

Exploratory Analysis of Factors Influencing User's Adoption towards OTT Industry

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Abstract--- Gone are the days when we needed to look ahead to blockbuster movies to be launched on the huge displays or needed to wait for a whole week to catch up at the brand new episode of favourite television shows. The online screening and streaming video content providing platforms which can also be said as OTT (Over-The-Top) services providing platforms have successfully marked their presence in the entertainment part of people's life in India. One of the prominent aspects in Industry 4.0 is personalization and customization of products and services, with the emergence of Industry 4.0 and Artificial Intelligence, OTT providers can learn about user preferences, majorly likes and dislikes and the amount of time spent on their platform. It further helps marketers to identify customers and fully understand expectations and enrich user experience while enjoying enhanced content recommendations. In addition to mining information, AI also helps to optimize OTT delivery. The content delivery infrastructure is monitored, offering valuable inputs for improving compression techniques apart from optimizing network traffic, which helps to achieve scalability in operations. This research investigates the factors influencing the user's adoption OTT platform in India. The author used exploratory factor analysis to determine the factors affecting adoption of OTT platforms. Data is collected through a self-designed questionnaire wherein 270 people were targeted, out of which 220 responded. Once the data is collected, in order to check the reliability and validity of the data Cronbach's Alpha test is performed. As a part of the conclusion, the author made some suggestions and recommendations discussing the adoption of OTT media platforms.

Key Words--- Over the top (OTT), Industry 4.0, Technology adoption, Artificial Intelligence, Digital Marketing

I. INTRODUCTION

Gone are the days when we needed to look ahead to blockbuster movies to be launched on the huge displays or needed to wait for a whole week to catch up at the brand new episode of favourite television shows. The online screening and streaming video content providing platforms which can also be said as OTT(Over-The-Top) services providing platforms have successfully marked their presence in the entertainment part of people's life in India. Now a days people their small screens more than big LCD or TVs. In case if they wish to watch any reality show, cricket match, any web series, serials, movies etc. their first preference would be their smart phones. Over the top (OTT) streaming structures including Disney+ Hotstar, ZEE5, Netflix, Amazon Prime Video, in conjunction with nearby players consisting of ALTBalaji, Voot, Eros Now, SonyLIV, MXPlayer amongst others have redefined the way Indian target market eat content. Binge-watching that is trending among the millennials and Gen-Z has taken the centre-stage. During COVID-19 pandemic, OTT platforms

are experiencing a unique moment. With millions at home, now everyone sitting at home are craving new content. During these tough Covid times the OTT platforms have witnessed a huge improvement in phrases of extended viewers, new subscribers and more modern audiences are flocking in the direction of on-the-go content, a lot in another way, be it tune, video and podcast consumption. With the upward push of the pandemic, OTT structures are gaining a good deal popularity. In early 2020, Netflix received nearly 15.8 million paid subscribers as locked-down audience had limited number of entertainment alternatives. Moreover, similar video streaming systems inclusive of Disney+ Hotstar, Amazon Prime, and ZEE5 have also located a spike within the range of subscribers, introducing a experience of sanguinity inside the future of the Over-the-Top (OTT platforms) enterprise. As the name implies, those platforms offer content explicitly to viewers over the internet usage of a TV, computer, and/or cellular telephones in the consolation in their homes on their fingertips. According to Statista report, "the projected figure for internet users in India is expected to grow to 492.68

million users in 2022, also India already is the second – largest online market worldwide and a big number of internet users are the people who use internet on mobile phones. Major players like Amazon Prime Video, Disney+Hotstar, and Netflix are undeniably doing amazing but the new entrants like Jio TV, Jio cinema, SonyLIV , Flipkart Videos are also fighting good with these pre-established OTT services providing platform in market. As social distancing and work-from-home continue to prevail, the shows watched on the OTT systems have become communication starters across the country, and globally. Also, many movies are actually being launched on OTT systems and are developing lots of buzz on social media structures. According to industry specialists, this trend will stay the same in near future as the worry of pandemic will keep human beings away from the theatres and cinema halls. OTT has empowered the client in an essentially one of a kind manner. Unlike the highly uni-dimensional, inflexible era of linear tv, over-the-top tv now allows customers to actively interact with content. It also gives them a big selection of picks, in terms of binge watching, time shift, region shift, and navigation. Besides resetting purchaser revel in and expectancies, OTT has also forced the incumbents to revisit a number of their lengthy held, middle business assumptions. Having to begin with shrugged off the competitive hazard from OTT, mainstream cable and satellite TV operators, in addition to broadcast networks, are progressively rolling out their own direct-to-consumer offerings. So, everybody can now watch ‘Game of Thrones’ or ‘Breaking Bad’ over any popular internet-enabled tool, without having to enrol in a cable company. The features like binge watching, on demand content, convenience, time shift , privacy, navigation etc insists a consumer to use these OTT platform services on their mobile screen. Other than these the reduction in internet cost, the expansion of internet services (broadly 4G) are the things that grabbed the customer`s eyeballs towards the online streaming videos and successfully converted it in their habits. Also the benefit which marketers are having from the advertisement during these online streaming videos is that the chances of viewing an advertisement is really more by the customers while watching online videos and these chances are comparatively low when being watched on TV.

II. LITERATURE REVIEW

OTT industry is providing platforms which have successfully marked their presence in entertainment part of people’s life. One of the prominent aspects in Industry 4.0 is personalisation and customisation of products and services. In addition, to mine information, AI helps to optimise OTT delivery. The content delivery infrastructure is monitored

offering valuable inputs for improving compression techniques apart from optimising network traffic which helps to achieve scalability in operations. In the study by Bhullar.A & et al., (2020), it was highlighted that content quality and user interface play an important role in adoption towards OTT. Cha (2013) talks about the motivational factors for opting OTT services. Despite the fact that OTT is a growing sector there has been very less research conducted in this domain. Past studies have focused whether OTT can become a substitute of traditional television or not. The user’s perspective has less been researched. So, in this paper we are trying to understand the user perception and what are the reason for their adoption of OTT platforms. The main factors will be identified with the help of empirical verification. This research will be of use to OTT providers to build long term relationships with the customers. In the study by Moyler & Hooper in 2009, convenience of watching content anytime and anywhere and on any device was considered as one the major factors for adoption of OTT platforms.

III. RESEARCH METHODOLOGY

A. PROPOSED MODEL

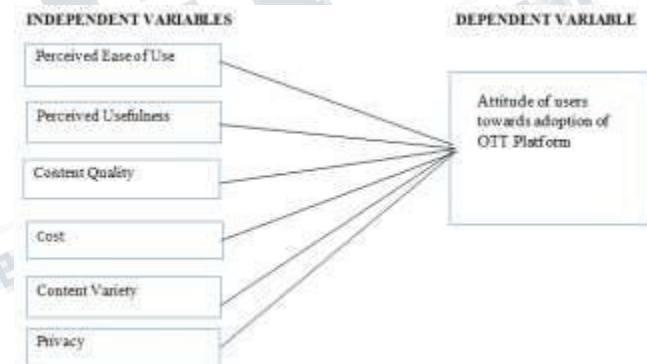


Fig 1. Proposed Model

B. Variables:

Perceived Ease of Use

Perceived Ease of Use (PEOU) is one of the important variable of TAM. It has been defined as “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989). The perceived ease of use refers to the capability of an individual to try a new innovation and evaluate its benefits easily .The perceived ease of use is the consumer’s perception that using OTT platform is easy by and it will lead to adoption of OTT media platform. OTT platforms gives flexibility to the viewer to watch any show, series or movies wherever user goes. So the content can be watched anytime and anywhere. The consumer is up for it to pay additional cost provided the

consumer gets privilege and pliability to watch anything anywhere.

Perceived Usefulness

Perceived usefulness is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989). For consumers usefulness of a new technology is very essential to switch to it. Whereas if the consumer does not find any usefulness of new technology then user will not take on the new technology, so to analyze the viewpoint of the users towards OTT media platform, it is essential to think about the Usefulness of OTT media to the user over traditional media.

Content Quality

Content Quality refers to the sort of content delivered to the customer, which is as per the requirement of the customer that set one’s heart on. Good content quality engage the central position in terms of interest generation amidst the audience. If the content is not up to the mark, no matter how the convenience of a platform is, user will not be interested to visit again. It is very important to put in the suitable interesting content on OTT platforms. The content need to be contemporary, interactive and fun to engage with. There could be graphic interfaces and innovative visual effects need to be incorporated so that it entices the consumers to be involved with the content.

Cost

Cost is one of those factor that is reason for the adoption of OTT platform. As, television provides around thousand channels in some operators and the cost that has to be paid is high as the whole package has to be taken and therefore, television becomes a costly medium. Whereas, OTT platforms are customized, so users are actually paying for what they are watching in terms of the OTT platform but in terms of television, they are paying even for what they are not watching and hence television is a costly medium in comparison to OTT platforms.

Content Variety

Variety is the spice of content. The customers love to watch diverse content and that made them to shift from TV to OTT platform. As, OTT allows the audience to watch not just diverse content from around the world but to also experiment new genres.

Privacy

Privacy is somewhat that currently every single user of OTT platform wants. Whereas violating the privacy can foster the transparency and trust between the customers and operators.

IV. DATA ANALYSIS & INTERPRETATION

Measurement Scales:

The measurement items (all statements) for all constructs were adopted from previous studies. Also, multiple items were used to measure each factor. For each item, a five-point Likert Scale is used ranging from "Strongly Disagree" to "Strongly Agree".

Table 1. Conversion of Likert Scale into Numerical Scale

Likert Scale	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Number	1	2	3	4	5

Table 2. Reliability Statistics for Questionnaire

Cronbach's Alpha	N of Items
.900	31

From table 2, the Cronbach’s Alpha value is 0.9, so we can say that the questionnaire is reliable as the value is above 0.7.

Table 3. Reliability Statistics for each factor

Factor	No of Statement in the Factor	Cronbach’s Alpha value
Privacy	3	.781
Ease of use	4	.933
Content quantity	4	.885
Content quality	3	.727
Cost	3	.758
Perceived usefulness	4	.872
Attitude	3	.893

From table 3, we can say that reliability of each factor is above 0.7, it is possible to state that each variable is reliable.

Table 4. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.917	
Bartlett's Test of Sphericity	Approx. Chi-Square	3287.435
	df	276
	Sig.	.000

This test fulfils the assumption of KMO which needs to be more than 0.6 and here it is 0.917 which means that sample is adequate up to 91.7%. Also, the significant value should be less than 0.05 and here P-value is 0.000 which means the result is appropriate and normality is achieved.

Table 5. Communalities

	Initial	Extraction
I believe when I share my account access with someone, that person should not be allowed to see the shows I am watching.	1.000	.639
I think OTT platforms are less risky in terms of data security.	1.000	.351
I feel uncomfortable in sharing my OTT account with others due to privacy reasons.	1.000	.706
It provides me with pause, play and rewind facility while watching.	1.000	.824
I can watch my favorite shows and movies multiple number of times.	1.000	.857
I can watch shows and movie according to my time convenience.	1.000	.833
I can watch shows and movies anywhere as it is very handy.	1.000	.783
I feel OTT platforms offer a wider range of content, be it shows, movies, news.	1.000	.731
I feel that there is more content of different languages in OTT platforms.	1.000	.651
I feel OTT platforms offer more genres of content (Movies and shows)	1.000	.779
I feel that the quantity of shows available on OTT platform is more when compared to TV	1.000	.711
I feel that shows on OTT platforms have better ratings.	1.000	.519
Sometimes I get early access of new seasons of flagship shows.	1.000	.459
I feel more award-winning shows and movies are available on OTT platforms.	1.000	.539
I feel that I have to spend less money on OTT platform over traditional media.	1.000	.595
I feel subscribing to OTT platform fits into my budget.	1.000	.733
I feel I can access more content by paying less.	1.000	.711
I like when I get alerts on upcoming content which matches my interest.	1.000	.520
I enjoy using OTT platforms.	1.000	.706
I feel entertained after using OTT platforms.	1.000	.739
I spend more time on OTT platforms.	1.000	.595
I use OTT platforms more frequently as compared to TV.	1.000	.787
I prefer subscribing to OTT platforms over subscribing to TV channels.	1.000	.753
I prefer OTT platforms as it allows me to binge watch more content.	1.000	.743

Extraction Method: Principal Component Analysis.

The basic assumption about communality is that it should be the values are above 0.5. more than 0.5 and in the above table 6, it is achieved as all

Table 6. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.207	42.529	42.529	10.207	42.529	42.529	4.592	19.134	19.134
2	2.043	8.512	51.041	2.043	8.512	51.041	4.079	16.997	36.131
3	1.559	6.496	57.537	1.559	6.496	57.537	3.654	15.224	51.354
4	1.396	5.818	63.355	1.396	5.818	63.355	2.143	8.930	60.285
5	1.060	4.416	67.771	1.060	4.416	67.771	1.797	7.486	67.771
6	.987	4.114	71.885						
7	.797	3.322	75.207						
8	.692	2.885	78.092						
9	.616	2.567	80.658						
10	.554	2.307	82.965						
11	.516	2.150	85.115						
12	.470	1.959	87.074						
13	.452	1.885	88.959						
14	.413	1.722	90.681						

15	.326	1.356	92.038						
16	.316	1.319	93.356						
17	.293	1.223	94.579						
18	.263	1.096	95.675						
19	.240	1.001	96.675						
20	.205	.853	97.529						
21	.166	.694	98.222						
22	.157	.654	98.876						
23	.155	.645	99.522						
24	.115	.478	100.000						

Extraction Method: Principal Component Analysis.

The above table shows the total variance explained by the factors and it is 67.771 which is satisfactory. This states that

67.771% of variance is explained by mentioned 4 factors in the model.

Table 7. Rotated Component Matrix^a

	Component				
	1	2	3	4	5
I believe when I share my account access with someone, that person should not be allowed to see the shows I am watching.	.300	.040	.349	.169	.631
I think OTT platforms are less risky in terms of data security.	.329	.258	.304	-.124	.261
I feel uncomfortable in sharing my OTT account with others due to privacy reasons.	-.016	.057	.158	-.006	.823
It provides me with pause, play and rewind facility while watching.	.253	.274	.808	.080	.160
I can watch my favorite shows and movies multiple number of times.	.254	.244	.828	.059	.211
I can watch shows and movie according to my time convenience.	.244	.276	.827	-.013	.120
I can watch shows and movies anywhere as it is very handy.	.229	.344	.765	.008	.164
I feel OTT platforms offer a wider range of content, be it shows, movies, news.	.319	.687	.380	.112	.009
I feel that there is more content of different languages in OTT platforms.	.160	.749	.236	.069	.059
I feel OTT platforms offer more genres of content (Movies and shows)	.246	.783	.322	.042	.022
I feel that the quantity of shows available on OTT platform is more when compared to TV	.247	.745	.261	.120	-.116
I feel that shows on OTT platforms have better ratings.	.471	.474	.182	.148	.133
Sometimes I get early access of new seasons of flagship shows.	.165	.554	.138	.086	.313
I feel more award-winning shows and movies are available on OTT platforms.	.346	.507	.042	.147	.373
I feel that I have to spend less money on OTT platform over traditional media.	.131	.013	-.039	.759	-.008
I feel subscribing to OTT platform fits into my budget.	.055	.079	.056	.846	.063
I feel I can access more content by paying less.	.102	.218	.067	.803	.069
I like when I get alerts on upcoming content which matches my interest.	.467	.322	.340	.058	.281
I enjoy using OTT platforms.	.655	.409	.222	.095	.226
I feel entertained after using OTT platforms.	.643	.449	.182	.143	.266
I spend more time on OTT platforms.	.650	.291	.150	.073	.243
I use OTT platforms more frequently as compared to TV.	.839	.162	.228	.068	.009
I prefer subscribing to OTT platforms over subscribing to TV channels.	.835	.154	.144	.103	-.029
I prefer OTT platforms as it allows me to binge watch more content.	.787	.168	.283	.120	-.017

The above rotation component matrix shows the statements falling under which factors. The KMO value for each statement is near or more than 0.6 which fulfills the basic assumption.

V. FINDINGS & CONCLUSIONS

The OTT platform market is flourishing at a very good pace and also, it can be called as modified version of traditional

television. It can be concluded that OTT service providers can develop their strategies by keeping in mind the above-mentioned factors. All the above factors are important and should be taken into consideration for building customer

driven strategies. By running EFA (Exploratory factor analysis), it was found that 4 components are important for the study which are explaining more than 67% of variance. Also, there is scope of considering the factors like perceived risk, self-efficacy and competitive advantage to study their influence in adoption of OTT platforms in the future research model.

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