



A Study on Consequences and Growth of OTT Platform using Factor Analysis and ANOVA

Ekta Yadav¹, Megha Goyal², Suman Ghalawat³ and Joginder Singh Malik^{4*}

¹Research Scholar, ^{2,3}Assistant Professor, Department of Business Management, CCS Haryana Agricultural University, Hisar-125004, Haryana, India

⁴Professor, Department of Extension Education, CCS Haryana Agricultural University, Hisar-125004, Haryana, India

*Corresponding author email id: jsmalik67@gmail.com

ARTICLE INFO

Keywords: OTT platform, Factor analysis, Reliability, Cronbach alpha and ANOVA

<http://doi.org/10.48165/IJEE.2023.59119>

Conflict of Interest: None

ABSTRACT

In the face of the global COVID-19 pandemic, the over-the-top service of new generic media continues its unbelievable flight. The availability of content, easy access to various shows, ease of use, and continuity of shows require users to subscribe to OTT video streaming. This study aims to pinpoint the factors that show the consequences & growth of OTT over the traditional medium and the effect of the consequences of the OTT platform on gender & occupation. With a sample size of 200, the data was gathered from primary sources utilizing convenience sampling and a semi-structured questionnaire. The data was analyzed by using factor analysis & ANOVA. Two main factors used in were Consequences of OTT (Factor 1) and OTT growth over traditional medium (Factor 2). The variations in factors 1 & 2 were 42.59 & 15.49 respectively. As per factor analysis, factor 1 was the most important and the Cronbach alpha values of 0.852 and 0.807 respectively, reveal the reliability of the two factors. Also, Analysis of Variance (ANOVA) shows that gender & occupation have a significant effect on the consequences of the OTT platform. The online consumption of content was also found to have several negative effects on the life style of the respondents.

INTRODUCTION

The COVID-19 pandemic has led to nationwide lockdowns, paving the way for telecommuting and online class concepts. People who were active in the pre-COVID era were restricted from leaving their homes due to sudden lockdowns. As a result, people's physical and mental health has been compromised. In order to adapt to the situation, they had to change their lifestyle. One of these big changes, which the entertainment industry also took advantage of, was the widespread commercialization of OTT platforms (Singh, 2020). A new era of entertainment has begun as a result of the over-the-top (OTT) platform's expanding prominence, proving that content can be shared in many different ways (Singh, 2019). The availability of content, easy access to various shows, ease of use, and continuity of shows require users

to subscribe to her OTT video streaming (Dasgupta & Grover, 2019). Over-the-top, or OTT, services mark a departure from traditional television, which broadcasts content using cable connections or satellite transmissions (Jose, 2020). Any device with an internet connection, like smartphones, tablets, computers or Smart TVs can access these platforms (Kumari, 2020).

Since the start of the pandemic, the general public has been more dependent on the internet and constantly on the lookout for new content which has caused OTT platforms' user base to rapidly increase (Goswami et al., 2020). The lack of outdoor entertainment during lockdowns and the ensuing travel restrictions, online releases of well-known and well-liked banner films, and uncensored content are also thought to have contributed to the expansion of OTT. The number of Indians who subscribe to many international OTT services like Netflix and Amazon Prime Video

as well as indigenous video-on-demand services like Zee5 and ALT Balaji has significantly increased during the pandemic (Chakrabarty, 2020). Modern ICT tools had made the process of disseminating information highly time and cost-efficient (Mishra et al., 2022). Unexpected circumstances like lockdowns, social isolation and travel restrictions had made people more dependent on these platforms (Ghalawat, 2021). Online content has successfully captured the attention of youth and kept them away from traditional media (Ahuja, 2020). The purpose of this research is to determine the elements related to the consequences & growth of OTT over the traditional medium and the effect of consequences of the OTT platform. This study examines these features of OTTs and focuses on how they affect people from all walks of life in terms of their behavior. It also examines how demographic factors like age and occupation have an impact on the outcomes of OTT platforms.

METHODOLOGY

The present study was conducted using a survey-based primary research method, with information obtained from 200 respondents via a well-constructed questionnaire with two sections. In the first section, questions about customer demographics were asked, and in the second, statements about the shortcomings and rise of OTT platforms relative to traditional media were listed. The responses were collected on a five point continuum, varying from strongly agree to strongly disagree. The data was analyzed using IBM SPSS-20 software. Factor Analysis was used to determine the impact of factors on customer perception and attitude and analysis of variance (ANOVA) was done to find out the effect of demographic variables such as age & occupation on the consequences of OTT platform, following null hypothesis has been formulated and tested:

- H0 (1):** Gender is not a significant effect on consequences of OTT Platform
- H0 (2):** Occupation is not a significant effect on consequences of OTT Platform

RESULTS AND DISCUSSION

Data reliability was tested using Kaiser-Meyer-Olkin sample validity and Bartlett sphericity tests. The Bartlett sphericity test

shows a significant chi-square value at the 1% significance level. These two tests show that the data are appropriate for factor analysis. The sample adequacy scale was also examined, and its value was determined to be 0.847. It was regarded as extremely important because it exceeded 0.5 and fell within the acceptable tolerance range of 0.5 and 1. The variables included in the factor analysis, together with their names, factor loadings, reliability, eigenvalues, and percentage of variance, are displayed in the Tables 1-3. Varimax Rotation principal component analysis was used to extract the factors.

Two factors emerged from the factor analysis, and both factors shed light on the key variables that were present in each factor. The derived two factors are: Effects of OTT and OTT growth over other traditional mediums. Factor 1 (Effects of OTT) - Statements associated with factor 1 are, if any form of uncertainty in your real life has been brought on by web series or online entertainment, having difficulty focusing on other tasks after spending a lot of time watching content, avoiding your friends and family while watching, lured to drinking, smoking or taking narcotics, facing psychological impacts from watching online stuff, not participating in physical activities as a consequence of binge watching. From the results, it can be concluded that, these seven statements mentioned above reflects the effects of OTT on consumers. Hence, the data can be summarized by stating that the statements under factor 1 can be labelled as ‘Effects of OTT’ having 42.596 per cent variance.

Table 1. KMO and Bartlett’s Test Measure for Sampling Adequacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.847
Bartlett’s Test of Sphericity	Approx. Chi-Square	899.387
	df	55
	Sig.	0.000
Cronbach’s Alpha		0.862
No of Items		11

Table 2. Total Variance Explained

	Factor 1	Factor 2
Eigen Value	4.686	1.704
% Variance	42.596	15.493
Cumulative %	42.596	58.090

Table 3. Rotated Component Matrix (a)

Item	Component	
	1	2
You have experienced any form of insecurity as a result of watching internet content or web series.	.826	-.027
Watching content for a long time ever affected your performance in your other works	.764	.123
While watching you used to avoid your friends and family too	.754	.242
After seeing them in web series and other online entertainment, you become drawn to alcohol, tobacco, or other narcotics.	.726	.107
Online content and web series have psychological consequences on you.	.637	.326
Your spoken language was impacted by web series and online content.	.624	.287
Due to binge viewing web series and internet entertainment, physical activity, outdoor games, or outings are avoided.	.558	.356
OTT growth is affecting on Television and Movie Consumption Habit of Users	.184	.843
In terms of viewership TV channels are lacking behind OTT platforms	.178	.782
Future attendance at movie theatres may decline due to the popularity of OTT video streaming services and its practical benefits.	.171	.772
OTT platforms offers more financially flexible packages when compared to Television	.139	.699

Table 4. Factor’s name and their Eigen values

Factor Name / Statements	Eigen value	Cronbach alpha value	Percentage variance
Effects of OTT (Factor 1)			
You have experienced any form of insecurity as a result of watching internet content or web series.	.826		
Watching content for a long time ever affected your performance in your other works	.764		
While watching you used to avoid your friends and family too	.754		
After seeing them in web series and other online entertainment, you become drawn to alcohol, tobacco, or other narcotics.	.726	.852	42.596
Online content and web series have psychological consequences on you.	.637		
Your spoken language was impacted by web series and online content.	.624		
Due to binge viewing web series and internet entertainment, physical activity, outdoor games, or outings are avoided.	.558		
OTT growth over other traditional mediums (Factor 2)			
OTT growth is affecting on Television and Movie Consumption Habit of Users	.843	.807	
In terms of viewership TV channels are lacking behind OTT platforms	.782		15.493
Future attendance at movie theatres may decline due to the popularity of OTT video streaming services and its practical benefits.	.772		
OTT platforms offers more financially flexible packages when compared to Television	.699		

Factor 2 (OTT growth over other traditional mediums) - Statements related with factor 2 are, OTT growth is affecting television and movie Consumption, TV channels are lacking behind OTT platforms in terms of viewership, future attendance at movie theatres may decline due to the popularity of OTT video streaming services and OTT platforms offers more financially flexible packages when compared to television. These four statements mentioned above reflect the OTT growth over other traditional medium of entertainment having 15.493 per cent variance (Table 4).

In order to study the relationship between demographic variables and factors affecting Consequences & growth over traditional media one way analysis of variance (ANOVA) has been used (Table 5).

Table 5. ANOVA Analysis

SUMMARY					
Groups	Count	Average	Variance		
Male	93	-.1493998	.96147223		
Female	107	.1298521	1.01902918		
ANOVA					
Source of Variation	SS	df	MS	F	P-value
Between Groups	3.880	1	3.880	3.937	.049
Within Groups	195.120	198	.985		
Total	199.000	199			

ANOVA 1

H0: There is no significant effect of gender on consequences of OTT platform.

H1: There is a significant effect of gender on consequences of OTT platform.

Hypothesis verification

The p value is (p=0.049) significant, so gender has significant effect on the usage of OTT platform. The result was in contrast

Table 6. ANOVA Analysis

SUMMARY					
Groups	Count	Average	Variance		
Student	141	-.1082874	.89134257		
Working	51	.3604333	1.18353201		
Homemaker	3	-.2239037	.49960525		
Entrepreneur	5	-.4883734	1.37955747		
ANOVA					
Source of Variation	SS	df	MS	F	P-value
Between Groups	9.622	3	3.207	3.319	.021
Within Groups	189.378	196	.966		
Total	199.000	199			

with Mishra et al., (2021) who revealed that gender has no significant relationship with utilization of ICT (Table 6).

ANOVA 2

H0: There is no significant effect of occupation on consequences of OTT platform.

H1: There is significant effect of occupation on consequences of OTT platform.

Hypothesis verification

The p value is (p=0.021) significant, so occupation have significant effect on usage of OTT platform. The results reject the null hypothesis. The outcome shows that factors like online content and web series have contributed to insecurities in real life of the respondents. Further respondents face trouble in focusing on other tasks after long hours of binge-watching online content and avoid their friends and families. Also, it was found that many respondents were lured to drinking and using drugs after watching these activities on OTT platforms. Online content and web series were also found to have a psychological effect on respondents. Physical activities, outdoor games and outings were avoided by respondents in the favour of binge-watching web series and online shows. The findings

are in line with Choudhary et al., (2016); Emmanuel et al., (2019) & Pandey et al., (2020) who all revealed that consumption of online content has a number of negative effects on the respondents.

CONCLUSION

The results concluded that online streaming services affects the lifestyle and have a huge impact on young people in India. Content created and presented on online platforms has successfully captured the attention of young people and pushed them away from traditional television. The high volume of sexual, abusive, and violent content presented on OTT platforms, along with alcohol and drugs, have a psychological impact on respondents, causing insecurities, despair, and insomnia. Additionally, youngsters are losing academic ground and becoming more susceptible to health issues due to a lack of physical activity. The study also showed that the effects of OTT are significantly correlated with both gender and occupation.

REFERENCES

- Ahuja, R. (2020). A Study of Effects of Web Series & Streaming Content on Indian Youth. *International Journal of Creative Research Thoughts*, 8(9), 1042-1056.
- Chakrabarty, A. (2020, July 01). How technology made life easy during Covid-19. *Financial Express*.
- Choudhary, R. L., Bhimawat, S. B., & Jain, K. H. (2016). Effect of internet utilization on overall performance of agricultural research scholars of MPUAT, Rajasthan. *Indian Journal of Extension Education*, 52(2), 188-191.
- Dasgupta, S., & Grover, P. (2019). Understanding adoption factors of over-the-top video services among millennial consumers. *International Journal of Computer Engineering & Technology*, 10(1), 61-71.
- Emmanuel, A. P., Ibrahim, M., & Ogurinde, O. (2019). Effects of social media on the Academic Performances of Students of Faculty of Agriculture, Kogi State University, Anyigba, Nigeria. *Journal of Extension Education*, 30(4).
- Ghalawat, S., Yadav, E., Kumar, M., Kumari, N., Goyal, M., Girdhar, A., & Agarwal, S. (2021). Factors Influencing Consumers Choice of Streaming Over the top (OTT) Platforms. *Indian Journal of Extension Education*, 57(3), 99-101.
- Goswami, M. P., Padhi, S. R., Bakshi, S., & Puthiyakath, H. H. (2020). Susceptibility of social media users to fake news: A study among Indian youth in the light of COVID-19. *Humanities and Social Science Studies*, 9(2), 1-15.
- Jose, R. (2020). Factors influencing the shift from traditional TV to OTT platforms in India. *International Journal of Advanced Science and Technology*, 29(7), 4044-4051.
- Kumari, T. (2020). A Study on Growth of Over the Top (OTT) Video Services in India. *International Journal of Latest Research in Humanities and Social Science*, 9(3), 68-73.
- Mishra, A., Singh, J., Maurya, A. S., & Malik, J. S. (2022). Effect of socio-personal traits of farmers on their perception towards social media. *Indian Journal of Extension Education*, 57(4), 71-74.
- Mishra, A., Singh, J., Malik, J. S., & Maurya, A. S. (2022). Social media use profile of farmers in Haryana. *Indian Journal of Extension Education*, 58(3), 51-54.
- Pandey, D. K., De, H. K., & Dubey, S. K. (2020). Social media usage among agriculture collegian in North-Eastern India. *Indian Journal of Extension Education*, 56(2), 26-30.
- Singh, D. (2020). How is coronavirus impacting the streaming platforms with an increasing appetite of viewers? *Financial express*. Retrieved on August 20, 2022 from <https://www.financial-express.com/brandwagon/how-is-coronavirus-impactingthe-streaming-platforms-with-an-increasing-appetite-of-viewers/1919916/>
- Singh, P. (2019). New media as a change agent of Indian television and cinema: a study of over-the-top platforms. *Journal of Content, Community and Communication*, 9(5), 131-137.