (p=.000) is found to be a meaningful result value. Therefore, switching costs has a moderating effect on the relationship between customer satisfaction and intention for continued use. Table5, Table6 summarize the analysis results.

Table 5. Hypotheses Test Results

Dependent variable	Independent variable	Unstandardized Coefficients		Standardized Coefficients	t (Sig.)	Hypo theses	Result
		B	Std. Error	β			
perceived value	System Quality	.219	.061	.255	3.604 (.000**)	H1-1	Supported
	Information Quality	.219	.052	.244	4.222 (.000**)	H1-2	Supported
	Service Quality	.136	.051	.185	2.648(.009**)	H1-3	Supported
R²=.311 , Adjusted R²= .303 , F=39.048,P= .000,Durbin-Watson= 1.571							
customer satisfaction	System Quality	.214	.054	.294	3.996(.000**)	H2-1	Supported
	Information Quality	.153	.046	.202	3.360(.001**)	H2-2	Supported
	Service Quality	.074	.045	.118	1.633(.104)	H2-3	Not Supported
R²= .257 , Adjusted R²= .248 , F=29.947,P= .000,Durbin-Watson= 1.771							
customer satisfaction	perceived value	.493	.043	.581	11.554 (.000**)	H3	Supported
R²= .338 , Adjusted R²= .335 , F=133.505,P= .000,Durbin-Watson= 1.777							
intention for continued use	perceived value	.479	.057	.460	8.376 (.000**)	H4	Supported
R²= .211 , Adjusted R²= .208 , F=70.156,P= .000,Durbin-Watson= 1.908							
intention for continued use	customer satisfaction	.718	.062	.584	11.653 (.000**)	H5	Supported
R²= .341 , Adjusted R²= .339 , F=135.789,P= .000,Durbin-Watson= 1765							

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Costs

*** p<0.001, ** p<0.01, * p<0.05

Table 6. Moderating Effect of   switching costs.

	Unstandardized Coefficients		Standardized Coefficients	t	P	Hypoth eses	Result
	B	Std. Error	β				
Value Adjustment	.121	.039	.232	3.134	.002	H6-1	Supported
Satisfaction Adjustment	-.153	.049	-.208	-3.15 8	.002	H6-2	Supported

5. Result

First, among the lower elements of subscription-based OTT platform quality, system quality, information quality, and service quality all have a positive (+) effect on perceived value. This indicates that the more secure the platform, the timeliness of information, and the attitude and speed of customer service in answering questions when users use OTT, the higher the perceived value felt by users. Second, among the lower elements of subscription-based OTT platform quality, system quality and information quality have a positive (+) effect on satisfaction, but service quality does not have a positive (+) effect on satisfaction. This indicates that there is no positive relationship between users' attitudes and the attitude and speed of customer service when answering questions, which is because most operations can be done autonomously when using OTT services, so the demand for service quality is not very high. Third, perceived value has a positive effect on customer satisfaction and intention for continued use, and customer satisfaction has a positive effect on   intention for continued use. Therefore, the perceived value of users when accepting OTT service affects customer satisfaction formation and ultimately affects intention for continued use. As reviewed above,   consumers'trust in subscription services is still insufficient and there is a perception that the costs paid for services are not reasonable.If this awareness is not improved, the outlook for subscription services cannot be said to be so bright. Therefore, rather than unconditionally being immersed in the expansion of subscribers, attitudes to listen to the voices of consumers and move flexibly accordingly are necessary because the core value of subscription services is in maximizing satisfaction by delivering the most suitable products and services to individual consumers. If consumers'voices are reflected first and what are necessary to them are considered first, consumers will not begrudge the costs paid for subscription services.Finally, the moderating effect of switching costs when perceived value and customer satisfaction influence the intention of continued use. The moderating effect of switching costs was confirmed by this study. This means that the greater the customer satisfaction, the higher the switching cost, and the more the current service provider induces more intention to continue using the service. Therefore, service providers should increase customer satisfaction on the one hand and try to increase switching costs on the other. Especially, service providers in industries with fierce price competition should draw customers' attention to non-monetary concerns more than monetary costs by establishing an emotional connection with customers and creating a friendly, convenient shopping pattern that meets their personal needs together.

As mentioned above, this study empirically analyzes the relationship between OTT service quality and intention

to continue using through an integrated structure of the information system success model and value-satisfaction-loyalty theory, incorporating a new variable switching cost with academic and practical implications. In other words, it shows the necessity of service enhancement that can improve users' perceptions regarding system quality, information quality, and service quality, indicating that exploratory research is a characteristic of OTT services. Therefore, this study identifies predictor variables for the intention to continue using OTT services and proposes a strategic orientation for the successful introduction and promotion of OTT services, which can be considered the significance of this study.

The present study can be said to have several limitations: 1.With respect to the generalizability of the study, this study investigated the use of five OTT service platforms and therefore has difficulties in applying and extending the findings in terms of generalizability.2.In this study, a comparative study by type of content, characteristics of content users, or type of content might have provided more meaningful results on the characteristics of OTT services.3.This study conducted a survey of Korean users. If the sample could be expanded globally geographically to collect data, it would improve the applicability of the results of the empirical analysis.

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