

A Study on the Effect of OTT Service Attributes on OTT Consumption Behavior; Focusing on 20's

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Abstract

In media and content research, if research was mainly conducted from the perspective of "viewing" in the existing legacy media market, it is time to study from the perspective of "consumption" of purchasing and consuming OTT services as the global market expands after COVID-19. Therefore, through this study it is intended to be the starting point and catalyst for establishing a consumer behavior model in the media and content fields. In addition, we would like to provide implications for domestic OTT service research and OTT service practitioners by grasping the OTT consumption behavior of the generation through OTT service attributes in their 20s, which are emerging as the main consumption in the era of globalization.

Keywords: OTT, OTT Service, Consumption, Consumption Behavior, Viewing, 20s

INTRODUCTION

Consumer activities through the Internet have expanded further and companies have a need to actively manage various activities of consumers occurring on the Internet. In particular, the high-speed Internet penetration rate and the increase in wireless Internet users have led to changes in the consumer's purchasing behavior process.

Currently, the global media content market is competing for services without borders, and this media content industry is an industry that contributes to improving and enhancing the national image by providing people around the world with an opportunity to indirectly experience the culture of the country.

Due to the development and spread of Internet technology, the production, distribution, and transmission of media have become digital, making it an environment to consume content at the same time around the world through OTT services. As a case in point, Netflix's "Squid Game" watched 140million people worldwide in the first four weeks since its first release, 1.86% of the world's 7.6billion people consumed the content

However, we still see content as an act of watching. This is because content viewing has been done through a device called TV. However, after Netflix entered the domestic market in 2016, due to the emergence of various OTT services such as wave and TVing, content has no longer been viewed from the perspective of "consumption" rather than from the perspective of "viewing." In the end, consumers are in an environment where they have to consume content through subscription and approval of OTT services in order to watch the content they want.

Therefore, this study intends to confirm which OTT service attributes, among OTT service attributes, content, cost, service quality and ease of use affect OTT consumption behavior in the 20s.

CONTENTS

OTT Service

OTT is an online content streaming service that provides various media contents such as broadcasting programs and movies through the Internet, and allows users to consume content on various devices such as TV, smartphone, pc and tablet with one account beyond set-top boxes connected to TV.

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Table 1. Trends in OTT service-related research.

Author	Year	Research Title
Jae-Shin Lee, Baek-Min Kim.	2021	Exploring Factors Affecting the Viewing Intention of Recommended Content of Paid OTT Services
Ho-Jong You	2020	The Comparative Study on the Behavior Characteristics Influencing the Usage of OTT Services
Ka-hye Kim, Ah-yeon Kim, Yong-jun Sung	2020	The Influence of Personalized Recommendation on the Millennial's Evaluation of OTT Services; Focused on the variety seeking tendency
Hee-Jay Kim, Chung-Joo Chung	2020	The usage motivations and behaviors of Netflix users in Korea. Journal of Communication Science
Hye-Sun Choi, Seung-In Kim	2020	A Study on User Experience of OTT Service; Focused on Netflix, Watcha and Wavve
Eun-a Kwak, Jin-ho Choi	2019	An Analysis of User's Perception regarding Service Attributes and Competitive Relationship among OTT Services in the Korean Market
Jin-wook Kim	2019	A study on the use of Big Data in Film Industry: Focused on Netflix's Analytical Tools

As such, the development of Internet and media technology is changing the viewing path of content and the consumption of users, and OTT services allow users to actively select content that suits their taste and use it as a variety of devices (multi-platform) without space-time constraints (Eun-a Kwak, Jin-ho Choi, 2019). Accordingly, not only can users dynamically consume content through the service, but it also affects users' service consumption selection behavior (Eun-a Kwak, Jin-ho Choi, 2019).

In particular, after COVID-19, it can be said that it is an important task to look at consumers' media consumption behavior at a time when content consumption through OTT services is expanding worldwide. In particular, I would like to pay attention to the consumption behavior of those in their 20s who have various devices such as pc, smartphone and tablet compared to other generations and show complex device usage behaviors (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021; Eun-a Kwak, Jin-ho Choi, 2019).

OTT Service Properties

The emergence of OTT services is noteworthy in that it played an important role in changing the viewing (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021). With the development of smart devices such as smartphone and tablet the environment for viewing broadcasting content has changed, allowing users to consume videos and media that suit their taste regardless of time and place (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021). Furthermore, through algorithms, content that suits one's taste was recommended and through replay, driving and linking the convenience of using content in various forms was sought (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021).

Table 2. A Study on OTT Service Properties and User Characteristics.

Author	Year	Research Title
Chae-ju Oh, Min-jeong Ham, Sang-woo Lee	2021	Classifying Video Media Repertoires of Millennial Generation: Focusing on the Use of TV and OTT service
Young-Kwan Kim, Sang-hyu Byun, Yeong-Ju Lee	2019	Empirical Analysis of the Nationwide Welfare Effect of VoD Service. Innovation studies
Ji-hun Yoo, Joo-Yeun Park	2018	A Study on the Factors Influencing Continuous Usage Intension based on OTT Service User
Ou-Yi Chun, Jae-hee Cho	2017	A Study on the Satisfaction and Continuance Usage Intention of Netflix; Cross-National Comparisons of Korean and Taiwanese Users
Dae-Han Kim, Nam-keek Park.	2016	Effects of OTT Service Users' Use Motivations on Satisfaction and Intention of Continued Use

As such, OTT service is essentially different from traditional broadcasting that caused passive viewing behavior in that users can be given various options such as viewing time, viewing place and viewing content (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021). Accordingly, users consume content more purposefully and necessity-oriented than in the past and rather than randomly selecting services, they are showing a selective consumption of services that are regularly used (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021).

As such, the OTT service-oriented media environment changed the viewing environment of media users and the viewing pattern of users changed according to the change in the viewing environment (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021). At this point in time, we would like to look at the overall relationship between the way consumers consume OTT services and how the combination changes, and what kind of OTT service attributes consumers have to consume them (Chae-ju Oh, Min-jeong Ham, Sang-woo Lee, 2021).

Consumption Behavior

In modern society consumption is an economic activity that selects and purchases necessary goods and services and an activity to lead a life and this experience of consumption has been naturally achieved in our daily lives (Dong-hoo Lee, Hae-won Kim, Seul-hi Lee, 2019).

In particular, due to the spread of COVID-19, the focus of consumption has shifted significantly from offline to online and mobile due to telecommuting and social distancing (Jam et al., 2018). Due to these changes in consumption patterns, the consumption market using online and mobile will expand further, so continuous research and development are needed.

In recent years, content consumption behavior is also evolving along with diverse and enriched media devices, content is diversifying and enriched, but the tendency to pursue more effective and efficient media consumption is naturally spreading because media usage time is absolutely limited (Heung-seok Koh, Joong-hyun Shin, 2018).

In addition, the universalization of digital devices extends time and space in media content consumption and has a close impact on daily life (Heung-seok Koh, Joong-hyun Shin, 2018). In other words, spatial deviations in media content consumption private media use in public space, means that individual preferences and intentions should be more important to consumers' media ratio (Heung-seok Koh, Joong-hyun Shin, 2018).

In particular, media consumption behavior in their 20s, who were born into the digital native generation along with smart media is changing significantly and those in their 20s who are familiar with digital media are more friendly to smart media than legacy media that are less flexible in broadcasting (Bo-bae Im, Min-ho Ahn, 2021).

Table 3. A Study on Media and Content Consumption Behavior.

Author	Year	Research Title
Bo-bae Im, Min-ho Ahn	2021	An empirical study of media use in mobile space comparing the in-house media use
Sang-gl Lee	2020	A Study on the Relativeness between the Growth of Smart Media and the Media Consumption Behavior as well as Educational Environment
Jeong-Hee Kim, Ji-Won Baek	2019	An Empirical Analysis of the Effects of OTT Services on Changes in the Media Use Pattern

RESEARCH METHOD

Research Model

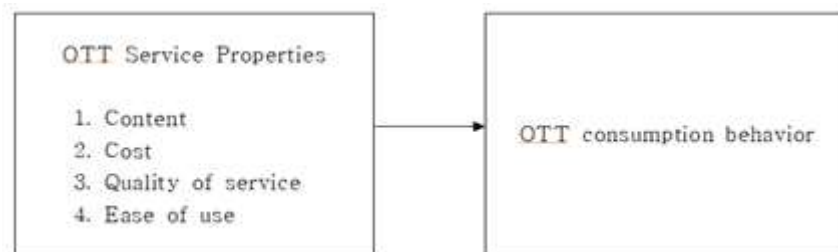


Figure 1. Research model.

- (1) Among the OTT service attributes, the content will have a significant effect on the OTT consumption behavior of those in their 20s.
- (2) The cost of OTT service attributes will have a significant effect on OTT consumption behavior in the 20s.
- (3) Among the OTT service attributes, service quality will have a significant effect on OTT consumption behavior in the 20s.
- (4) Among the OTT service attributes, the ease of use will have a significant effect on the OTT consumption behavior of those in their 20s.

Research Method

The composition of the questionnaire was based on studies related to OTT services and consumption behavior examined in related studies in Chapter 2, and the items derived from previous studies were reconstructed according to the purpose of this study. After reviewing the understanding and suitability of the survey contents through media, content-related Ph.D. (Including professors) and media and content field practitioners for more than 20 years, the questions were modified in the final questionnaire to ensure that the survey respondents responded faithfully. In addition, this questionnaire was composed of variables derived based on previous studies.

Specific research methods in this study are as follows. First, an exploratory factor analysis(EFA) was conducted to analyze the validity of the measurement tool, and the reliability of the items constituting the factor was analyzed using the Cronbach's alpha coefficient. Second, frequency analysis was conducted to understand the general characteristics of the research subject. Third, multiple regression analysis was conducted to verify the effect of OTT service attributes on OTT consumption behavior.

EXPERIMENTAL RESULTS

Feasibility and Reliability Analysis

As a result of the analysis, the Kaiser-Meyer-Oikin(KMO) measure is .904, and Bartlett's sphericity verification result was also significant($p < .001$), the factor analysis model was judged to be suitable. In addition, the loading amount of all the factors was more than .40, satisfying the validity of the overall measurement tool, and the analysis was conducted without additional items or adjustments. In addition, the alpha coefficients of all variables were 0.6 or more, and it was judged that the reliability was high. Therefore, it was evaluated that there were no items that hinder reliability, and the analysis was conducted without removing the items.

Multiple Regression Analysis

Multiple linear regression analysis was conducted to verify the factors that OTT service attributes(content, cost, service quality, and ease of use) affect OTT consumption behavior.

As a result of verifying the regression model, the regression model was suitable with $F=3.528(p < .05)$, and the explanatory power of the model was about 21%($R^2=.021$). On the other hand, the Durbin-Watson statistic was 1.997, which was close to 2, so there was no problem with the assumption of the independence of the residuals, with a tolerance of 0.1 or more and a VIF(Variance Inflation Factor) of less than 10, so there was no multicollinearity problem.

Independent variable	B	S.E	β	t	p	tolerance	VIF
(Constant number)	3.383	0.034		99.169***	<.001		
Cost	-0.188	0.109	-.077	-1.727	.085	0.981	1.019
Quality of service	0.162	0.145	.050	1.120	.263	0.988	1.013
Ease of use	-0.221	0.087	-.113	-2.538*	.011	0.978	1.022
F=3.528(p<.001), R2=.021, adjusted R2=.015, Durbin-Watson=1.997							

1) Dummy variable: Reference group(Contents=0)

* $p < .05$ ** $p < .01$ *** $p < .001$

Figure 2. Multiple linear regression analysis.

In addition, as a result of verifying the significance of the regression coefficient, it was found that convenience of use had a significant negative (-) effect on OTT consumption behavior. In other words, it was evaluated that the higher the convenience of use among OTT service factors, the lower the OTT consumption behavior of those in their 20s.

CONCLUSIONS

Netflix, which has the largest number of subscribers among the world's OTT services, was able to secure about 213.6 million subscribers worldwide as of the end of the third quarter of 2021 by analyzing and using consumption behavior rather than demographic data in producing content.

Apple TV+ and Disney+, global OTT services, launched in Korea in November for the first time in five years since Netflix entered Korea in 2016, and global OTT services such as HBO MAX and Amazon Prime are in full swing. In addition, the domestic OTT service market is expanding and competition is intensifying between these global OTT services and domestic OTT services. Therefore, this study started with the aim of accurately analyzing the OTT consumption behavior of the generation through the attributes of OTT services in their 20s.

In particular, in the reality that people in their 20s are emerging as the center of consumption, we tried to find theoretical and practical implications for discussing new media and content consumption behaviors such as OTT and metaverse, along with a new understanding of the media and content industry.

The main results of this study are as follows.

First, the priorities of the four service attributes of content, cost, service quality, and ease of use among OTT service attributes were analyzed for those in their 20s who consume OTT services (Eun-a Kwak, Jin-ho Choi, 2019), 74.2% of content, 13.4% of ease of use, 8.1% of cost, and 4.3% of service quality. Accordingly, as a result of a regression analysis to analyze the effect of OTT service attributes on OTT consumption behavior in 20s, the effect on OTT consumption behavior among OTT service attributes in 20s had a positive effect ($=\beta 096, p < .05$), it was found that ease of use had a negative effect ($=-.108, p < .05$). In addition, it was analyzed that cost and service quality did not affect.

In the end, it was confirmed that content was selected as the top priority in selecting the OTT service among the four attributes of the OTT service for those in their 20s. This means that OTT service attributes such as cost, service quality, and ease of use are no longer universal for OTT operators and for those in their 20s who consume them, and cannot bring about differentiation in their consumption behavior.

In the course of this study, the subjects were those in their 20s, who are emerging as the center of consumption. However, in order to secure the scalability of future studies, it is also necessary to conduct a study comparing the differences in OTT consumption hedges for each age group for all ages over the 20s.

REFERENCES

- Hee-Kyung Koo (2011), "Purchasing Behavior of AISAS Process According to the Generations for Fashion Products," *The Korean Society of Science & Art*, 9, 15-26. DOI: <https://doi.org/10.9708/jksci.2021.26.01.265>
- Eun-A Kwak., and Jin-Ho Choi (2019), "An Analysis of User's Perception regarding Service Attributes and Competitive Relationship among OTT Services in the Korean Market", *Broadcasting & Communication*, 20(2), 121-169. DOI: <http://dx.doi.org/10.22876/bnc.2019.20.2.004>
- Chae-Ju Oh., Min-Jeong Ham., and Sang-Woo Lee (2021), "Classifying Video Media Repertoires of Millennial Generation: Focusing on the Use of TV and OTT service," *The Journal of Korean Institute of Communications and Information Sciences*, 46(5), 863-881. DOI: <http://dx.doi.org/10.7840/kics.2021.46.5.863>
- Dong-Hoo Lee., Hae-Won Kim., and Seul-Hi Lee (2019), "TV Home Shopping : The Intersection of Everyday Life, Media, and Consumption," *Korean Journal of Communication & Information*, 97, 37-76. DOI: <http://dx.doi.org/10.46407/kjci.2019.10.97.37>
- Jam, F. A., Singh, S. K. G., Ng, B., & Aziz, N. (2018). The interactive effect of uncertainty avoidance cultural values and leadership styles on open service innovation: A look at Malaysian healthcare sector. *International Journal of Business and Administrative Studies*, 4(5), 208-223.
- Eun-Ju Ahn., Jae-Hyeok Jo., and Sung-Su Kim (2020), "A Study on the Relationship between Consumer's Consumption Propensity, SNS Advertising Attributes, Product Image, and Purchase Intention," *The Journal of Internet Electronic Commerce Research*, 20(6), 107-133. DOI: <http://dx.doi.org/10.37272/JIECR.2020.12.20.6.107>
- Heung-Seok Koh., and Joong-Hyun Shin (2018), "An Exploratory Study on Media Use by Digital Natives," *JOURNAL OF*

- THE KOREA CONTENTS ASSOCIATION*, 18(3), 1-10. DOI: <http://dx.doi.org/10.5392/JKCA.2018.18.03.001>
- Bo-Bae Im., and Min-Ho Ahn (2021), "An empirical study of media use in mobile space comparing the in-house media use," *Broadcasting & Communication*, 22(1), 41-75.
- Jae-Shin Lee., and Baek-Min Kim (2021), "Exploring Factors Affecting the Viewing Intention of Recommended Content of Paid OTT Services," *The Journal of Internet Electronic Commerce Research*, 21(1), 69-88.
- Jam, F. A., Singh, S. K. G., Ng, B., & Aziz, N. (2018). The interactive effect of uncertainty avoidance cultural values and leadership styles on open service innovation: A look at Malaysian healthcare sector. *International Journal of Business and Administrative Studies*, 4(5), 208-223.
- Ho-Jong You (2020), "The Comparative Study on the Behavior Characteristics Influencing the Usage of OTT Services," *The e-Business Studies*, 21(1), 55-72. DOI: <https://doi.org/10.14400/JDC.2022.20.5.513>
- Ka-Hye Kim., Ah-yeon Kim., and Yong-jun Sung (2020), "The Influence of Personalized Recommendation on the Millennial's Evaluation of OTT Services; Focused on the variety seeking tendency," *Journal of the HCI Society of Korea*, 15(3), 43-53. DOI: <http://dx.doi.org/10.17210/jhsk.2020.09.15.3.43>
- Khan, M. T., Khan, T. I., & Khan, S. (2020). Innovation & Its Diffusion in Business: Concept, Stages & Procedural Practices. *sjesr*, 3(4), 174-186.
- Hee-Jay Kim., and Chung-Joo Chung (2020), "The usage motivations and behaviors of Netflix users in Korea," *Journal of Communication Science*, 20(2), 89-129. DOI: <http://dx.doi.org/10.14696/jcs.2020.06.20.2.89>
- Hye-Sun Choi., and Seung-In Kim (2020), "A Study on User Experience of OTT Service; Focused on Netflix, Watcha and Wavve," *Journal of Digital Convergence*, 18(4), 425-431. DOI: <http://dx.doi.org/10.14400/JDC.2020.18.4.425>
- Young-Kwan Kim., Sang-kyu Byun., and Yeong-Ju Lee (2019), "Empirical Analysis of the Nationwide Welfare Effect of VoD Service," *Innovation studies*, 14(3), 59-80. DOI: <http://dx.doi.org/10.46251/INNOS.2019.08.14.3.59>
- Ji-Hun Yoo., and Joo-Yeun Park (2018), "A Study on the Factors Influencing Continuous Usage Intension based on OTT Service User," *Journal of Broadcasting and Telecommunications Research*, 102, 46-79.
- Yi-Chun Ou., and Jae-hee Cho (2017), "A Study on the Satisfaction and Continuance Usage Intention of Netflix; Cross-National Comparisons of Korean and Taiwanese Users," *Korean Journal of Journalism & Communication Studies*, 61(5), 341-375. DOI: <http://dx.doi.org/10.20879/kjics.2017.61.5.011>
- Dae-Han Kim., and Nam-kee Park (2016), "Effects of OTT Service Users' Use Motivations on Satisfaction and Intention of Continued Use," *Journal of Broadcasting and Telecommunications Research*, 77-110.
- Sang-Gil Lee (2020), "A Study on the Relativeness between the Growth of Smart Media and the Media Consumption Behavior as well as Educational Environment," in *2020 Summer Conference of the Korean Broadcasting and Media Engineering Association*, 517-520.
- Jeong-Hee Kim., and Ji-Won Baek (2019), "An Empirical Analysis of the Effects of OTT Services on Changes in the Media Use Pattern," *International Telecommunications Policy Review*, 26(1), 47-79.
- Ji-Hyung Shin, (2019). *Millennials and Generation Z's use of media*, KISDI Status Report, 19(4), 2-7.