Data Analysis Portfolio

A fast learning individual seeking opportunity for professional experience that allows me develop and expand my knowledge and experience. Looking to develop my skills, gain valuable experience, deliver excellent results and contribute significantly to the growth of the organization.

Professional Background

Computer Engineering graduate with a background with Excel, SQL and tableau. Highly analytical, motivated and skilled in problem solving. Can work well both independently and in a team.

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Udemy Project Description

I was asked to present the data on course revenue by my manager with limited time given the data of different courses. This report is to find out where opportunities may lie to increase revenue for the next quarter and also to track the performance of each course. I had to append the data into a single sheet, clean the data, then I made visualizations of my results. With these I was able to find out places in which income can be increased and the courses that are performing well.

The Problem

I have to find out where to increase revenue for Udemy within 3 weeks. I need to collect the number of subscribers, the average price of each course and the ratings of each course. I also need to collect the average number of subscribers by level and which courses are free and paid for. I need to know which course brings in the most revenue and which courses are highly rated.

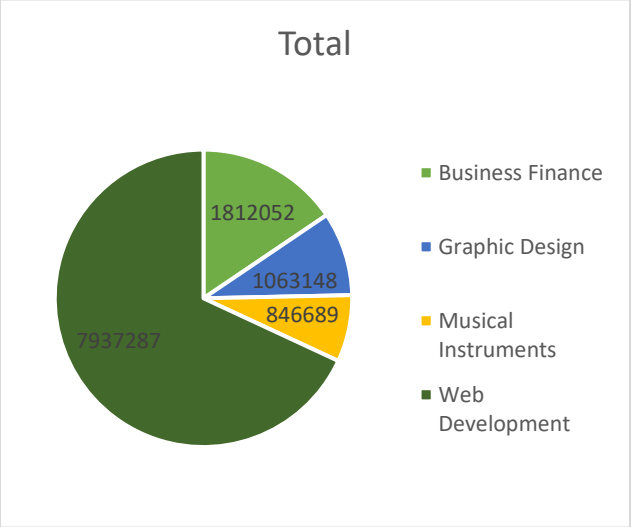
Design

There were four separate sheets containing different courses, which I had to append into a single sheet, then I removed the duplicates and null values from the sheet. I also had to replace the “Web Development” subject because it wasn’t consistent with the other subjects on my sheet. Using a separate sheet I brought out the courses with the top 20 subscribers then I used excel and tableau to make my visualizations because of how bulky the data is.

Findings

Finding 1

Figure 1: Total subscriptions by Category



subject	SUM of num_subscribers
Business Finance	1868711
Graphic Design	1063148
Musical Instruments	846689
Web Development	7937287
Grand Total	11715835

Here we see Web development has the highest number of subscribers followed by Business finance then graphic design and lastly Musical instruments. Web development also has more subscribers than the other courses combined.

Finding 2

Figure 2: Average Price by Level and Subject

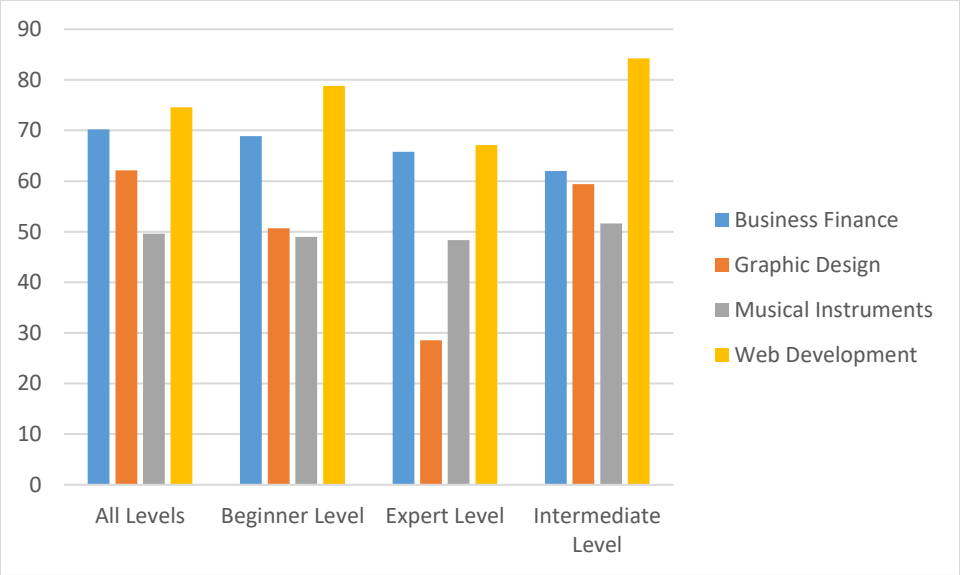


Table 1: Free/Paid Users

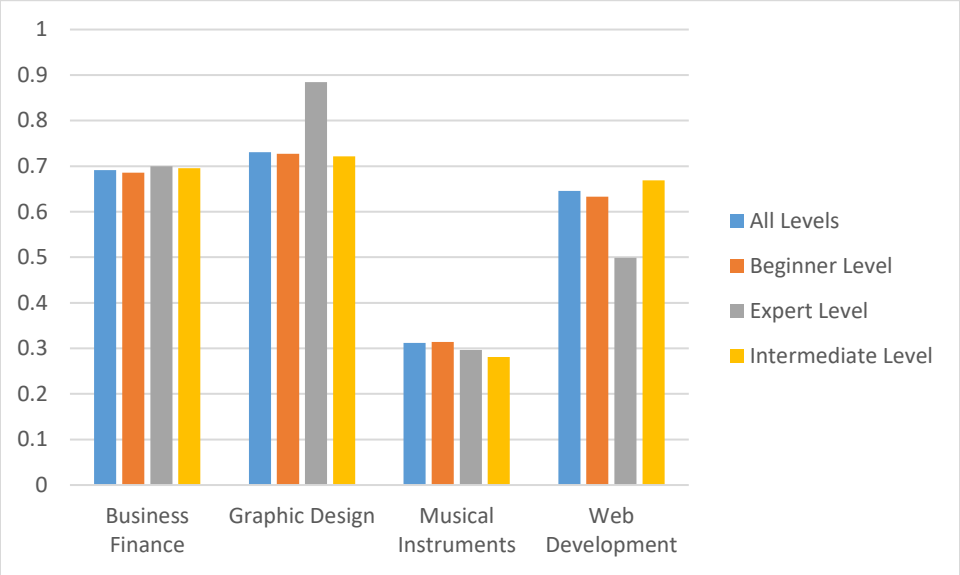
Row Labels	Count of num_subscribers
Free	310
Paid	3362
Grand Total	**3671**

With this table we can see most people pay for courses on this platform.

Here we can see the average price across all levels and the intermediate level for web development has the highest average price. At expert level the average price for business finance and web development is almost the same.

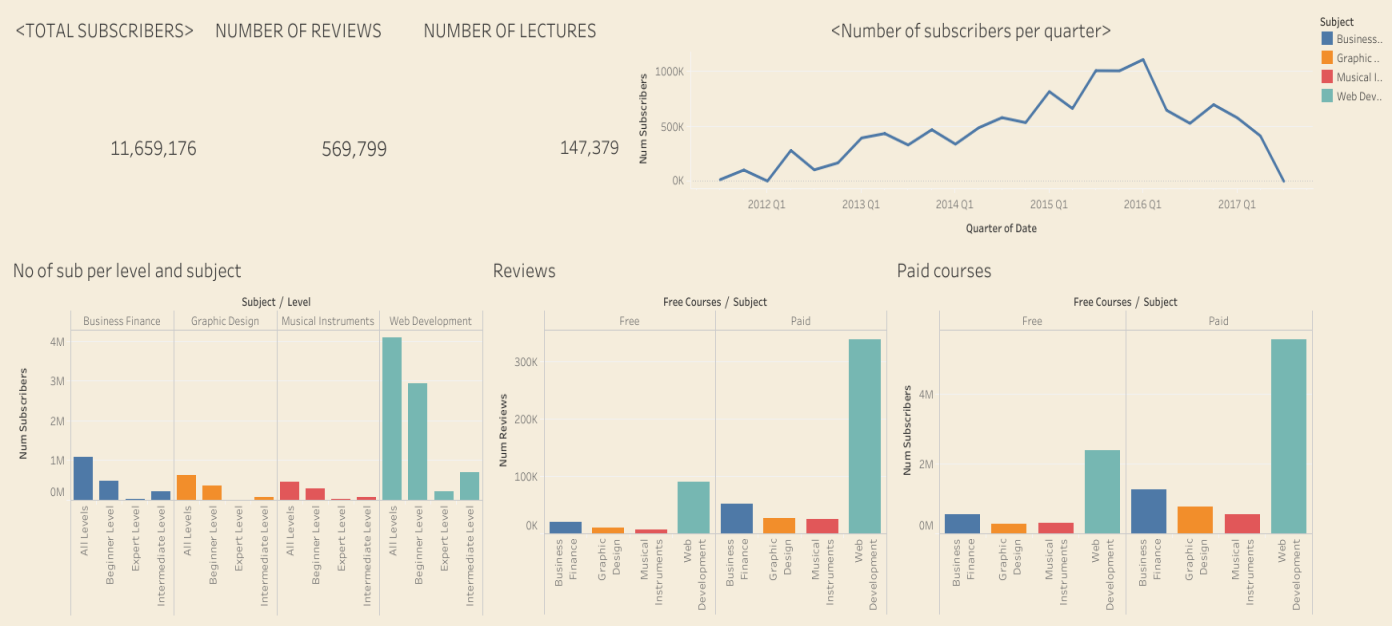
Finding 3

Figure 3: Average Course Rating by Level and Subject



Here Graphic design has the highest rated courses across all levels while web development is third even though it has the highest number of subscribers.

Dashboard 1



From this dashboard we can see that the number of subscribers peaked at first quarter of 2016 and there has been a steady decrease over the quarters, also web development has the highest number of subscribers across all levels, it also has the highest number of reviews and it's the most paid course.

Dashboard 2

This dashboard shows the top 20 courses with the highest number of subscribers, Web development has 17 out of the top 20 courses with musical instruments having 2 Business Finance having 1 while Graphic Design has none. Another thing to note is that more of the top 20 courses are free. And most of the courses are either "All levels or Beginner level" courses.

Analysis

From the first dashboard we can see that there was a steady increase in the number of subscribers from the first quarter of 2011 till the fourth quarter of 2016 and since there has been a steady decrease through the rest of the quarters, this might be because of the emergence of other online learning platforms. Out of all the subscribers Web Development has more than double the amount of subscribers than other courses combined but the thing is it has the third lowest average ratings among the four courses so even though Web development courses are the most popular they aren't rated high enough. Web development also has the highest average paid courses especially at Intermediate level. Out of all top 20 courses, 17 are from Web development and also about 91% of the courses are paid so most of our customers go for the paid courses.

Conclusion

After my analysis from the data I believe we should increase the price of Web development courses also increase the price of Graphic design courses because they are the highest rated courses. We also need to improve the Web development courses because they are the most popular but third highest rated course.

Netflix Project Description

I have been given a month to find out where to increase Netflix subscribers from by the next year. I had to remove all duplicate movies from my sheet, arrange the shows by TV series and movie, then I made visualizations with my result. With these I was able to find out where to increase revenue from.

The Problem

I have been tasked to find out areas in which I can increase subscribers for Netflix for the next month. I need to collect the countries that use Netflix the most, the type of shows people watch the most and the most popular show categories.

Data Design

The data were in different sheets, so I had to append them to a single sheet then I removed all the duplicates from the single sheet I was working on. I also had to remove all the null values from the sheet. I used excel to bring out some tables and tableau to make my visualizations because it's easier for the large data.

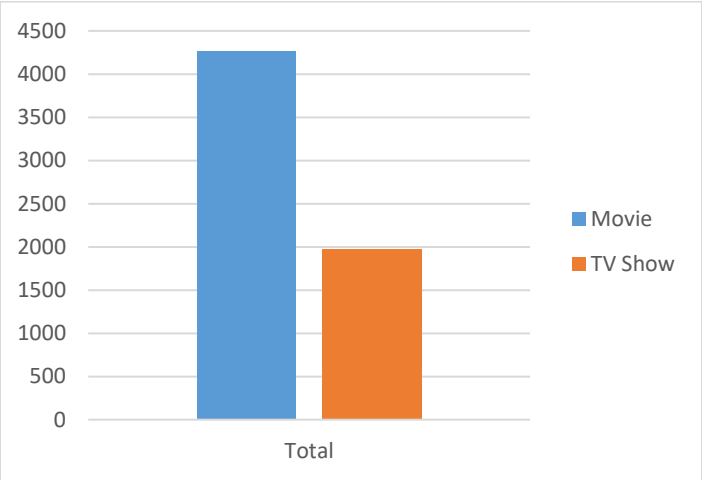
Findings

Finding 1

Table 1: Movie/TV Shows

Row Labels	Count of show_id
Movie	4263
TV Show	1969
Grand Total	**6232**

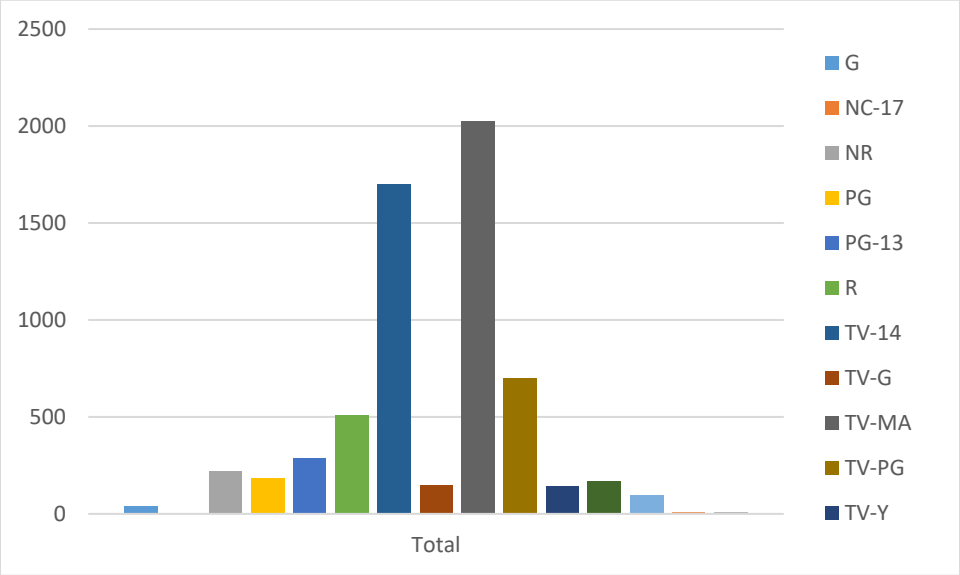
Figure 1: Movie/TV shows



The total number of shows are 6232 with TV shows taking about 68% of the total and movies having the rest.

Finding 2

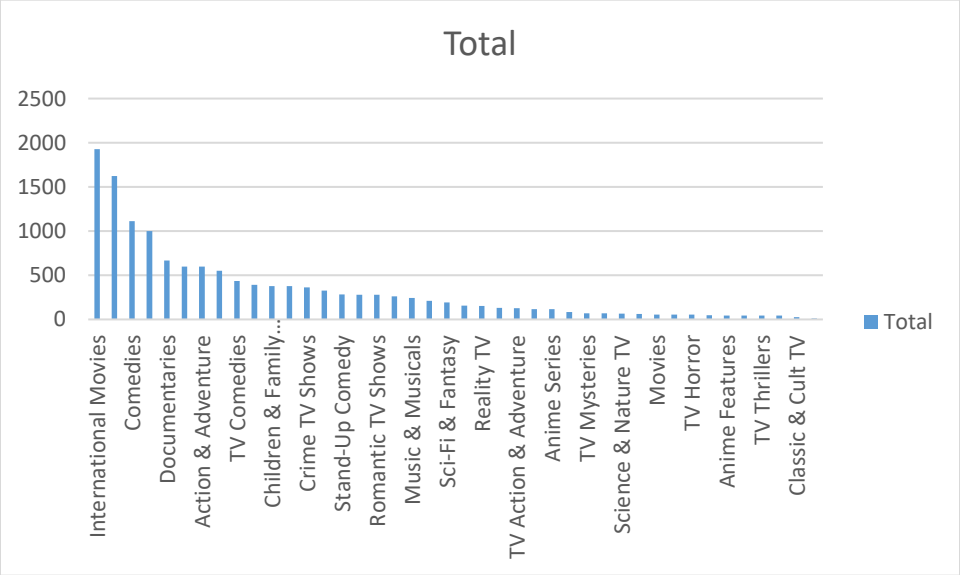
Figure 2: Total Shows by Age Rating



From this chart we can see that TV-MA (Mature Adults) have the largest amount of movies closely followed by TV-14 and their total is more than other shows combined.

Finding 3

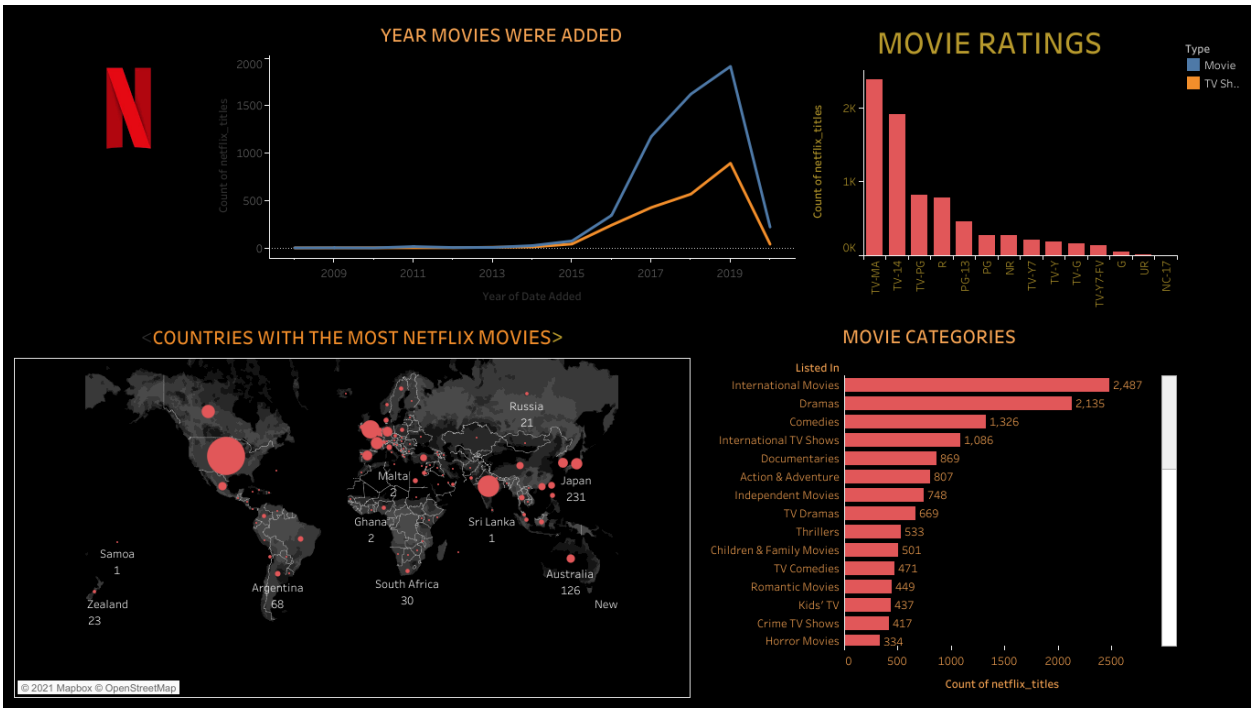
Figure 3: Total shows by Categories



Here we can see that International movies have the highest number with comedy second.

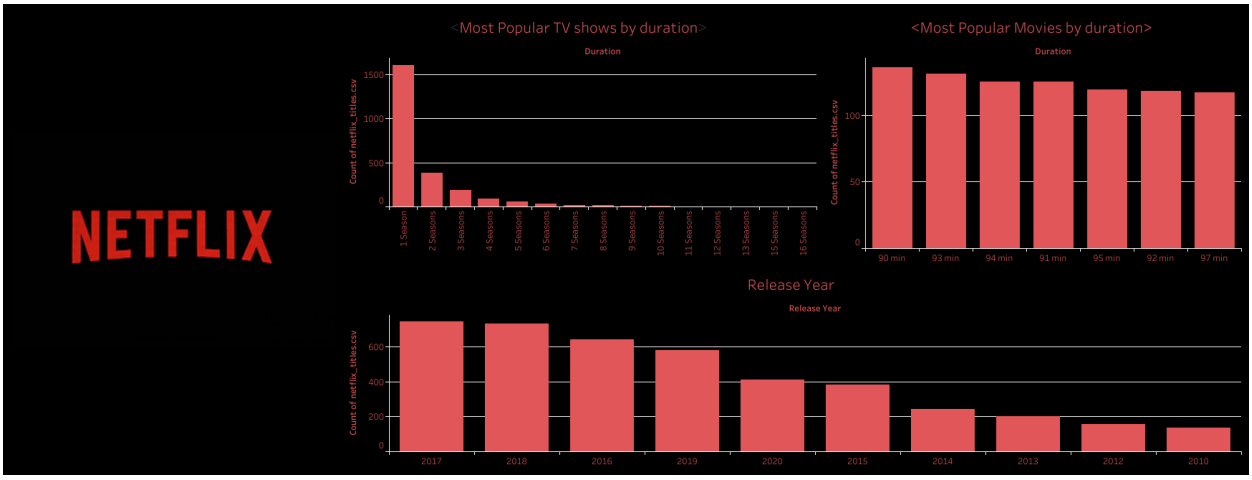
Classic and cult, TV thrillers and Anime features have the least number.

DASHBOARD



From our dashboard we can see that in 2019 there was a major increase in TV shows and movies, we can also see International Movies are the most movies added to Netflix. The countries that produce the highest movies added to Netflix are USA, UK, Spain, South Korea and Japan.

DASHBOARD 2



From this dashboard we can see that movies around 90-97 minutes are the most on Netflix while TV shows with only 1 season are one-third of the total TV shows on Netflix also shows released within 2017,2018,2016,2019 are the most while really old shows are really few on Netflix.

Analysis

From the dashboard we can see that most of the programs on Netflix are Movies taking about 68% of everything, the most popular category of movie by age rating is TV-MA and TV-14 and international movies are the most on Netflix. We can also see that there was a steady slow increase in the shows on Netflix until 2019 where there was a sharp increase, by 2020 the shows added reduced a lot due to pandemic and people not being able to make new shows/movies. Also mostly recent movies are uploaded on Netflix i.e. (2016-2019) and TV shows with only a single season.

Conclusion

People like binge watching shows so they prefer the shorter movies or just a TV show that is just one season, so those movies should be uploaded more and also Netflix should increase movie productions from other countries.