

## **AI-Driven Recommendation Systems on OTT Platforms: Shaping User Experiences**

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### **Abstract**

In the contemporary growth Over-The-Top (OTT) platforms in India, Artificial intelligence (AI) based recommendation systems can be identified as a major contributor. AI-driven recommendation system (ARS) significantly enhances user satisfaction, engagement, search experiences, this personalization of content suggestion affects subscription continuance intention. Through AI-driven systems consumer preferences can be predicted more efficiently and with unparalleled accuracy (Rajpara, 2024). Although in India, OTT services have become the primary channel of content consumption, there remains a gap in understanding user reaction towards ARS. A vast number of existing studies ignore customer perception of ARS and investigate optimization of recommendation systems and its technical design (Wang, Chen, & Kuang, 2025). As in the recent years India has experienced an exponential growth in the OTT market fuelled by affordable data plans, a diverse audience base and increased internet penetration, the realms of customer perception of ARS cannot remain unexplored. Understanding how Indian consumers perceive and respond to ARS is essential for developing strategies that resonate with this unique market.

This research addresses this gap with the help of the “Unified Theory of Acceptance and Use of Technology 2” (UTAUT2) model. The study investigates consumer perception towards ARS. Here insights were brought forward with the help of in-depth interviews of both audiences and OTT content policymakers. The inclusive literature review employed in the study examines critical factors such as user behaviour, satisfaction, and engagement in the post-pandemic era to explore AI's effect on digital media consumption. The findings showcase the role of ARS in improving seamless content discovery and user experience.

**Keywords:** *AI-Driven Recommendation System, OTT Platforms, Consumer Behaviour, UTAUT 2 Model*

### **Introduction**

Nowadays Over-the-Top (OTT) platforms have become a preferred medium for accessing entertainment content (Deanco Group, 2024). OTT services, where audio and visual content is distributed through the internet without traditional cable or satellite providers. In the

post pandemic landscape, OTT industry is witnessing a hike in new user registrations and a notable

growth in content consumption time on its platforms. Within the industry these platforms are facing an intense competition. As a result, to sustain in the market OTT platforms are investing in advanced technologies like Artificial Intelligence (AI) to improve user experience and engagement (XongoLab, 2025). Due to the significant growth, OTT players are also facing immense content demand from audience. OTT platforms are enhancing digital entertainment by offering vast content libraries. The international as well as national OTT providers are experimenting with content game and tries to develop a hassle-free delivery system for their audience. OTT media streaming sector is one of the most prominent areas where AI-powered recommendation systems (ARS) have made a significant impact. AI-driven recommendation systems have revolutionized this new form of content delivery systems. The ARS is heavily depended on data filtering techniques to improve user retention and satisfaction. In enhancing digital user experiences the role of AI in content personalization is profound (Zhang, Lu, & Jin, 2021).

The application of Artificial Intelligence in the field of recommendation systems have been a remarkable development in the OTT industry. These recommendation techniques are powered by artificial intelligence along with the use of machine learning and algorithms. This technology intends to analyse extensive consumer data like search history, audience profile, demographics, purchase behaviour, and preferences. Through the datasets, the ARS can determine the most appealing products or contents to the users. In turn, it would enhance user engagement, satisfaction, and most vitally, customer retention. ARS are designed to improve user experience by providing personalized recommendations and reducing search time. (Caballar & Stryker, 2024).

This study assesses the consumer perception of AI-driven recommendation systems offered by leading OTT platforms in India. This investigation looks specifically at the effect of AI into user engagement, decision satisfaction, and the change in user's behaviour in the post-pandemic world.

### **Research Objective**

This research examines consumer reactions to AI-powered recommendation systems on Indian OTT platforms.

1. Objective 1: To analyse the impact of AI-driven recommendation systems on user engagement.
2. Objective 2: To evaluate user satisfaction with AI-powered recommendations.
3. Objective 3: To investigate behavioural changes in users due to AI-based content curation.

## **Literature Review**

### **The Role of AI in Enhancing User Engagement and Personalization**

The incorporation of Artificial Intelligence into Over-The-Top platforms has drastically changed audience experiences by enabling advanced recommendation systems (RS). These systems customize content distribution based on user preferences, analysing user behaviour and contextual data through collaborative filtering and content-based filtering as well as hybrid techniques (Pattanayak & Shukla, 2021). By analysing user behaviour, viewing preferences, and contextual data these systems provide immersive digital experiences with timely and pertinent suggestions (Behare & Jeet, 2024). Previous studies claim that AI-powered systems directly affect content discovery and user engagement. On the other hand, researchers claim that AI has the capability to transform interaction by increasing user time spent on platforms (Sodiya et al, 2024).

These results elucidate that AI is increasingly influencing global viewership pattern. By utilizing AI to suggest tailored content, platforms such as Amazon prime and Netflix effectively reduce user churn rates by ensuring higher levels of satisfaction and engagement (Chahwala et al., 2025; Riskos et al. 2024). Additionally, AI-powered systems use predictive data analytics to anticipate user preferences. These nuances allow platforms to design content libraries that align with their target demographics. ARS enabled innovations not only improve user engagement but also help to increase resource allocation. Hence, platforms are not inclined to invest in content that fits with predicted user preferences (Zhang, Lu & Jin, 2020).

Furthermore, currently in countries like India and Southeast Asia AI driven region-based content personalization has become an essential. AI systems ensure that the suggestions should resonate with regional audiences by combining their cultural nuances, which lead to improved user retention and satisfaction. This cultural sensitivity in AI design helps to cultivate loyalty across various user populations to better navigate global market places. However, algorithmic biases and unethical use of personal data are still highly debated concern among policymakers and business leaders (Karami, Shemshaki & Ghazanfar, 2024).

### **Personalization, Cultural Nuances, and Localized Datasets**

In AI-powered systems, personalization has been essential for boosting platform consumption and user retention. Kim & et.al., (2017) found that OTT consumers of China and Korea prioritize recommendation systems as an important attribute that promote their willingness for OTT service. The findings emphasize the need for a personalized content suggestion system to gratify the consumers. Chahwala et al. (2025) found a substantial correlation between recommendation accuracy and user retention in the Indian OTT market. The study conducted by Pourashraf & Mobasher (2023) highlighted the need for regional datasets and culturally sensitive AI systems

particularly in effective news recommendation system. A more inclusive database can help platforms tailor their recommendation algorithms to regional preferences, languages, and social norms. While cultural sensitivity in AI models mitigates biases from Western-centric datasets, fostering a diverse digital media landscape. This personalization makes the user experience more relevant and engaging. In a research article, Chen et al. (2023) states that the incorporation of local cultural elements to cater to a vast global audience to be beneficial. Ethical AI frameworks promote lesser-known regional films and independent productions. They also claim that to attain to a unique market demand, inclusive personalization can enhance audience satisfaction. In addition to that, they suggested that utilizing localized databases has the potential to outperformed rivals in user engagement measures in culturally diversified countries. Additionally, regional personalization leads to higher user retention and subscription rates, building stronger emotional connections and fostering long-term loyalty. Without relying on general algorithms, ARS are well versed to meet the complex needs of demographics. Recently platforms like “Netflix” and “Amazon Prime Video” have started incorporating localised data bases in their content offerings. By capitalising in regional productions these platforms are incorporation cultural cues into their algorithms. That help these platforms to expand their user base in countries such as South Asia, Latin America, and Africa (Shalini et al. 2022). Regional preferences, such as language diversity and culturally distinct themes, have become critical predictors of user engagement. Furthermore, tailored suggestions based on cultural contexts promote the inclusivity in OTT services. By which regional OTT platforms are also gaining active user base that restrict market control or monopoly within the industry. Users are more likely to feel represented and valued when the content resembles their cultural identity. However, there is a need for a clear parity between regional and globalized content. Overemphasis on regional adaptation can result in content silos, restricting consumers' exposure to diverse perspectives and global narratives (Flare AI, 2025).

### **Shifting Viewing Habits and the Risks of Algorithmic Bias**

AI-based personalization has altered viewing patterns. By limiting the need for active content searches this personalisation systems promote binge-watching, media gluttony and movie marathon (Sodiya et al, 2024). Different platforms such as Netflix is now using AI to recommend content based on past preferences, enhancing content discovery process. This easy access to content has caused a shift in consumption habits, where users depend more on algorithmic recommendations than searching out content themselves. This transformation has resulted into the popularity of autoplay and "next episode" features, which encourage continuous viewing (Mishra, 2025).

However, algorithmic biases have become a major concern. This biases confine consumers to stick to their pre-existing preferences and restricted exposure to various viewpoint. This effect is known as the “filter bubble” as described by Pariser (2012). This phenomenon restricts users from discovering diverse content, which strengthens and narrows down user choices. Additionally algorithmic biases may inadvertently contribute to the homogenization of content

by reinforcing existing preferences. Platforms prioritize engagement over content diversity by offering users familiar content that matches their previous preferences. This notion can optimise user satisfaction but users are deliberately exposed to a limited selection of media. This leads to a confined depiction of voices, ideas, and genres, which could hinder creativity in both content production and consumption (Pariser, 2012; Sodiya et al, 2024). Furthermore, as algorithms often favour popular content, smaller creators and niche content are at risk of being marginalized in Favor of mainstream choices (Glotfelter, 2019).

If implemented appropriately, AI may still be used to develop more inclusive, diverse content ecosystems, despite the potential risks of algorithmic biases. Various articles, including Web Stat (2025), underline the relevance of adopting AI not just to reinforce consumer choices but also to increase exposure to content that challenges users' existing preferences, thus bursting the filter bubble's narrowing effects.

### **The Creative Implications of AI in Content Creation**

AI's impact extends to content creation by optimising production expenditures. It also can be utilized to predict popular content demand. AI improves resource efficiency but there is also a concern about creative freedom. Nowadays, with the interventions of AI, the content production and distribution process has changed, it is becoming more data driven than artistically inspired (Dhawan, 2024). Platforms are now preferring popular models over experimental or unconventional ideas that is leading towards homogeneity. Despite these, artificial intelligence (AI) can be a good fit to human creativity. Researchers contend that AI-driven recommendations help content creators to know emerging trends better (Sodiya et al, 2024). Similarly, Selvi & Ramya (2024) argue that AI technologies may be effectively used to enhance storytelling and narrative structure. Platforms like Netflix includes AI as a guide in their hybrid model to maintain the artistic autonomy (Mishra, 2025). The future OTT platforms should combine AI with ethical and creative considerations. To maintain the balance ethical AI practices requires transparency, and collaboration between technology (Ayinla et al., 2024). Algorithmic biases, creative integrity and diversity should be addressed while using AI in content creation and consumption.

### **Challenges of Data Security and Ethical Concerns in AI-Driven OTT Platforms**

While AI has fuelled personalization, concerns related to data privacy, ethics, and user autonomy remain constant problems. The collection and analysis of private data for AI-powered recommendation systems raises crucial challenges about transparency, consent, and control (Ayinla et al., 2024). The growing debate about ethical implications resulted in a trade-off between personalisation and privacy. According to Sharma & Mishra (2023), strict regulatory frameworks are required to solve these problems and protect consumer rights. The explicit guidelines for data retention and sharing should emphasise transparency and informed consent.

Without these guidelines, user data is more prone to exploitation. This may lead to breaches of confidentiality and loss of trust in digital platforms.

Algorithmic opacity exacerbates ethical issues as users were unaware about information control by OTT platforms. It is not always known to the users how their data is treated and how recommendation algorithms influence their content consumption (Ayinla et al., 2024). To ensure algorithmic transparency, using open-source algorithm or explainable AI models can influence the decision-making process and trust in AI. Sharma & Mishra (2023) argue that vague privacy regulations and an absence of user-centric data management tools worsen the problem. To empower consumers, researchers suggest to employ technologies like opt-in permissions, real-time data usage dashboards, and streamlined privacy agreements. Zuboff (2019) discusses the phenomena of 'Datafication' in which personal information is turned into a commodity for commercial advantage. Without explicit consent when platforms use private data, several ethical concerns are being raised. In the AI eco systems data breaches and unauthorised data sharing create the urgency for profound data security measures.

Globally, data protection regulatory standers differ. The "European Union's General Data Protection Regulation" (GDPR) states, '*A standard for data privacy by stressing user consent, the right to be forgotten, and stringent penalties for noncompliance*' (EU, 2016). In contrast, countries such as India are still in the process of developing a comprehensive data protection regulation. These disparities call for the requirement of universal guidelines that maintain a balance between innovation and ethical conduct. In addressing confidentiality complications, various ethical AI approaches such as differential privacy and federated learning can be used as potential solutions. These strategies limits data exposure and reduce the risk of misuse (Ayinla et al., 2024). Building trust in AI, a multi-stakeholder strategy can be implemented that include policymakers, platform developers, and end users.

## **Research Problem & Potential Gaps**

While AI recommendation systems are widely used, there are still some unexplored areas. One of the significant gaps is understanding the consumer response to these personalised suggestions (Khandelwal et al., 2023). Past studies focused on only on the technical and algorithmic approaches of recommendation systems, but how users feel about and interact with these personalized recommendations is still lacks attention. This knowledge gap also focuses on user perceptions, satisfaction, and the psychological impact of AI-driven content curation. This imparity is more prominent in the context of India, where streaming services are growing rapidly but there's little research on how users respond to them and their behavioural changes.

This study looks at how Indian consumer responses to AI-driven recommendation systems on streaming platforms. Specifically, the study focuses the relation of AI with user engagement, decision satisfaction, and changes in user behaviour in the post-pandemic era.

## **Theoretical Framework**

The “Unified Theory of Acceptance and Use of Technology 2” (UTAUT 2) (Venkatesh, Thong, & Xu, 2012) was employed to analyse user engagement and acceptance of AI-driven recommendation systems on OTT platforms. Following the UTAUT 2 basis, the users are more prone to the adoption of new technology when ease of use and usefulness play a role in their satisfaction with the AI-enabled recommendations on OTT platforms.

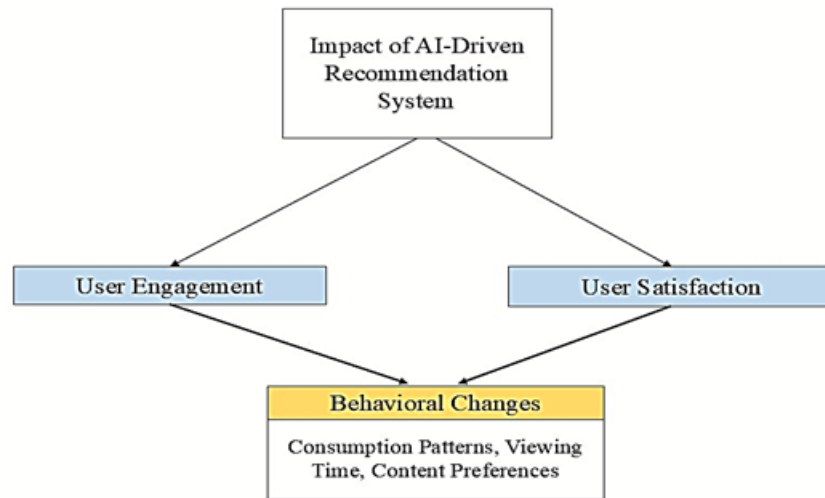


Fig. 1: Conceptual Framework

The “UTAUT 2” model unravels some key constructs, such as ‘Performance Expectancy’, ‘Effort Expectancy’, ‘Social Influence’, and ‘Facilitating Conditions’ are particularly relevant in understanding how users interact with ARS. How these constructs are directly impacting users' engagement, consumer satisfaction, and their behavioural patterns of AI-driven recommendations, is the main thrust area (*Fig. 1*).

## Methodology

Qualitative research approach has been employed to achieve a comprehensive and in-depth understanding of the study (Lim, 2024). Creswell (2009) suggested the process of qualitative data analysis by implementing systematic organization, review, categorization of patterns into sub-themes and themes and finally interpretation of the data set.

To obtain a deeper insight of user experiences and opinions, this study conducts in-depth interviews with two groups of participants: OTT platform users and OTT content policymakers. The non-probability (purposive) sampling method has been employed to select a group of OTT users, specifically targeting Gen Z audiences from Kolkata who are active consumers of digital content. Additionally, interview was conducted with the SEO of ETV Bharat to gather insights from an OTT content policymaker's perspective. 35 students were interviewed, along with the SEO, to gather insights from both the user and policymaker perspectives.

## Sampling Design

Primary data were gathered using a self-designed structured questionnaire, which included sections for demographic evidence and responses to seven semi-structured questions through purposive sampling techniques. These questions focused on identifying positive factors, barriers or challenges, and the overall consumer experience with AI-driven recommendation systems on OTT platforms. The study comprised 35 respondents (13 male and 12 female), all active OTT users from Gen Z, who expressed their willingness to participate. All participants were students from higher secondary level. For the telephonic interviews, participants were contacted via phone, and the researchers recorded their responses manually. In qualitative research, smaller sample sizes are often adequate to enable in-depth, case-oriented analysis (Sandelowski, 1996). Due to Gen Z's purposeful choice for the survey, most respondents are between the ages of 16 and 25. They are especially pertinent for examining user interaction with AI-driven recommendation systems on over-the-top (OTT) platforms as they are digital natives.

**Table 1**

Demographics Profile of the Respondents (N = 35)

Demographic Details	Number	Percentage
Age (In Years)		
Below 16	3	8.57
16-25	32	91.43
Gender		
Male	16	45.72
Female	19	54.28
Level of Education		
Metric	3	8.57
Post Metric	18	51.43
Under Graduate	12	34.29
Post Metric	2	5.71
Total	35	100



## Qualitative Thematic Analysis

Data from the interviews were compiled using Microsoft Excel spreadsheets, and the analysis was performed manually by the researcher. Initially, the responses from the interviewees were recorded with consent and carefully recite to gain better understanding of the content. Subsequently, identification of sub-themes and themes were done irrespective of biases (Kondracki, Wellman, & Amundson, 2002) (Sharma & et.al., 2022). The stages undertaken for qualitative thematic analysis are illustrated in Figure 2.

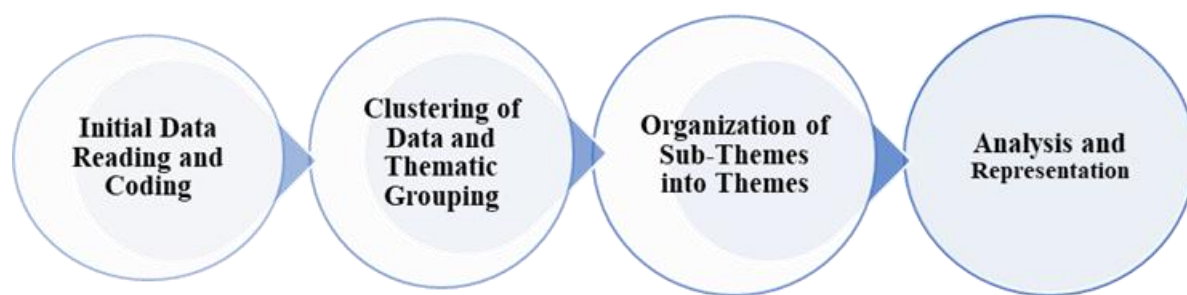


Fig. 2: Stepwise Process for Qualitative Data Analysis (Sharma & et.al., 2022)

### Initial Data Reading and Coding

The first recorded interviews were transcribed to ensure accuracy in interpreting the responses. The transcriptions were thoroughly reviewed, and initial codes were labelled using the open coding method (*Table 2*). These codes were recorded in an Excel sheet. As subsequent interviews were scrutinized, any new codes identified were added to the existing ones in the Excel sheet. The codes were derived from the responses of the interviewees, which provided insights into recurring patterns (Lim, 2024) (Sharma & et.al., 2022).

### Organization of Codes into Sub-Themes

The analytic hierarchy method, which is iterative in nature, was used to identify and organize sub-themes and themes from the data (Ritchie & Lewis, 2003). This process began with assigning abstract concepts to the data and then gradually evolved into more defined themes. Sub-themes were initially identified directly from the data, allowing for organic theme development. Positive and negative factors associated with AI-driven recommendation systems were clustered separately, as shown in the Tables 3 and 4.

In the process of analysing the positive codes, we identified four key sub-themes. First sub-theme is Content Discovery and Enrichment, focuses on how personalized recommendations

help consumers to find content according to their preferences, explore new genres, increase their knowledge, and gain a greater interpretation of various topics. The availability of content snippets such as trailers, thumbnails, and cast information further aids users in making informed choices. The second sub-theme, Navigation and Interaction with AI-Driven Recommendations highlights the ease of navigating personalized content on OTT platforms, where users find it simple to interact with AI-based recommendations. Additionally, certification details also help users select content that aligns with their preferences. Time Efficiency and Convenience identified as third sub-theme that emphasizes how AI-driven recommendations save users time by presenting content tailored to their tastes, and how better feed preferences improve the overall viewing experience. Lastly, User Retention and Satisfaction addresses how personalized recommendations increase the likelihood of users continuing their subscriptions to OTT platforms, as they feel their overall content consumption experience is enhanced by these tailored suggestions (Table 3).

On the negative side, we grouped the codes into two sub-themes, Firstly, Time Wastage and Distraction addresses issues such as binge-watching, general distractions, and the promotion of addictive viewing habits, leading to significant time wastage. Finally, Content Search and Quality Issues revolves around the difficulties users face in finding specific content. Distractions from thumbnails and an emphasis on quantity over quality make it harder to navigate the platform effectively. Furthermore, unnecessary content suggestions contribute to the frustration of users, as they often feel overwhelmed by irrelevant content (Table 4).

### Clustering of Sub-Themes and Thematic Grouping

The identified sub-themes were grouped into themes (Tables 3 and 4). Positive impact of AI-driven recommendation system in OTT platforms were categorized under themes like Content Discovery- Personalization, Convenience and User Experience, while negative themes included Excessive Consumption, Distraction and Quality Concerns. After reviewing, related sub-themes were merged to form broader themes aligned with the research objectives.

**Table 2**

Transcription of interview (Sample)

Interview Conversation	Codes
[...AI recommendations are helpful for me because occasionally I come across <b>something new, like new web series or movies<sup>1</sup>....]</b>	1. New Content Discovery

[...So, previously when we use to search for a movie or web series to watch **it used to take use lot of time to find what I want to watch but nowadays I think the recommendation system has improved quite a lot<sup>2</sup>....]**

2. Easy to Navigate

[I am **addicted<sup>3</sup>** to YouTube and Netflix because everything that I want to watch is there right Infront of me specially in YouTube, the length of the videos is quite short so I end up watching it for hours...]

3. Excessive Consumption

[...Sometimes, **this makes me overwhelmed because there are a lot of unnecessary recommendations<sup>4</sup>**. For instance, if I search for something, the system gives me the same type of content for weeks. That I do not want to watch.]

4. Unnecessary Content Suggestion

**Table 3**

Identification of Codes, Sub-themes, and Themes for Positive Factors

Sl. No.	Codes	Sub-Themes	Themes
I	Help me to discover that I am likely to enjoy		Content Discovery and Personalization

	<p>New Content or Genre discovered</p> <p>Knowledge increasing by viewing different content</p> <p>Gained In-depth understanding</p> <p>Snippet of content like (Trailer, about information of programme or each episode, Casting) helped to select</p>	<p>Content Discovery, Exploration and Enrichment</p>	
II	<p>It is easy for me to navigate through the personalized recommendations on OTT platforms</p> <p>The OTT platform's interface makes it easy to interact with AI-based recommendations</p> <p>Certification details also helped to select specific content</p>	<p>Navigation and Interaction with AI-Driven Recommendations</p>	
III	<p>Finding content through AI-driven recommendations saves me time</p> <p>Got better feed preference</p>	<p>Time Efficiency and Convenience</p>	<p>Convenience and User Experience</p>
IV	<p>Likely to continue subscribing to an OTT platform due to personalized content recommendations</p> <p>Personalized recommendations enhance overall content consumption experience on OTT platforms</p>	<p>User Retention and Satisfaction</p>	

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**Table 4**

Identification of Codes, Sub-themes, and Themes for Negative Factors

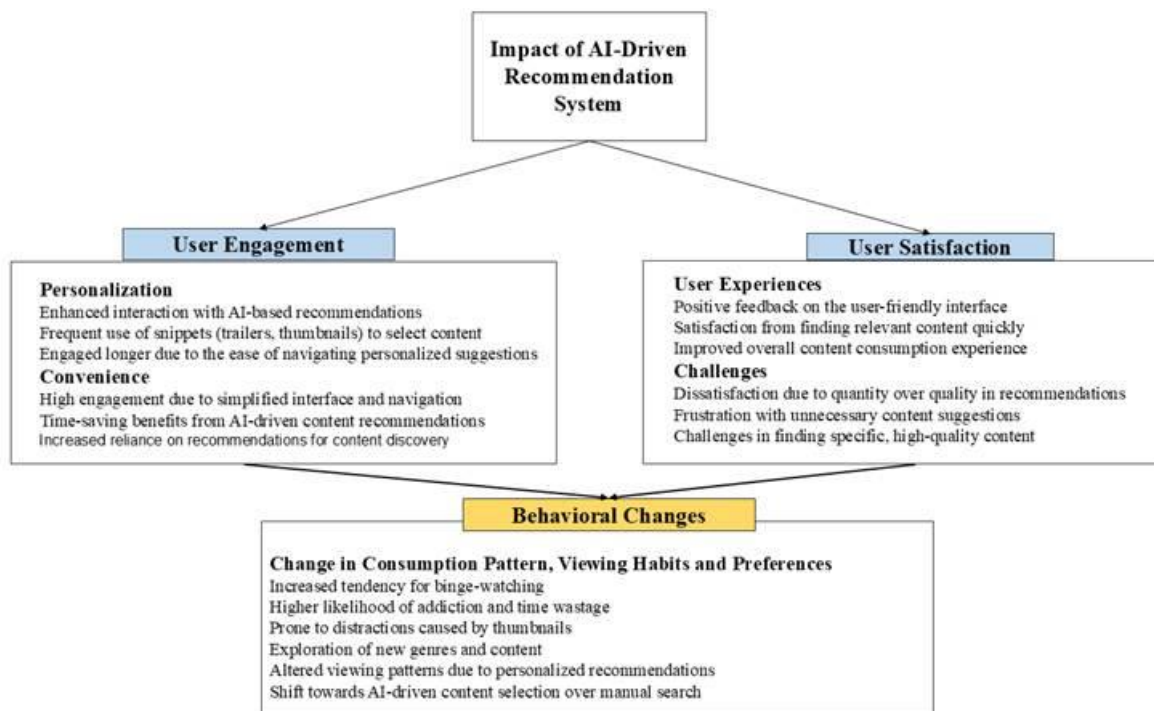
Sl. No.	Codes	Sub-Themes	Themes
I	Wastage of time  Binge watching  Promotes addiction	Overconsumption and Addiction	Excessive Consumption and Distraction
II	Distraction from core activities  Distracted by thumbnails  Unnecessary content recommendations	Distraction due to Recommendation Overload	
III	Difficulty in finding specific content  Quantity over quality	Content Discovery Challenges	Quality Concerns

### Analysis and Representation

The research identified several key themes related to the effects of AI-driven recommendation systems on user behaviour and experiences on OTT platforms. These themes were structured into a conceptual framework that emerged through an iterative process of analysing data and theoretical insights. The framework (Fig. 1) was continually modified as more categories and themes emerged, ultimately Figure 3 is providing a clear understanding of how AI-based recommendations influence user engagement, satisfaction, and behavioural changes. The framework is built around three core categories i.e. User Engagement, User Satisfaction, and Behavioural Changes.

### Figure 3

## Visual Representation of the Proposed Framework



## Findings

The study considered theoretical insights, including user behaviour theories and recommendation system models, to ensure that the framework (Fig. 3) comprehensively reflects the evolving nature of user interaction with AI-driven recommendation systems on OTT platforms. The following key findings emerged from the analysis:

### User Engagement and Personalization

AI-driven recommendation systems have become a key factor in enhancing user engagement as it offers personalised content suggestion tailored to individual preferences. This personalization improves interaction with the platform as it helps the users with the content selection by showing content snippets such as trailers, thumbnails, and episode information. The study found that users are inclined to remain engaged for longer due to the ease of navigating personalized suggestions. Additionally, the convenience of AI-driven recommendations system encourages users to depend heavily on the platform for content discovery. The optimized interface of OTT platforms, powered by AI systems, is responsible for improving overall user convenience. Simplified navigation, along with personalized features, leads to better engagement, as users can easily

access relevant content. It is found that AI-driven recommendations significantly reduce the time spent searching for content that benefits users. This seamless content discovery fosters increased reliance on these automated suggestions with minimal effort.

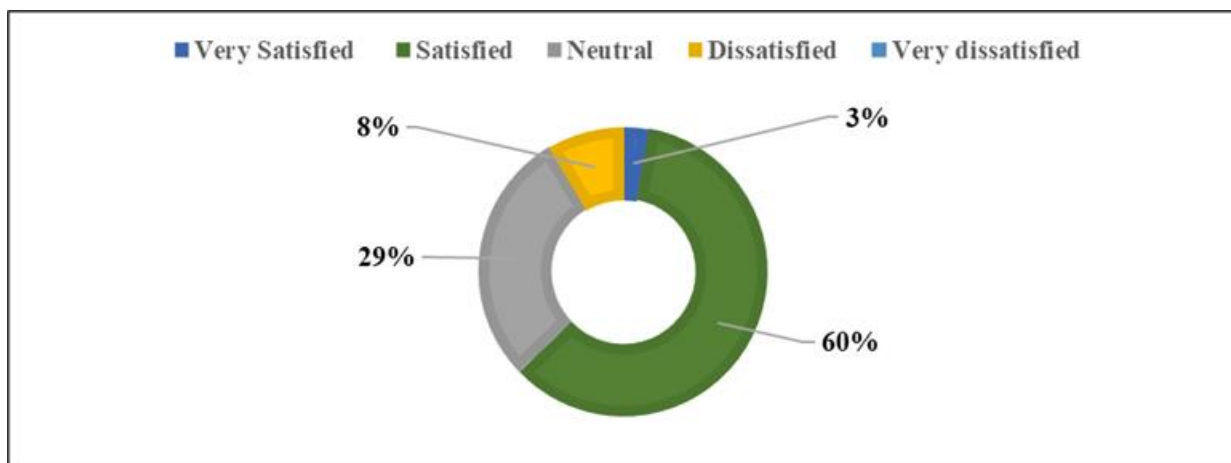
### User Satisfaction and Experiences

The study indicates that the effectiveness of recommendation system has directly influenced user satisfaction. The user-friendly interface of OTT platforms gets positive response from users in their content discovery. Additionally, personalised recommendation significantly contributes to improve an overall content consumption experience, as users felt that their preferences were better understood by the policy makers. However, there are still some challenges left in regards to prioritizing quantity over quality. This dissatisfaction overwhelms users with the large volume of suggestions, as it includes irrelevant or unnecessary content recommendation. Moreover, frustration become apparent when users try to find specific, high-quality content among the vast array of options. These issues can be dealt with a more balanced and refined ARS that highlights content relevance rather than sheer volume. Majorly users expressed satisfaction regarding the content suggestions provided by AI-driven recommendation systems on OTT platforms (*Fig. 4*).

#### § How satisfied are you with the content suggestions provided by OTT platforms' AI-driven recommendation systems?

**Figure 4**

User Satisfaction with the content suggestions provided by OTT platforms' AI-driven recommendation systems



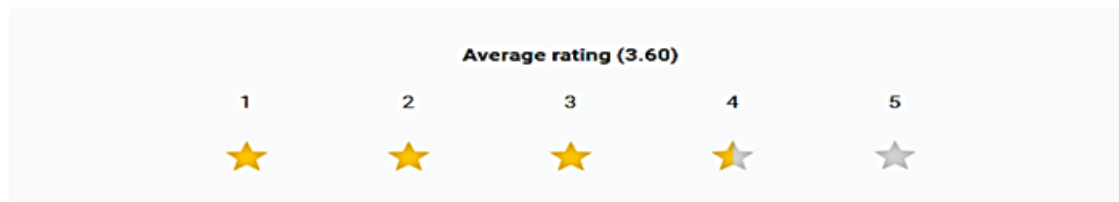
### Behavioural Changes in Consumption Patterns, Viewing Habits, and Preferences

The study further identified significant behavioural changes in consumption patterns and viewing habits due to AI-driven recommendations. The easy access to personalized content leads to an increase in binge-watching, with users continuing to watch content recommended by the platform. However, this tendency to binge-watch often resulted in time wastage and an increased risk of addiction, as users engaged with content for longer periods without actively seeking it out. Additionally, distractions caused by content thumbnails were noted as influencing viewing decisions, as users often found themselves diverted by eye-catching visuals. On a positive note, personalized recommendations encouraged users to explore new genres and content, shifting them away from manual searches and promoting a more passive consumption model. This shift in viewing habits toward AI-driven content selection altered users' engagement with the platform, making content discovery more automated and less dependent on user initiative.

Regarding users' continuance intention, *Figure 5* indicates that users show a moderate inclination to renew their subscriptions to OTT platforms based on the quality of AI-driven recommendations. The average rating of 3.60 out of 5 suggests a satisfactory yet not outstanding experience, highlighting the need for further enhancements in personalized content suggestions to boost user retention and engagement.

**Figure 5**

Subscription Continuance decision to an OTT platform due to the quality of its AI-powered recommendations



### Expert Insights on AI-Driven Recommendation Systems in OTT Platforms

In an interview with Ms. Dwitia Das, the SEO of ETV Bharat, she shared valuable perspectives on the potential and challenges of AI-driven recommendation systems in the OTT industry. Ms. Das expressed confidence in the fact that the OTT industry will witness a huge change in content personalization because of AI-driven systems in future.

In response to the question of effectiveness of ARS in enhancing user engagement, she stated, *‘I believe that AI-driven recommendation systems have a tremendous potential to enhance user engagement and retain subscribers... we have observed several key benefits including personalization, content discovery, relevant suggestions, and real-time recommendations. These*



*features contribute to greater user satisfaction by offering a competitiveness in the market. However, the role of AI in content personalization is undeniable, there is still some uncertainty about the sustainability of these systems, whether they dominate the future of OTT platforms or not.'*

In reply to concerns about the restrictions and ethical guidelines of ARS, particularly regarding user privacy, Ms. Das emphasized the need for surveillance from policymaker's standpoint. She points out that privacy challenges should be addressed to ensure their long-term positive impact on all stakeholders.

### **Conclusion & Recommendation**

Predominantly, the study highlights the profound influence of AI-driven recommendation systems (ARS) on user engagement, satisfaction, and behavioural changes on OTT platforms. ARS enhances customer retention and continuance intention. Nowadays platforms provide personalized content that aligns with user preferences. These types of content recommendation systems suggest a transition to a more global OTT market furnished with adaptive personalization features and user interfaces. Therefore, as improvements in the user experience are felt, it evolves one step closer to a personal space for each user: this indeed represents individuality at its core.

The transition from the conventional recommendation system to the AI-driven one is not merely a jump; rather it is a revolution in the dynamic sense. Effective ARS fosters loyalty and stickiness to the platform and ensures low churn rates. This is currently taking steps towards building long term relationships with the users.

ARS, on one hand, improves user experiences and convenience, while on the other, it takes content quality down with it in the list of concerns related to excessive consumption. To deal with these issues, continuous refinement of ARS is required that offers personalization with quality. Feedback loops with user interactions will also provide support for iterative improvement. These recommendation systems learn and evolve based on the user feedback, and consequently improve dynamic customization. The ARS also pushes the customers towards "endless-scrolling" or "binge-watching" to increase its own engagement metrics; hence causing "addiction" or "media gluttony". A recommendation system, thus, fine-tuned to avoid addiction is a must. To avoid addiction a refined algorithmic recommendation system is required. Platforms should refrain from promoting content craving and design their ARS based on principles. Encouraging users to consume mindfully should be on the ARS agenda, by introducing features like time reminders, screen time monitoring, and consumption breaks.

Another major aspect regarding ARS is user privacy. All the user data collected should be treated ethically and the platforms should have a transparent policy on data usage. The personalization and the individual right to privacy should be maintained. Future researchers can explore the

ethical side of AI concerning content personalization, putting more emphasis on data privacy and transparency. Additionally, studying long-term effects on user well-being and engagement could provide valuable insights into the sustainable development of AI-driven platforms. Besides, customer retention and continuance intention should be subjects for deeper studies.

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