

# Chapter 7

## OTT Platforms From the Perspective of Critical Algorithm Studies: The Algorithmic Paradox of the Audience

Elif Karakoç Keskin

 <https://orcid.org/0000-0002-2831-2247>

Yeditepe University, Turkey

### ABSTRACT

*The perspective of critical algorithm studies, which focuses on the concerns that algorithmic mechanisms create or may create in the individual and social context emphasizes that it is important to examine the position of individuals who are currently using recommender systems. Recommender systems are one of the algorithmic structures aimed at keeping users constantly connected and interacting on digital platforms. It is thought that the digital togetherness enabled by media convergence necessitates a focus on recommendation systems within the data cycle of the digital platform ecosystem. This chapter attempts to focus on the effects at the intersection of algorithmic and social structures and problematize these effects in the context of OTT platforms within the framework of current concepts. Hence, the chapter focuses on describing the current state and potential concerns of personalization algorithms and recommendation systems on OTT platforms in relation to the basic conceptualizations of critical algorithm studies in the context of human-algorithm interaction.*

### 1. INTRODUCTION

With the advancement of digital technology, the audience's communication and connection with the media, as well as the ways in which they consume media information, have changed. With digital broadcasting, the audience now has more control over time and space than they did with traditional broadcasters. The audience can now watch visual and/or audio media content anywhere, at any time, and on any device of their choice thanks to the benefits of the digital age. One instance of this is the Over-the-Top (OTT)

DOI: 10.4018/979-8-3693-0116-6.ch007

streaming media delivery system used by Video on Demand (VoD) services, which enables users to access videos without the need for a conventional video playback device.

It is critical in the VoD platform system, which aims to ensure that media content consumption is not interrupted, to maintain the audience's interest and loyalty to the platform, as well as to analyze the user's predictable persona with viewing data. Platforms in this regard benefit from recommender systems based on personalization content, and thus recommendation algorithms.

Broadcasting service providers also control the flow of content in order to direct the audience from VoD platforms to social media platforms, and from social media platforms to VoD platforms, in order to increase screen time, keep them engaged, and thus generate more revenue. The algorithms, which are activated by training the user's behavioral data, make recommendations that the user is likely to click on and possibly interact with. VoD platforms, which have become important components of today's media ecosystem, reach out to both existing subscribers and potential users via various social media platforms and make content recommendations.

In the algorithmic structure, the choices made by users to watch media content on digital platforms are addressed as behavioral data (Kara & McAleese, 2021, p. 4), and the algorithm is processed to provide recommendations for each user and guide the user's decisions. Recommendation algorithms use a database of user preferences (Breese et al., 1998) to predict content that a user might like, find interesting and useful (Burke, 2002), and are able to direct users to that content.

Providing services worldwide, VOD platforms such as Netflix, Amazon Prime, and Disney Plus offer users a variety of content ranging from movies, television series, television programs, and documentaries (Zengin, 2020, p. 169). Users can thus watch content whenever and wherever they want. They also encounter content for their predictable behavioral data with the conditions provided by recommendation systems. Netflix, for example, "trains" audiences to comprehensively mark content, using personalization-driven recommendation systems to provide users with a personalized video library and recommendations to ensure that users continue to watch or subscribe (Bhaskar, 2016). Aside from Netflix, many VoD platforms are investing more and more in machine learning-based recommender systems in order to retain current consumers and attract new ones.

Through VoD platforms, the audience has far more control over what they watch, how they watch it, and how long they watch it than in the traditional watching process. However, it is also paradoxically controlled by the algorithmic structure of the platform through its behavioral data within the framework of recommender systems adopted as one of the business models of the platform ecosystem.

Critical algorithm studies (CAS) have been motivated by the working principle of recommender algorithms, which is based on collecting, processing, and analyzing user data to train the algorithms and then using this data to provide new recommendations to users.

The working principles of algorithms and their functioning as decision mechanisms in the processes of data collection, storage, and analysis are examined in critical algorithm studies, which focus on the concerns that algorithmic structures create or may create in individual and social contexts. Accordingly, the power of algorithmic systems (Moats & Seaver, 2019) that influence users' decision-making processes in the digital environment provide a foundation for studies on the potential effects and risks of algorithms, algorithm-based systems, and data science tools on social life.

Critical algorithm studies address the need for an academic field of study (O'Neil, 2017) that assumes the responsibility of understanding and critiquing the role of technology, particularly algorithms that are responsible for many decisions in social life. This perspective enables the questioning of algorithms not only as codes containing digital instructions but also as guiding mechanisms that construct individual and

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/ott-platforms-from-the-perspective-of-critical-algorithm-studies/337668](http://www.igi-global.com/chapter/ott-platforms-from-the-perspective-of-critical-algorithm-studies/337668)

## Related Content

---

### The impact of MIMO Communication on Non-Frequency Selective Channels Performance

Andreas Ahrens and César Benavente-Peces (2011). *Handbook of Research on Mobility and Computing: Evolving Technologies and Ubiquitous Impacts* (pp. 100-114).

[www.irma-international.org/chapter/impact-mimo-communication-non-frequency/50582](http://www.irma-international.org/chapter/impact-mimo-communication-non-frequency/50582)

### Multi-Label Classification Method for Multimedia Tagging

Aiysha Ma, Ishwar Sethi and Nilesch Patel (2010). *International Journal of Multimedia Data Engineering and Management* (pp. 57-75).

[www.irma-international.org/article/multi-label-classification-method-multimedia/45755](http://www.irma-international.org/article/multi-label-classification-method-multimedia/45755)

### Board Game Supporting Learning Prim's Algorithm and Dijkstra's Algorithm

Wen-Chih Chang, Te-Hua Wang and Yan-Da Chiu (2012). *Methods and Innovations for Multimedia Database Content Management* (pp. 256-270).

[www.irma-international.org/chapter/board-game-supporting-learning-prim/66698](http://www.irma-international.org/chapter/board-game-supporting-learning-prim/66698)

### ISEQL, an Interval-based Surveillance Event Query Language

Sven Helmer and Fabio Persia (2016). *International Journal of Multimedia Data Engineering and Management* (pp. 1-21).

[www.irma-international.org/article/iseql-an-interval-based-surveillance-event-query-language/170569](http://www.irma-international.org/article/iseql-an-interval-based-surveillance-event-query-language/170569)

### Content Adaptation in Mobile Learning Environments

Sergio Castillo and Gerardo Ayala (2010). *International Journal of Multimedia Data Engineering and Management* (pp. 1-15).

[www.irma-international.org/article/content-adaptation-mobile-learning-environments/49146](http://www.irma-international.org/article/content-adaptation-mobile-learning-environments/49146)