**Title: Introduction and Background - Netflix Business Model and Deep Learning**

**Course: Higher Diploma in Data Analytics – Case Studies**

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While we researched into previous cases which are success stories of How Netflix becoming world leading video streaming services .

Netflix has gained upper hand among its competitors such as Disney+, Hulu, Prime Video, and HBO Max.

Company is long been known for its effective use of user data to create algorithmic to improve viewing recommendations on the platform

One limitation is the suggestions are highly personal , The [paper here](https://tidsskrift.dk/mediekultur/article/view/121223/170409) describes this approach as “shaping the audience “

The information in the article is collected through group discussions, social media platforms from users of different regions who are also Netflix users.

Important factor that the article highlight here is most viewers are seeing Netflix as **‘ Primary source of TV’**

**Less importance is given to sports channels, news channels etc., Education ,** particularly in the regions where affordability is an issue.

Article also highlight on the fact : Netflix, like most large technology companies, is vague about exactly how it collects and uses data to power its algorithms

Netflix so dependent on “decisions based on algorithms”, some of decisions such as cancelling of a future episode due to no value

Netflix is global its presence is there worldwide particularly in

emerging in countries in in Asia where Netflix and its content is not regulated enough to a particular region.

Netflix page layouts are mainly designed in such a way most useful buttons and features that feed the algorithms are readily available to users but certain features which are also helpful to users ex: ‘more info’ are less of a priority.

**Limitations of Case study : use of other Deep learning models to improve user recommendations.**

[Recommended System Algorithm](https://towardsdatascience.com/recommender-systems-a-complete-guide-to-machine-learning-models-96d3f94ea748)

A screenshot of a customer feedback

Description automatically generated

A screenshot of a video game

Description automatically generated

One of features required for recommended system algorithm is user feedback. Netflix has options available on there screen to catch both Explicit and implicit feedback , which one is considered of more of priority when performing recommendations ?

And it is observed that it is easy to collect information on what user has watched or searched, but not always users leave feedback in spite they liked the content.

Which means that more of offline and online data collected by algorithm is implicit in nature which may not be a true indication of what the user likes for sure.

Implicit feedback is more than likely to be too loud in the dataset than explicit feedback .

Netflix does not impose users like YouTube to seek feedback rather the like and “love this” options are clearly presented to the user.

Importance of theses options are as highlighted in the post [here](https://bgr.com/tech/netflix-continue-watching-remove-titles-web-desktop/).

Time spent watching content does not mean quality time spent or user liked the content . As in this post by [youtube](https://blog.hootsuite.com/how-the-youtube-algorithm-works/), Youtube has built in AI to tackle the time spent by the user watching the content.

No indication in the case study how this is handled by recommended system algorithm.

Back in 2015 itself youTube started making changes to there content watching recommendations to user by giving more importance to Likes, Share, Comment, Dislike etc.,

There is no such evidence in the paper to describe how Netflix is using this data.

In fact there is no option to comment on any video content that users can leave on the Netflix app.

Most watched section on Netflix screen – does this means the users have finished watching or just left watching incomplete?

No evidence or disclosure in the paper of how Netflix uses this data to provide recommendations .

**Bag of Items approach:**

Method is like bag of words . Consider example below as a sentence how many times ‘It’ and ‘was and ‘the’ has appeared.

Importance or weight is given to most frequently used word.

Importance is given to most occurred word with in the document is measured.

A white background with black text

Description automatically generatedA close up of words

Description automatically generated

A group of black text

Description automatically generated

If this theory is applied to Netflix then it is most watched videos or user interactions like Pause, length of wated items, Like etc., The importance increases proportionally to the number of times a word appears in the document. How does this theory applied to Netflix user data and video content ?

Approach on how Bag of Items applied on Netflix data is not clearly explained in the case.

How is normalisation of data is defined if the length of the video content is wated by the user.

References :

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Growth in Asia :

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<https://medium.com/greyatom/an-introduction-to-bag-of-words-in-nlp-ac967d43b428>

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