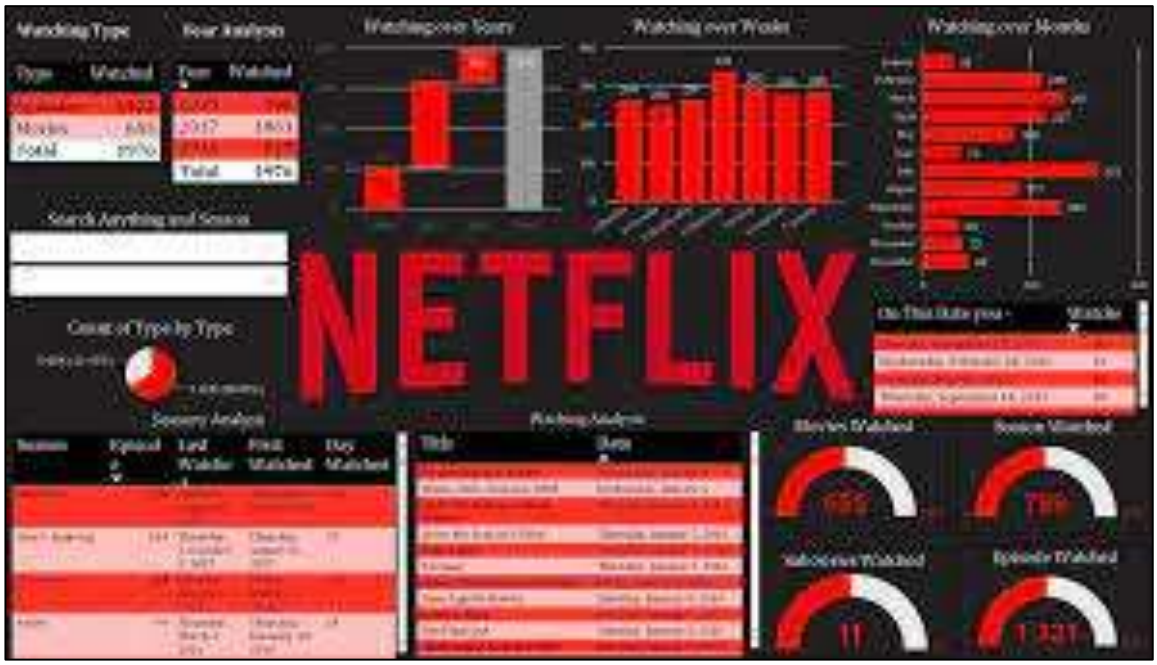
Certification Program in
Business Analytics & Optimisation
From IIT DELHI

Story Based Case Study – 2

TOPIC: Big Data Analysis for Netflix



From:

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BACKGROUND

Netflix is one of the most popular online content providers. Company initially started selling and renting DVDs. With the boom in the usage of internet around the world, it changed its business model to video on demand. Also, it started producing online content like web series and movies. Netflix understood the power of big data and started analyzing it to understand its customer's base. Netflix collects huge amount of data from vast variety of customer base in the form of location of users, watch time, interests, and age of customers.

OBJECTIVE OF CASE STUDY

With the help of this case study, one can understand how Netflix with the help of Big Data analytics improved customers experience, become more customer centric when compared with its competitors and increased its subscribers. This case study also analyzes the business strategies of Netflix.

ANALYSIS

Netflix had the advantage of first mover, as it adapted the Big Data analytics in the year 2006. Netflix based on older data developed an algorithm (called supervised learning) to predict the movie preferences of its customer base. Based on machine learning model, Netflix was able to provide more customer centric content, thereby increasing the customer base by 10% in a year. Netflix algorithm based on inputs from the user, provides a personalized recommendation. Every time a new user comes on the platform, algorithm starts monitoring the user habits like age, language and genre of movies. Also, every time a user watches something, algorithm keeps on updating the data set to provide better suggestions in the future.

Based on the analysis of the subscriber, Netflix developed three models for subscription.

1. Content Based Filtering
2. Collaborative Filtering

A. Content Based Filtering

In this recommendation is given to the user, based on the history of the user. If the user has watched crime, war related movies, then similar content will be recommended to the user, to keep them attracted to the platform.

B. Collaborative Filtering

In this category, algorithm scans the user and group them according to their interest. For example, Person A watches crime, horror, comedy movies. Person B watches war, comedy and horror movies. Then the algorithm will suggest Person A to watch War and Person B to watch crime related movies. This works on the psychology that people in the same group have similar interests.

Limitations of the Analytics:

1. Not sufficient data for new subscribers.
2. Huge computational power is required to process the data.
3. Geographical diversity of the user base, might affect the recommendations.
4. Accuracy, as many active users don't provide the rating used for analysis.

Similar strategy was used by Netflix, in bidding to produce HOUSE OF CARDS, a well-known web series having 2 seasons and 26 episodes. Based on the results of Big Data, Netflix was confident that the show will be a big hit among the viewers. This helped Netflix in gaining 80% success rate for original content.

CONCLUSION

Thus, Big Data Analytics is a boon for the OTT platforms in analyzing the target audience, their likes and dislikes. Based on the results, decision makers can decide on the content to be shown on their platform, to grab the attention of the audience. Now-a-days, production or the original content is decided by running Big Data Analytics and other data mining algorithms to decide the size of target audience. This also helps in providing personalized suggestions for people of different age groups.