



# **8 WAYS AI IS POWERING THE FUTURE OF OTT**

ARTICLE





## THE INFLUENCE OF AI ON THE OTT INDUSTRY

Artificial Intelligence is revolutionizing the OTT industry by impacting the various stages of the content lifecycle, including video, audio, and podcasts. From content material discovery and enhancement to video indexing, Artificial Intelligence can promote online content and ensure extraordinary engagement in the streaming media industry. Leveraging the power of AI, streaming services are creating hyper-personalized experiences for their subscribers to preserve their competitive advantage.

It has been reported that 85% of the data consumed over the internet is in the form of videos. This consumption amounts to 2.8 exabytes of data transferred over the internet through streaming technology. Amid the extraordinary amount of digital data consumed, online streaming services will soon account for 82% of the total internet traffic by 2022\*. As video consumption grows at an exponential rate, AI will play an increasingly important role in parsing this massive data flow.

## AI GETS MORE PERSONAL

Subscribers tend to lose interest within 90 seconds of browsing and either choose something or leave the platform. Based on behavioral data points, AI is assisting providers in supplying hyper-personalized content recommendations, resulting in an improved user experience.

OTT platforms can uncover insights about the content preferences of subscribers by using machine learning algorithms. Artificial Intelligence can also aid in discovering collective-behavior relationships, as well as identifying trends that relate to content and connect titles that are not always obvious.



## NON-STOP VIEWING, ONLY WITH AI



With massive amounts of data streamed every second, it's not surprising that systems experience interruptions and downtime. By parsing data on what users stream the most and spikes in viewership, AI can assist streaming services in determining when to cache

websites on regional application servers for faster loading times. Imagine if the system could predict problems and switch to different networks before they occur. Predictive analytics, with the right data, will soon make it a reality.



## FASTER SEARCH AND RECOVERY, SMARTER VIDEO INDEXING

The search and indexing capabilities grow exponentially by extracting speech and visual metadata from videos. AI can help unlock valuable video information using advanced algorithms, making content more accessible to viewers. Consider requesting chase scenes from movies and having the platform pull them out for viewing. With AI-driven video indexing, the potential for both streaming viewership and research support has significantly increased.



## INTELLIGENT ENCODING MORE INFORMATION, LESS HASSLE



Advanced encoding entails selecting the best type of video compression based on the type of content. However, encoders are now going one step further by allowing users to choose the type of encoding based on the scene. Here, encoding is done contextually, as not all scenes require the same compression level. As a result, the overall size of the finished video is reduced even further, saving the end-user bandwidth without sacrificing quality.

While manually selecting the best coding format for each scene is time-consuming, machine learning has significantly sped up the process. AI algorithms can quickly compare content to known parameters for a particular device or media player. Using AI, systems can promptly recommend the optimal bitrate ladder for best viewership and quality by analyzing these parameters against anticipated bandwidth.



## NAVIGATING THE OTT DATA MAZE WITH AI

AI enables the analysis of every second of video content for deep value information such as elements shown on screen, character emotions, and the nature of the scene. Rather than having staff manually review material, AI technology can now generate a highly accurate account of all spoken words in the video and scene and metadata information down to specific time references.

We'll soon know if we're consuming more content with car explosions or tearful breakups, just like we do with end-of-year food delivery service reports. Consider the impact this could have on both content creators and OTT players!





## AI TALKS THE TALK - OTT CAPTIONING AND MORE

Content delivered across multiple OTT platforms must adhere to specific standards and style guidelines, including closed captions in various formats and multilingual transcriptions.

Content providers can now use AI tools to automatically review machine-transcribed content and edit it much faster and with greater accuracy than ever before. This process saves a significant amount of time and effort while meeting the requirements of various OTT platforms for transcripts and captions in multiple languages.

## DRIVING USER ENGAGEMENT WITH AI RECOMMENDED THUMBNAILS

Choosing a compelling and relatable image while showcasing the aspects of a show can be a difficult task. Streaming media service providers are now using contextual algorithms to provide data-driven options for thumbnails.

Contextual algorithms rank images and predict play probability by considering many aspects of the audience's past preferences. The thumbnail is then displayed based on the likelihood of viewership selection.



## SAY WHAT? AI IN SPEECH RECOGNITION

Natural language processing (NLP), for example, is a transformative AI technology that will soon allow us to "talk" to our content. We've already seen some of this with Alexa and Siri's speech recognition capabilities.

As technology advances, the ability to request content will soon permeate all aspects of the OTT space, including viewership, production, and analytics.



## FINAL THOUGHTS

The global pandemic of 2020 pushed the world towards increased consumer and digital adoption, with streaming media at the forefront of this digital wave. The streaming and broadcasting explosion has generated a vast amount of user and content data. With the help of AI, OTT services can unearth deep insights and ultimately offer an engaging and

unparalleled experience for subscribers. And as we enter the metaverse era and hurtle towards higher-quality displays, faster internet, and newer ways to consume content like augmented and virtual reality technologies, AI is likely to do a lot more of the heavy lifting in the future.

*\*Source - <https://towardsdatascience.com/>*



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+1-866-9-TAVANT | hello@tavant.com | [tavant.com/media](https://www.tavant.com/media)