Chapter 8

Advancing Personalization and Recommendation Algorithms in the OTT Industry:
Enhancing User Experiences and Driving Engagement

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ABSTRACT

In order to deliver customised content and improve user experiences, over-the-top (OTT) providers must adopt efficient customization and recommendation algorithms as the OTT sector continues to grow. The objective of this chapter is to investigate the developments, difficulties, and best practises relating to personalization and recommendation algorithms in the over-the-top environment. The significance of customization and recommendation algorithms in the over-the-top OTT business will be covered in the proposed chapter. The proposed chapter seeks to provide readers interested in customisation and recommendation algorithms within the OTT business with useful information and helpful advice. It will discuss how the OTT market is changing and provide practical advice to OTT service providers looking to improve their users' user experiences via sophisticated personalisation and recommendation algorithms.

1. INTRODUCTION

The Over-The-Top (OTT) industry has gone through a seismic shift in the recent years, which has revolutionised the way that people consume media content and transformed the landscape of the entertainment industry. OTT platforms, which are characterised by their ability to deliver a diverse array of media content directly to consumers over the internet, have not only disrupted traditional models of media

distribution but also redefined the very nature of viewer engagement (Brian & Robert,2020).OTT platforms are characterised by their ability to deliver a diverse array of media content directly to consumers over the internet. The idea of personalization, which adapts content suggestions to the preferences of each individual user to produce a viewing experience that is unique to that user, is at the centre of this transformation. This study will investigate the mechanisms, benefits, challenges, and future prospects of enhancing user experiences and driving engagement through advanced personalization techniques. The purpose of this research is to investigate the pivotal role that personalization and recommendation algorithms play in the OTT industry.

The rapid growth of over-the-top (OTT) platforms has resulted in an unprecedented volume of media content becoming readily accessible to users at any time and from any location. However, this abundance has also presented a challenge, which is the task of locating content that, amidst the vast ocean of options, resonates with individual preferences. In response to this, recommendation algorithms have emerged as essential tools for users to utilise in order to efficiently navigate the content maze that exists today. These algorithms make use of user data, such as viewing history, preferences, and interactions, in order to generate recommendations for content that is specifically suited to each individual user (Yousaf,2020). Not only does this personalization make it easier to find content, but it also increases user engagement by providing them with options that are pertinent to the areas in which they are most interested. As a consequence of this, OTT platforms are increasing the amount of money they invest in the development of more refined recommendation algorithms in order to provide content suggestions that are more accurate and relevant (Kwon, Y et al.,2021).

The advantages of providing users with personalised recommendations for content go far beyond the convenience factor. A sense of connectivity and loyalty between the viewer and the platform can be fostered by enhancing the user experience. A successful personalization strategy gives users the ability to craft their own entertainment experience, which in turn results in longer engagement sessions and higher levels of user satisfaction. Additionally, as users find content that resonates with them, they are more likely to explore a platform's extensive library, find hidden gems, and even sample genres that they might not have otherwise considered. This is because users become more likely to do so as they find content that resonates with them. Therefore, the implementation of advanced personalization techniques helps drive user engagement and retention, which in turn contributes to the expansion of the over-the-top (OTT) industry as a whole.

The pursuit of effective personalization, on the other hand, is not without its obstacles. An ongoing challenge consists in finding a happy medium between providing personalised content recommendations and protecting the privacy of individual users. Ethical questions are raised as a result of the fact that platforms are collecting and analysing user data in order to improve their recommendation algorithms. This makes it necessary to take a transparent approach to data usage and provide users with control over their information. In addition, the "filter bubble" effect, in which users are only shown content that is in line with their existing preferences, raises questions about the potential for limiting serendipitous content discovery and narrowing perspectives. To ensure that personalization improves user experiences without inadvertently stifling diversity and exploration, addressing these challenges is essential and must be a top priority.

When we look into the future, we can see that the personalization and recommendation algorithms that will be used in the OTT industry will undergo remarkable development. It is anticipated that as technology continues to advance, machine learning and artificial intelligence will play crucial roles in playing a pivotal role in the further refinement of these algorithms (Hallur et al.,2023).The incorporation

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