### Chapter 9

# The Art and Science of User Engagement: Personalization and Recommendations in the OTT Era

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#### **ABSTRACT**

This chapter explores the importance of personalization and recommendation algorithms in OTT era, emphasizing their role in enhancing content discovery and customizing user experiences. Crucial techniques like collaborative filtering and content-based filtering underpin these algorithms, which ensues personalized user experiences. Recommendation algorithms shape media consumption patterns, content discovery, influencing user behavior, cross-platform consumption and binge-watching habits. This chapter also paid attention to acknowledging ethical considerations like privacy concerns and algorithmic bias. Additionally, it also explores the challenges and opportunities for content creators in catering to algorithmic preferences, along with significance of balancing effective ad targeting and user privacy in personalized advertising. Improving and assessing recommendation algorithms using different metrics and feedback loops is important, however future trends concentrate on contextual personalization and adaptive experiences, enhancing user's entertainment journey.

#### 1. INTRODUCTION

The way people engage with streaming video in the ever-evolving entertainment industry has been completely transformed by Over-The-Top (OTT) media. Every OTT platform works on a data-driven paradigm, gathering consumer data to gain valuable insights into audience behaviour. For strategic decision-making, this analytical data serves as cornerstone, from content development to targeted marketing campaigns. Recommendation algorithms play an essential role in augmenting the overall viewers' experience by

DOI: 10.4018/979-8-3693-0116-6.ch009

proposing contents tailored to individual preferences. These algorithms not only engage the viewers but also ensures they discover new content that resonates with their unique interests.

We are inflowing in an era of content democratization, where OTT stands as a driving force, restructuring the way viewers consume, create and interact with media. In this dynamic landscape of entertainment, personalization and recommendation algorithms are fundamental in delivering a rich and captivating entertainment experience while fuelling the growth of the OTT industry (Yeole, Saha, & Bhaisare, 2022).

## 1.1. The Evolutionary Impact of Personalization and Recommendation Algorithms

Personalization and recommendation algorithms have had a transformational impact in changing digital media consumption over the years. These algorithms have reshaped the way we access, find, and interact with content, creating a significant influence not just on the media and entertainment industries, but also on our daily lives. Enhancing content discovery is one of the most significant ways these algorithms have impacted digital media consumption. Traditionally, consumers had to hunt huge content libraries, which sometimes resulted in decision fatigue and dissatisfaction. Personalization algorithms have completely altered the scene (McKinnon, 2022). These algorithms analyse user behaviour and preferences, making tailored content suggestions that align with individual interests. In turn, it simplifies the content discovery process and introduces users to a broader range of content. Users are no longer restricted to popular or trendy selections; instead, they may discover specialized or lesser-known contents that resonates to their own preferences. As a result, the digital media ecosystem has turned as more assorted and accessible.

Another significant influence of these algorithms is the customisation of user experiences. Based on previous interactions, each user's dashboard and content recommendations are personalized (Chandra, Verma, Lim, Kumar, & Donthu, 2022). These algorithms not only keep consumers interested, but they boost their overall satisfaction. Users are shown such contents that are tailored to their interests, building a bond with the digital platforms they use. This sense of personalization encourages consumers to return frequently, increasing user retention and platform loyalty (Liang, 2007).

Decision fatigue has been greatly decreased by customization algorithms (Furey, 2023). With so much contents available on so many platforms, people may become overwhelmed when picking what to watch, listen to, or read. Personalized recommendations make this process easier by providing information that matches the user's tastes. This not only streamlines the user experience but also encourages users to explore more relevant content they might not have considered otherwise. By frequently offering content that reverberates with individual users, platforms will be able to maintain user's interest and extend the time users spend on their platforms. Longer user engagement has a direct influence on the success of content providers, as it results in higher subscription rates, improved ad views and enhanced overall revenue (Saxena, 2023).

Personalization is critical in encouraging people to subscribe to subscription-based platforms (Haleem, Mohd, Mohd, Ravi, & Rajiv, 2022). These platforms can persuade users that a subscription is a worthwhile investment by displaying the contents that are relevant to their interests. This, in turn, leads to long-term revenue sources. Data-driven insights have also emerged as a vital consequence of these algorithms.

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