

# REPORT

## Project Description:

The company *Udemy* wants to increase the revenue in the next quarter, so it requires the insights and trends from the operating course modules. In order to make decisions, the following data set is provided,

[Udemy dataset](#)

which has the information of all courses and their content, rating, pricing, number of subscribers and some other information about the courses from 2011-17.

With the data provided, it was called for identifying the opportunities to increase the revenue in next quarter.

## Design:

The data provided is raw and it needs to be cleaned, so I imported the data into spreadsheet and renamed the columns in detail for better understanding.

I created a **filter** and removed all the empty rows in the data set

Later I searched for any name errors and replaced those with the correct spellings using **Find & Replace**

I created a new column called 'Date' and added the dates that are separated from Time stamp using the **Right** function.

Then I created a new column called 'Free or Paid' and added the values to it using the **IF** function by taking the condition if value in the 'Price' column is 0 then it returns FREE or else NOT FREE

I **sorted** the data by 'Number of Subscribers' and Copied the Top 20 course names and pasted them in a new sheet.

Then with the help of **VLOOKUP** I've gathered all the necessary information from the main sheet and by this I've got the information of top 20 subscribed courses and their related information.

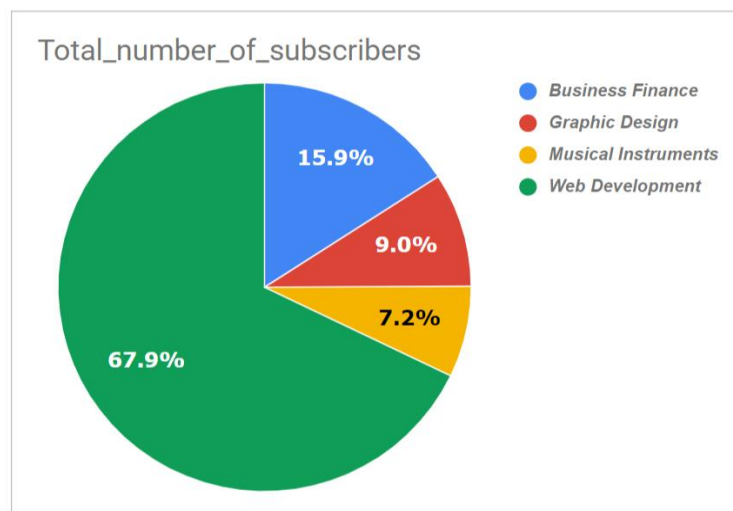
And then from this new sheet of Top 20 subscribed courses I've made **pivot tables** and some visualizations from the sheet as the Viz's are great tools for easy understanding of details.

Finally, I've used **Tableau** for EDA (Exploratory Data Analysis) on this data sets and found some hidden insights.

## Findings:

From a total of 11,760,483 subscribers; following is the breakdown of subscribers grouped by subjects

❖ Business Finance	1,868,711
❖ Graphic Design	1,063,148
❖ Musical Instruments	846,689
❖ Web Development	7,981,935

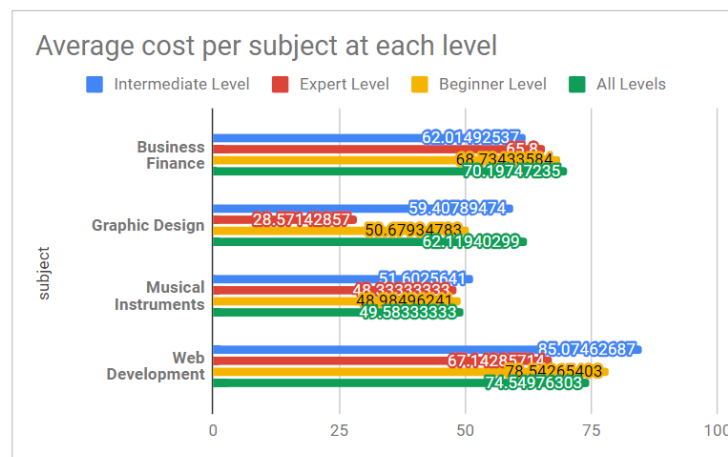


From this finding it is suggested that the subscribers are more inclined towards learning Web Development courses compared to other courses.

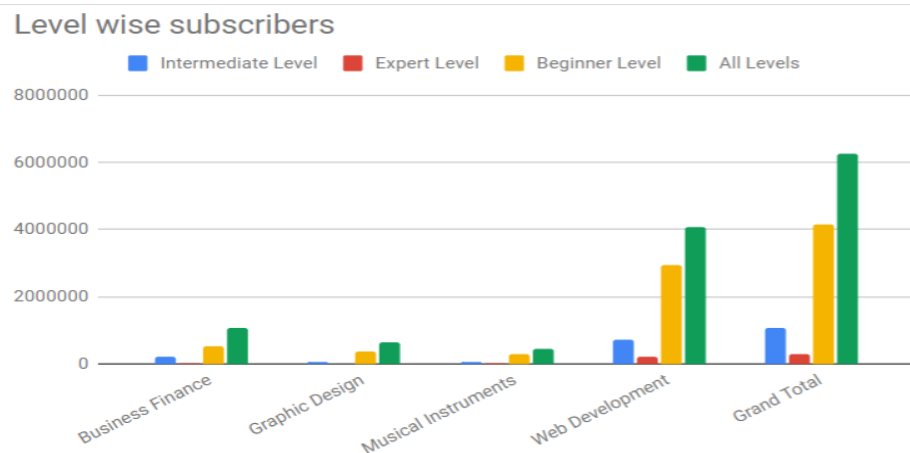
Given in the data, every course is classified based on their level of Understanding and there lies 4 levels

- ❖ Beginner level
- ❖ Intermediate level
- ❖ Expert Level
- ❖ All Levels

Cost is Varying for every level for every subject



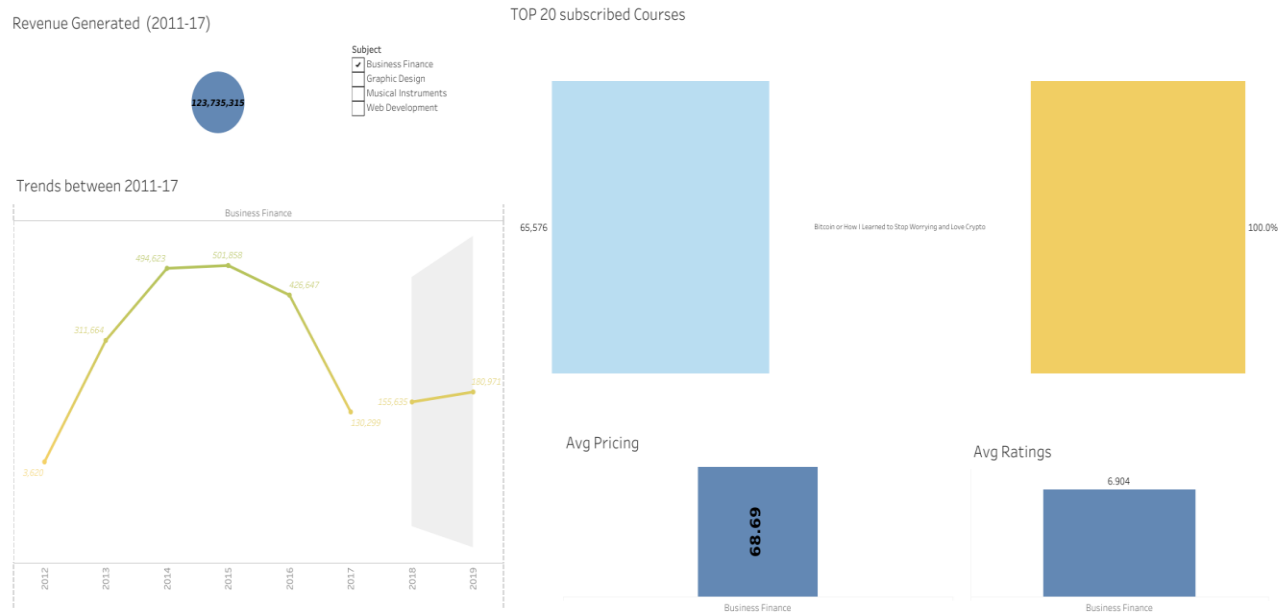
It is found that Most of the subscribers chose All Levels as their Level of Understanding and following depicts it



Following are the findings from EDA on Tableau

Insights from *Business Finance* subject is as

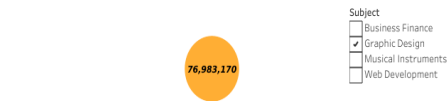
Average Price:	68.69
Average Rating:	6.90
No. Of Courses in Top 20:	01
Revenue Generated (2011-17)	123,735,315
Expected Subscribers in next 2 years:	336,606
Forecasted Revenue in next 2 years:	27,362,600



Graphic Design

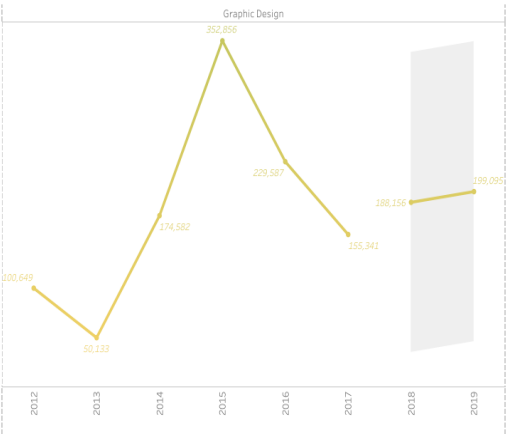
Average Price:	57.89
Average Rating:	7.30
No. Of Courses in Top 20:	00
Revenue Generated:	76,983,170
Expected Subscribers in next 2 years:	387,251
Forecasted Revenue in next 2 years:	51,867,314

Revenue Generated (2011-17)



TOP 20 subscribed Courses

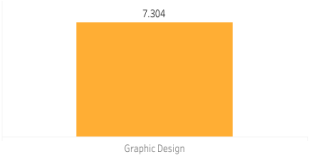
Trends between 2011-17



Avg Pricing

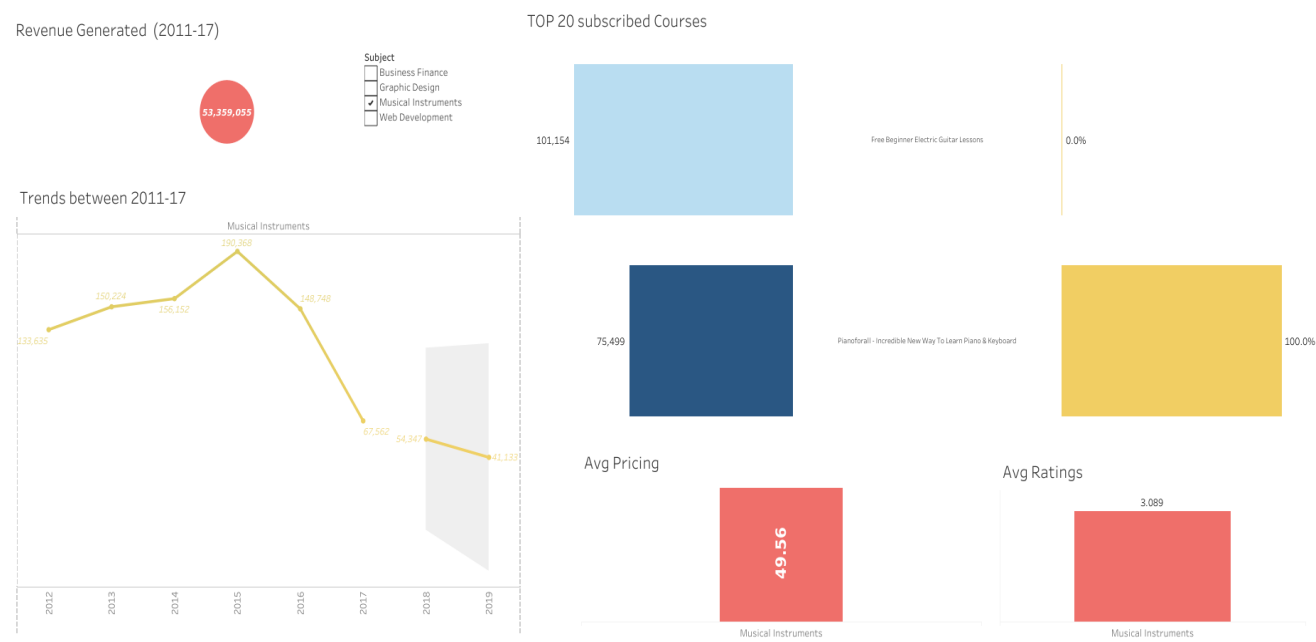


Avg Ratings



Musical Instruments

Average Price:	49.56
Average Rating:	3.08
No. Of Courses in Top 20:	02
Revenue Generated:	53,359,055
Expected Subscribers in next 2 years:	95,480
Forecasted Revenue in next 2 years:	10,956,653



Web Development

Average Price:77.04

Average Rating:6.43

No. Of Courses in Top 20:17

Revenue Generated:631,082,465

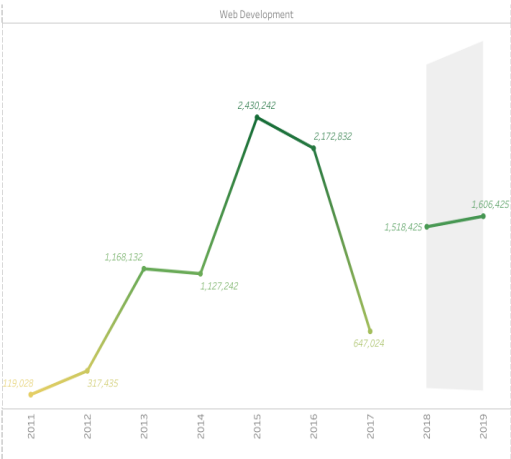
Expected Subscribers in next 2 years:3,124,850

Forecasted Revenue in next 2 years:251,723,336

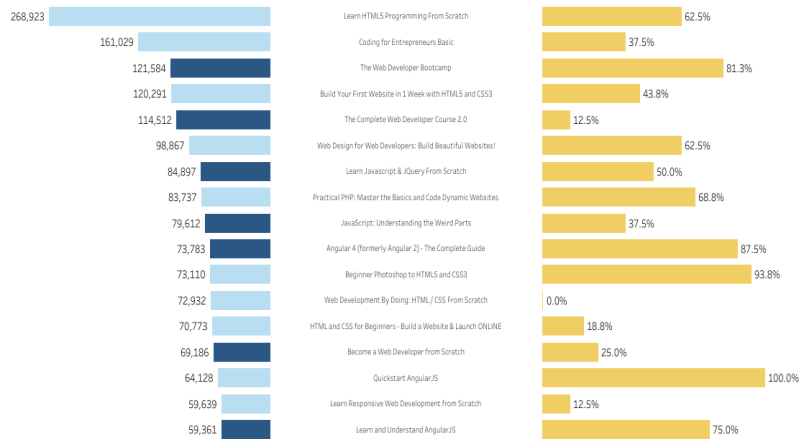
Revenue Generated (2011-17)



Trends between 2011-17



TOP 20 subscribed Courses



Avg Pricing



Avg Ratings





## ANALYSIS:

To find what's the solution for a problem it's better to know the cause for this problem,

For this problem I used **Root Cause Analysis (RCA)**

### **Problem Statement:**

*Find the opportunities to increase revenue and track the performance of courses.*

***Why is the Revenue not generated more in past 2 quarters of the year 2017?***

The number of Subscribers was decreasing and from past 8 quarters there's a decline in subscription of paid courses.

***Why is there a Decline in number of subscribers?***

The addition of new Courses was reduced in last 3 quarters compared to the previous years and so the updated content is not available, as a result the subscribers were less.

***Why were more courses not added in this year?***

Most of the viewed content of the subscribers was from the years 2013-15 so not many new courses were added.

***Why Subscribers were watching most of courses from period between 2013-15***

Majority of the subscribers are subscribed to web development and business Finance; between the years 2013-2015 there were many web development & Business Finance courses with better pricing and good ratings.

***Why most of the subscribers subscribed to Web Development courses?***

Among the 4 subjects, web development has major number of courses and most of the courses were beginner friendly and had positive reviews and ratings

## CONCLUSION:

*To Generate more revenue, new courses with updated content and beginner friendly modules should be introduced.*

*More than 60% of top 20 subscribed courses were free and to generate revenue these has to be made to paid courses with a course fee*

*Web Development has the constant retention of subscribers from past trends and so it's advised to add courses of this content.*

*Business Finance and Graphic design has more Avg Ratings than Web Development so it is better to add new courses related to these subjects and make high rated free courses to paid.*

*The Content of paid courses with negative ratings should be reviewed and should be updated.*

*The Musical Instrument subject is expected to lose more subscribers because of the poor reviews and content. So, these courses have to be replaced with new courses and better content.*

*Graphic design Courses has greater ratings and so the customer retention is also more. We can increase the pricing of these courses.*

## Reference Links:

You can view these findings and cleaned data by clicking the provided links.

- For Final version of raw data after Data Cleaning

[Click here](#)

- For Interacting with the Tableau dashboard after EDA

[Click here](#)