An Analysis of the Anime Industry

Abstract— This study has been conducted by comparing the performance of a range of different anime from two major rating websites. This data has been collated in the form of a MyAnimeList dataset obtained from Kaggle and web-scraping from Anime-Planet. The analysis of the trends in the industry will be carried out utilizing visual analytics and Linear Regression.

I. INTRODUCTION

Prior to the early 2000s, the word "anime" was predominantly popular in Japanese youth culture had not extensively penetrated western markets. (Williams, 2019) However, in the prior two decades, it is no doubt that anime and Japanese pop culture has influenced western society in many ways. There has been a domestication of anime in western society and it can be seen in large investments into anime production in popular streaming services such as Netflix and Crunchyroll. (Yeung, 2020)

In 2019, the anime industry is a record high of \$24.08 billion dollars in revenue, with an overseas contribution of 51%. (Wit, 2020) It could be the big shift in entertainment, catering to people of all ages, from children to adults. The analysis conducted in this report focuses on the growth of anime consumption, outside of Japan.

II. ANALYSIS DOMAIN, QUESTIONS AND PLAN

A. Data and Domain

There are two major websites that house western reviews of anime, one of which is MyAnimeList (MAL) and the second is Anime-Planet (AP). Data has been obtained in two ways for the purpose of this study. The first is obtained through a dataset on Kaggle, containing the reviews from MyAnimeList, this contains the genres, number of episodes, air date, duration, number of votes etc. Similarly, the number of votes, rating and other details have been scraped from Anime-Planet.

There are two target variables in this study, these are the scores given to the show/ movie on each of the two websites, with the scores on MAL ranging from 0-10 and AP ranging from 0-5. These scores can be translated into the performance of the anime in terms of customer satisfaction.

B. Research Questions

MAL is the most popular resource for western anime viewers to post their reviews, with there being over 120 million users a month frequenting the site. It is the most extensive database of information related to the industry, including categorisation of different shows. (Orsini, 2018)

The aim of the analysis is to identify how the trends have changed in anime, over the last 20 years and identify different genres and target audiences which are doing particularly well. The questions below will be the main scope of the analysis:

- What is the trend in anime consumption, is there any change in the number of of users watching anime?
- What factors affect anime rating on the two websites?

- Do the users on each of the websites hold similar preferences or are they catered to different markets?
- How does length of the media (in episodes and run time) affect rating? Do certain genres do better than others?
- How do different target audiences, Shoujo, Shounen, Seinen and Josei (teen male, young adult male, teen female and young adult female respectively) react to anime?

III. FINDINGS AND DISCUSSION

A. Overview of the Industry

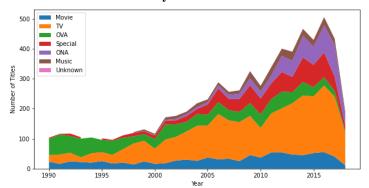


Figure 1- Titles of each type of Media from 1990 -2018

To understand how the industry has grown, we need to understand how the consumption of anime media has changed over the last 30 years. Prior to the 2000s, there was a lot more consumption in anime primarily through OVA. These are limited run-time media which summarise the plot of manga and novels, unlike TV shows which are longer running. There has been a significant growth in TV and Specials consumption, especially after the 2000s and again a resurgence after 2010. The number of ONA titles has also grown significantly, especially after 2010. ONA generally tends to include media of other east Asian countries including Korean and Chinese media. The popularity of anime earlier on, may have induced a increase in ONA production.

The growth in film production seems to be quite slow, with a slow increase yearly- this may be due to the resources required to creating a film being much greater with respect to advertising, pre- and post-production expenses, compared to series.

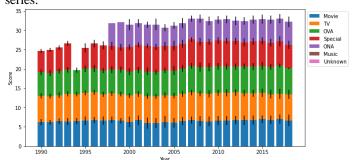


Figure 2- Change in Score from 1990-2020

The Scores have not drastically changed over the years, as shown in figure 2. This is surprising, as the number of titles has been consistently increasing for most media. This may include bad titles and good titles, so the overall quality of the media has been overall consistent. This insists that newer titles have higher scoring values, as is shown by the increasing standard deviation in the media.

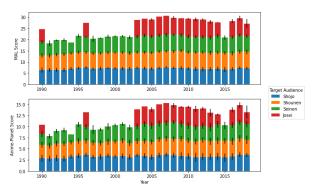


Figure 3- Different Target Audiences and their Average Ratings

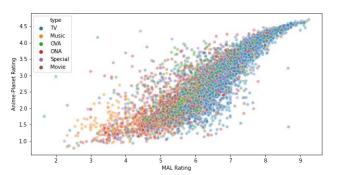


Figure 4- Comparison of ratings between the two Websites

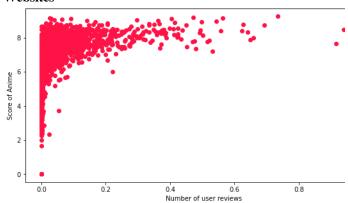
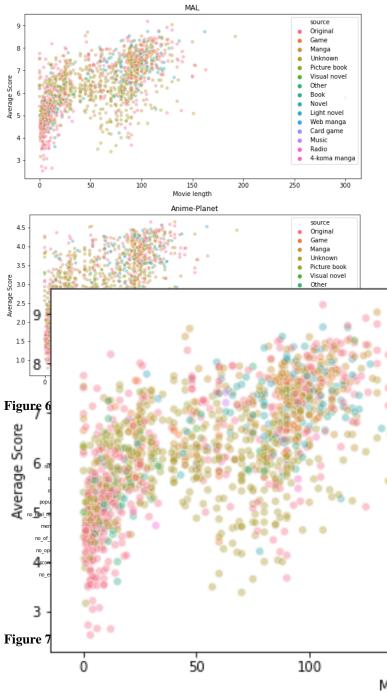


Figure 5- Score of Anime vs number of User Reviews



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