Udemy Courses Analysis

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Udemy Project Description

This project involves the detailed analysis of four Udemy subjects with different courses. Four files, one for each subject, were presented in excel format with errors embedded in them. The incorrect, incomplete, duplicated, and improperly formatted data was removed or modified. This is to ensure that the results are reliable and of high quality.

This report is to convey with a clear purpose the analyzed data. How the data was obtained, the process took to clean and transform the data into usable charts and tables to derive insights from them for decision-making. Also, to recommend a course of action for the problem of increasing revenue. The most popular courses, highest-paid courses, the number of subscribers, ratings, level, and income generated from each level and course must be known to increase revenue.

To solve the problem and answer the above questions I;

- Ensured the data was clean
- Noted the measures and dimensions to be converted to visuals
- Transformed the data into usable tables and charts
- Derived insights from the tables and charts
- Utilized insights from the visuals to make informed decisions.

The results achieved were strongly inclined towards a direction. The subject of interest has a 67.9% subscription rate, a total price of $92,675, and the highest subject rating. Although Web Development has the highest subscription rate (85%) for the top 20 subscribed subjects, the courses are mostly free.

The Problem

Udemy is looking for ways to increase its quarterly earnings, and I am to present the data on course revenue. To better understand the questions, one should ask questions regarding the problem and the company itself. Such questions include;

- Is the company running short on income? Why?
- Why does the company need to increase its quarterly earnings?
- Are users not paying enough?
- Do users prefer free courses to paid courses?
- Is there too much cost incurred and not enough profit?
- Are the courses being taught well by the instructors?

Design

The four data received were consolidated on a google sheet. The data was unfit for analysis because it contained errors, including; duplicated, blank cells, and improperly formatted data. The errors were rectified on google sheet by removing the duplicates and empty cells. Also, using the find and replace feature to ensure the data is consistent. Underscores were inserted in between words to make it easier to parse.

Additionally, columns were included in the dataset, such as the Date, Free or paid courses, and Free beginner courses column. The left function was used to create the date column. IF and IF AND function to create the free or paid courses column and free beginner courses column, respectively.

VLOOKUP was utilized to find and organize the top 20 subscribed courses alongside their level, duration, and date. It was also used to determine whether the courses are free or paid and free beginner courses. Tableau and Pivot Table in Excel were utilized to visualize. Based on the given timeframe, the tools fit best in analyzing the data and are great visualization tools.

Findings

Finding 1

Among the top 20 subscribed subjects for free and paid courses, Web Development has an 85% subscription. At the same time, Musical Instrument and Business Finance have 10% and 5%, respectively. Although Web Development has the highest percentage of subscriptions, only 35% are paid with 5% Musical Instruments paid courses. The remaining 60% are free courses.

Figure 1:

Total number of subscribers by subject
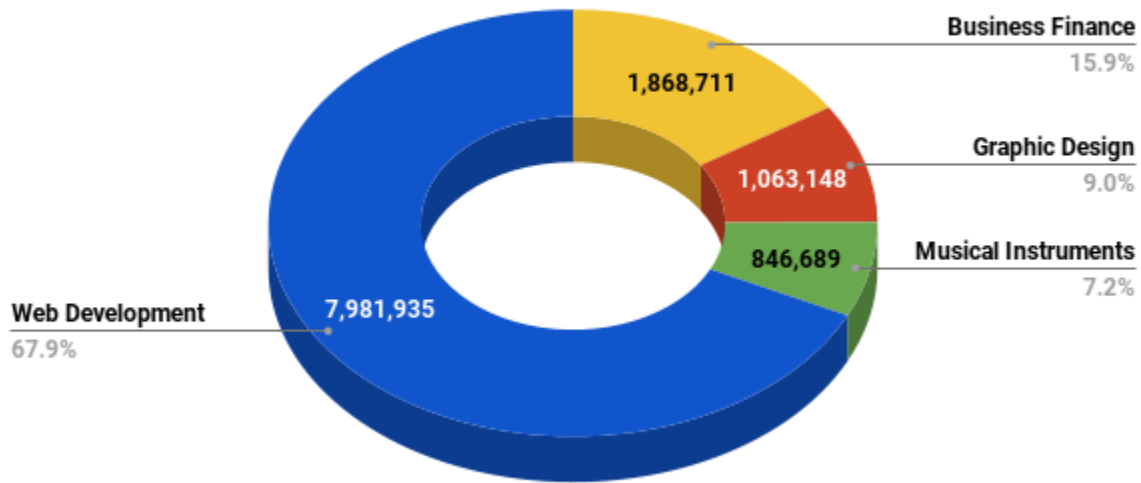
In figures, Web Development has above $7,900,000 (67.9%) subscribers for free and paid courses. Only 7.2% subscribed to Musical Instruments and 9.0% to Graphic Design. Business Finance is the second highest with 15.9% subscription. The chart below shows the total number of free and paid courses subscriptions. This indicates that Web Development has the highest number of subscribers.

Figure 2:

Total number of lectures for free and paid courses
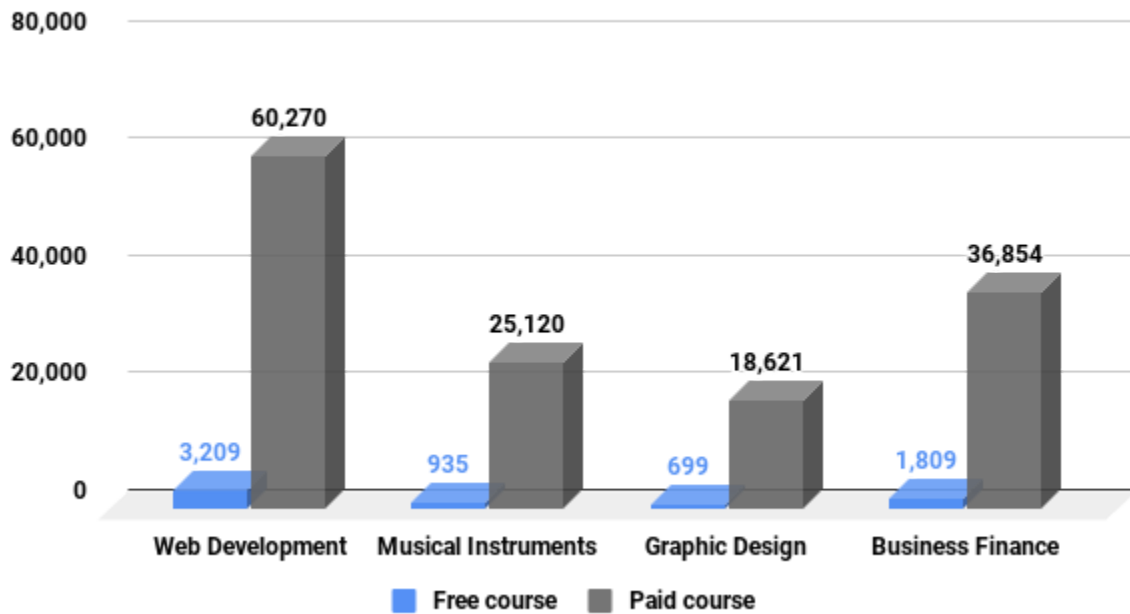
Visually, Web Development has the highest number of lectures with 60,270 lectures for paid courses and 3,209 for free courses compared to the other three subjects. Aside from Web Development, users also opt for Business Finance, which is the second-highest in terms of the number of lectures released for free and paid courses.

**Figure 3:**

Total price for free and paid courses by subject
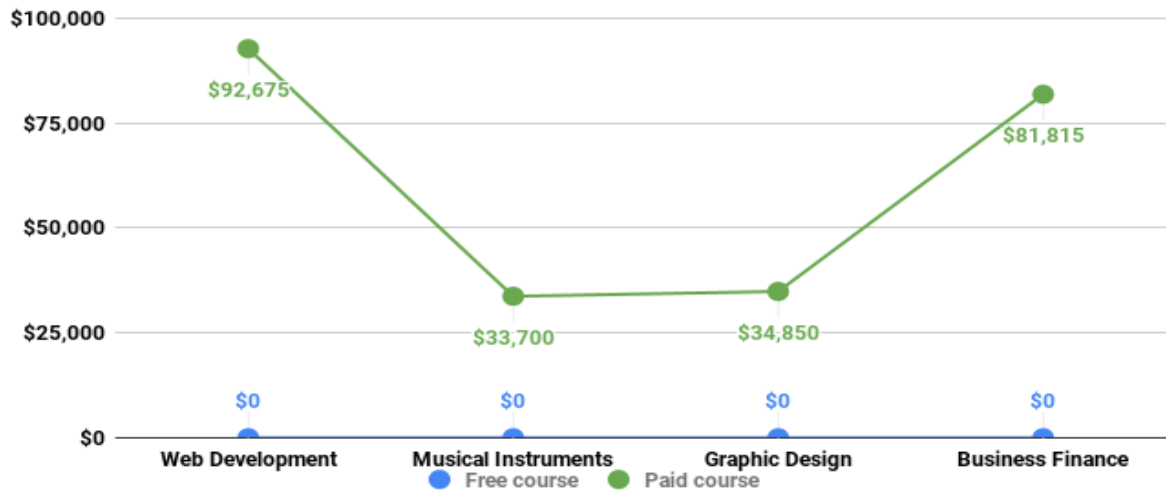
Just like in the number of subscriptions, in price, Web Development and Business Finance have a total cost of $92,675 and $81,815, respectively, for paid courses and a zero price ($0) for free courses. At the same time, Musical Finance and Graphic Design have a total cost of $33,700 and $34,850, respectively. This is in sync with the number of subscriptions for the subjects. The subjects with the highest numbers of subscribers have the highest total income.

Finding 2

Figure 4:

Profitability at a Glance for Subject and level
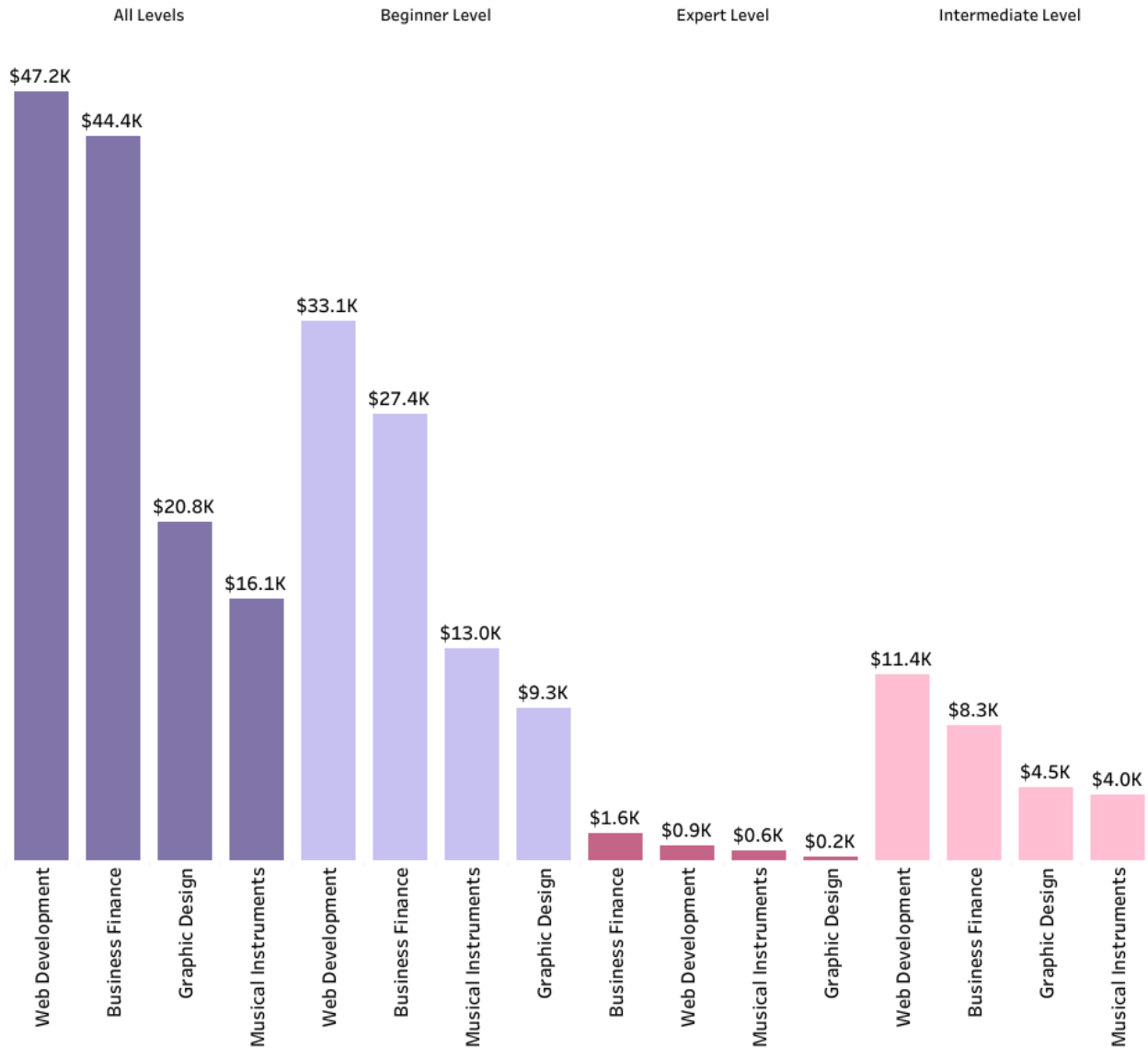
Across all levels, Web Development tops the chart with a total price of $47.2k, $33.1k, $1.6k, and $11.4k for All, Beginners, Expert, and Intermediate levels, respectively. However, there is a meager price for all subjects at the Expert level, including Web Development. It is followed closely by Business Finance, which is the second-highest.

Figure 5:

Profit Timeline (6 week moving average)
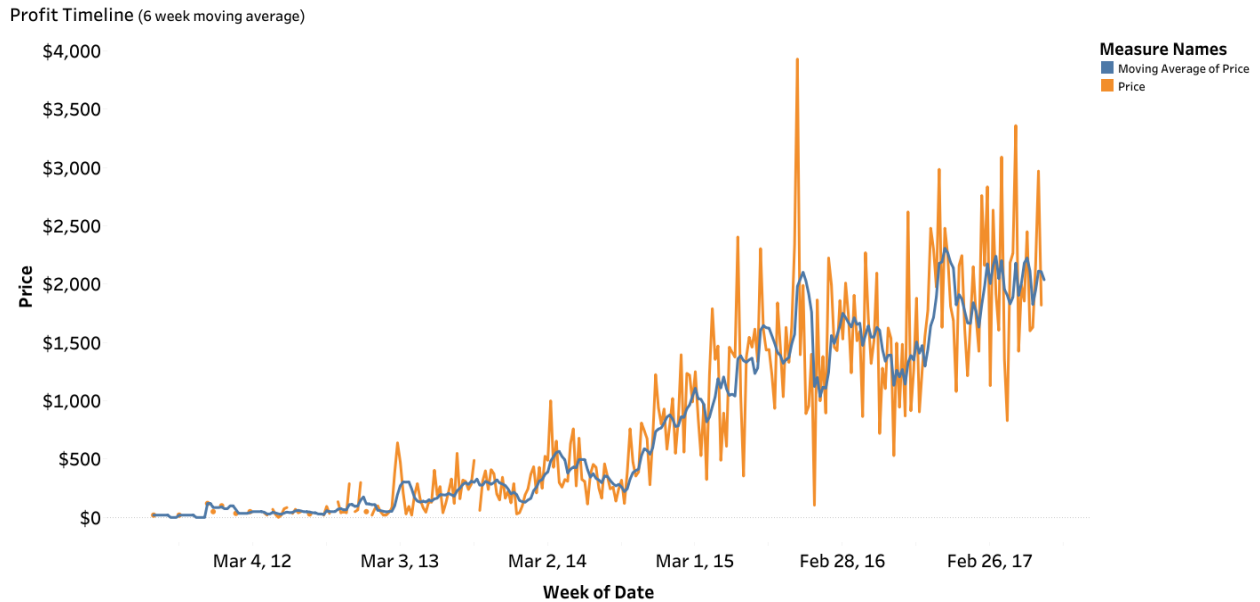
Before the year 2013, only Web Development was generating income. All other courses began generating revenue in 2013, with Web Development having the highest revenue. The profit timeline peaked towards the end of 2015 due to an increase in subscriptions. Although the number of subscriptions fell in 2016, the increase in 2015 positively impacted the spike in 2016.

Analysis

WHYS

- Why does the company want to increase its quarterly earnings? **Because it needs more funds**
- Why does the company need more funds? **Because it is running short of funds**
- Why is the company running short of funds? **Because top subscribed courses are free**
- Why are the top subscribed courses free? **To allow users to have access to the courses.**

From the Root Cause Analysis, it was deduced that the company is not earning enough and needs additional income from the courses. It was also discovered that the low revenue is because most top subscribed courses are free. To achieve this, the question or problem to be simplified here is; which course(s) should we increase its subscription fee to increase revenue?

Conclusions

From the findings and analysis, we can say that Web Development is the most sought-after by users because it is the most subscribed course. Although these users often opt for free courses instead of paid, it still ranks top with the highest total price. Web Development and Business Finance generate the highest income with $92,675 and $81,815, respectively. They have the highest rating and total cost for all levels.

Web development emerged from the Top 20 Subscribed courses as the most subscribed with an 85% subscription rate. Although it is the most subscribed, they are mostly free. Also, an increase in the number of lectures will increase revenue for each subject, provided the number of subscriptions also increases. This holds only if the number of subscriptions to paid courses also increases. To increase revenue, I recommend that the firm;

- Increase the price of courses for Web development and Business Finance
- Allocate money to producing more paid lectures for all, beginner and intermediate level courses for Web Development and Business Finance
- Convert most free courses for Web Development and Business Finance to paid
- Little to no resources should be expended on expert level courses, or it should be out of the business investment plan

Appendix

Google Sheets Data Set for Udemy Project

https://docs.google.com/spreadsheets/d/1za7voaxKW07-dKDNjCuaXCy-p3w1fLLaxv_FYUs4LMs/edit?usp=sharing

Tableau Data Visualization for Udemy Project

https://public.tableau.com/app/profile/habibat.jimoh/viz/Module4Visuals_16341479532180/UdemyDashboard?publish=yes