

DATA ANALYSIS PORTFOLIO

PREPARED BY: OLUWATOMISIN POPOOLA

Portfolio Outline

1. Professional Background	1
2. Project Description	2
3. The Problem	3
4. Methodology	4
5. Findings	5
6. Analysis	13
7. Recommendation	15
8. Why Analysis	17
9. Capstone Project	26

Professional Background

As a recent Alumni by Entry Levels Data Analysis, i have honed my skills in Data Analysis, I am excited to contribute my academic knowledge, passion, and dedication to a dynamic organization. Throughout my journey with Entry Levels, I have honed my skills while participating in various projects that have fostered my teamwork and problem solving abilities.

I have been fascinated with the possibility of data analysis used for making informed decisions and hence my interest in data analysis.

Udemy Project Description

As a data analyst for Udemy, I was tasked by my finance manager to present the data on the most popular course with the most subscriber and to identify which courses to tailor marketing and advertising towards also, courses to increase prices for to drive more revenue.

Key questions:

- What is the most popular course?
- What courses can they increase the price for?
- Which courses should they tailor their marketing and advertising towards?

The Problem

The business problem is to understand and measure the performance of the different courses provided on the udemy website, identify opportunities for further revenue growth and identify the most popular subject area subscribers have found interesting.

Data from the following topics : Web Development, Graphic Design, Business Finance , and Musical instrument will help in providing information. The data is provided in descriptive , tabular, and pictorially to enable its understanding.

The analysis seeks to understand the subject with the total number of subscribers, course with the highest subscribers, to understand courses with the potential for increase in price to drive more revenue and tailored marketing and advertising.

Methodology: Aggregate Analysis

I have studied subscribers enrollment trends obtained from Udemy between the years 2018-2021 of (4) different subject areas. The data was adjusted for duplicates, blank cells expunged and inconsistent data adjusting using google sheets. The clean data was analyzed using Tableau to create necessary visuals. The study aims to identify most popular course and possible opportunity for price increment on the following topics.

FINDINGS

Finding 1. The total number of subscribers for each subject

<i>subject</i>	SUM of num_subscriber
Business Finance	247230
Graphic Design	73273
Musical Instruments	96114
Web Development	940953
Grand Total	1357570

The table shows the total number of subscribers in each subject, the largest percentage (69.27%) of the subscribers enrolled in Web Development. The total number of subscribers in all four subject is 1,357,570.

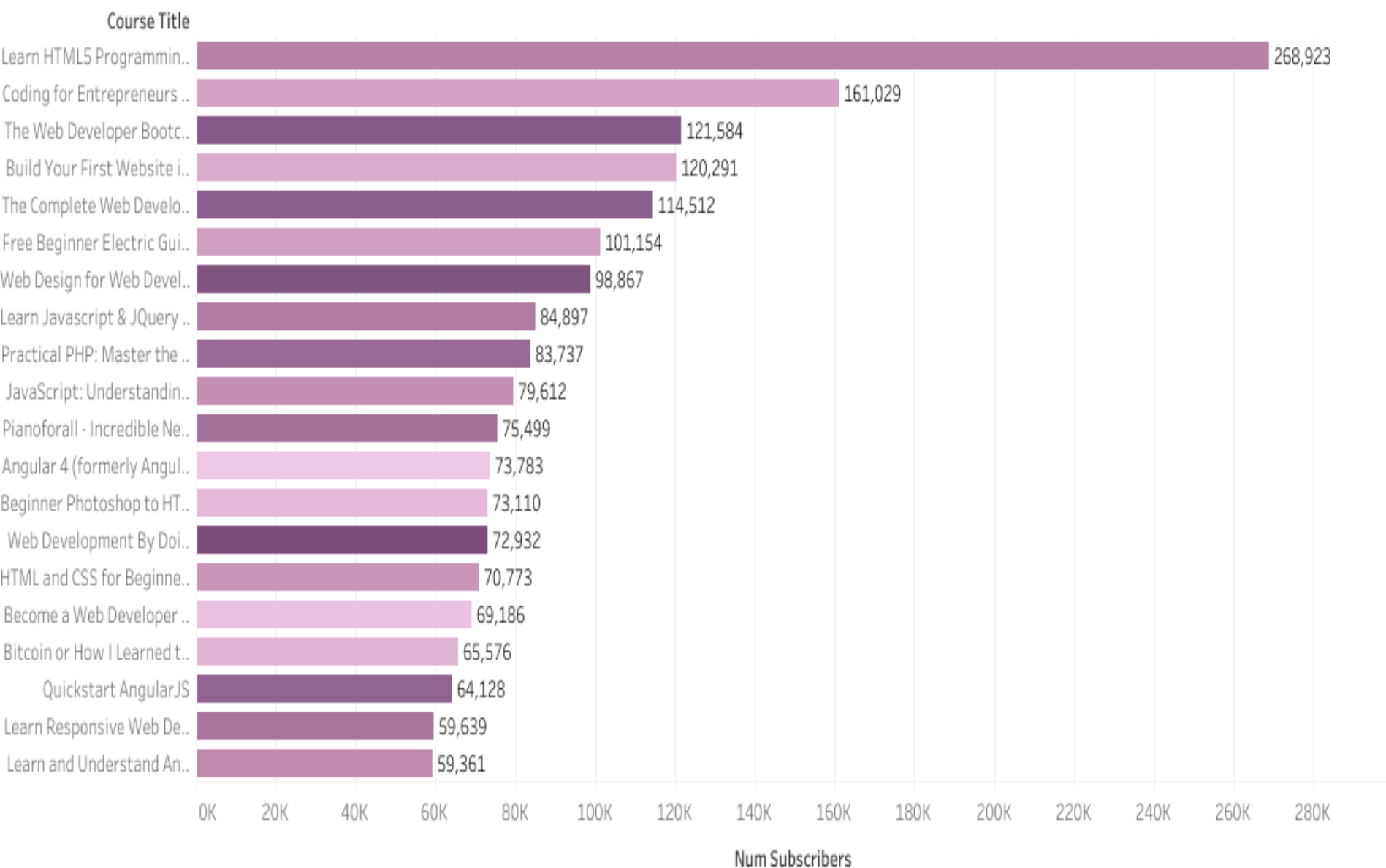
Finding 2

The chart shows HTML5 is the most popular courses in the top 20 most popular courses and it is a free course.

The top 5 courses are all Web Development courses:

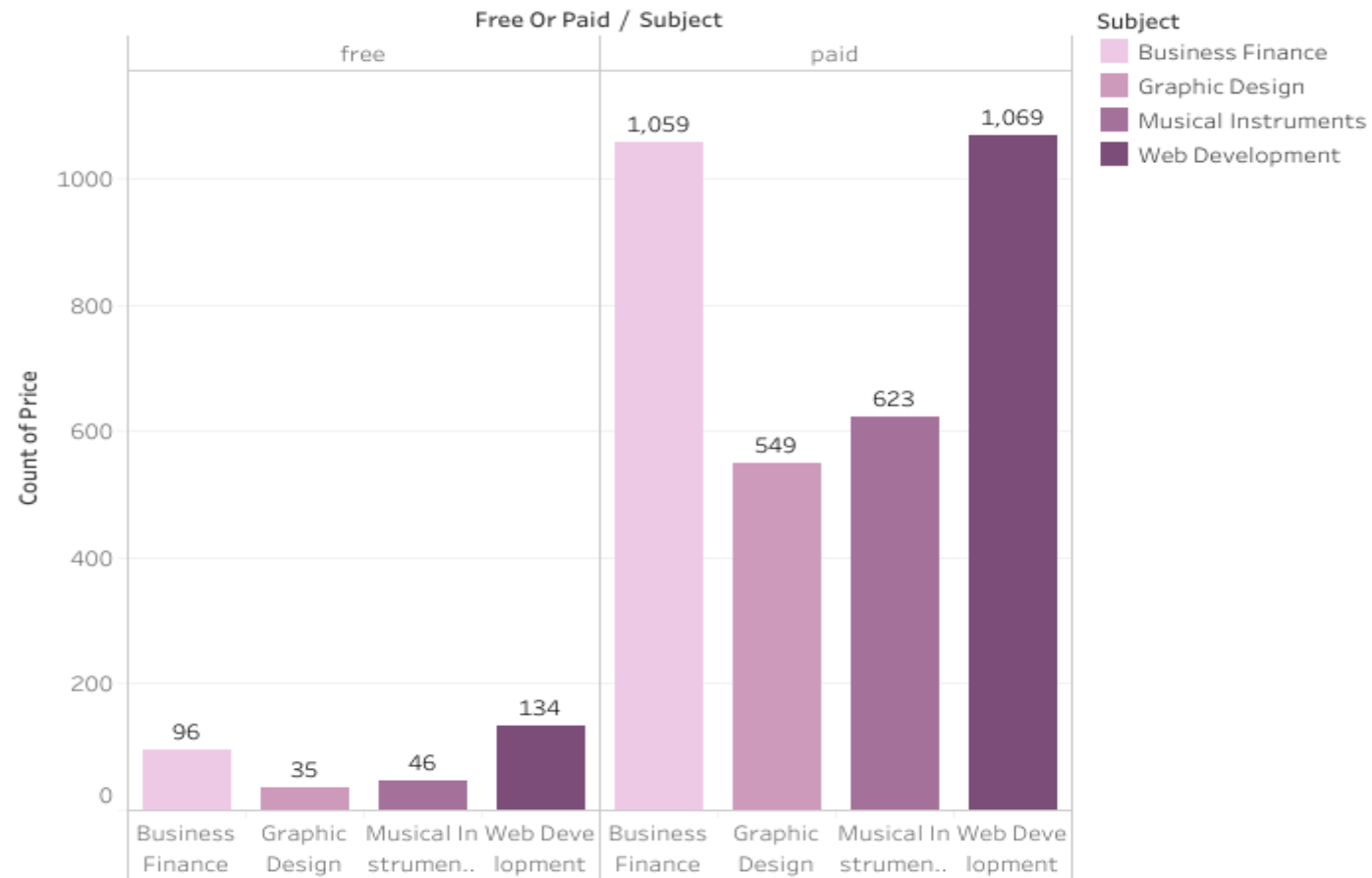
1. HTML5
2. Coding for Entrepreneurs
3. The Web Developer Bootcamp
4. Build Your First Website
5. The Complete Web Developer

Top 20 most popular courses

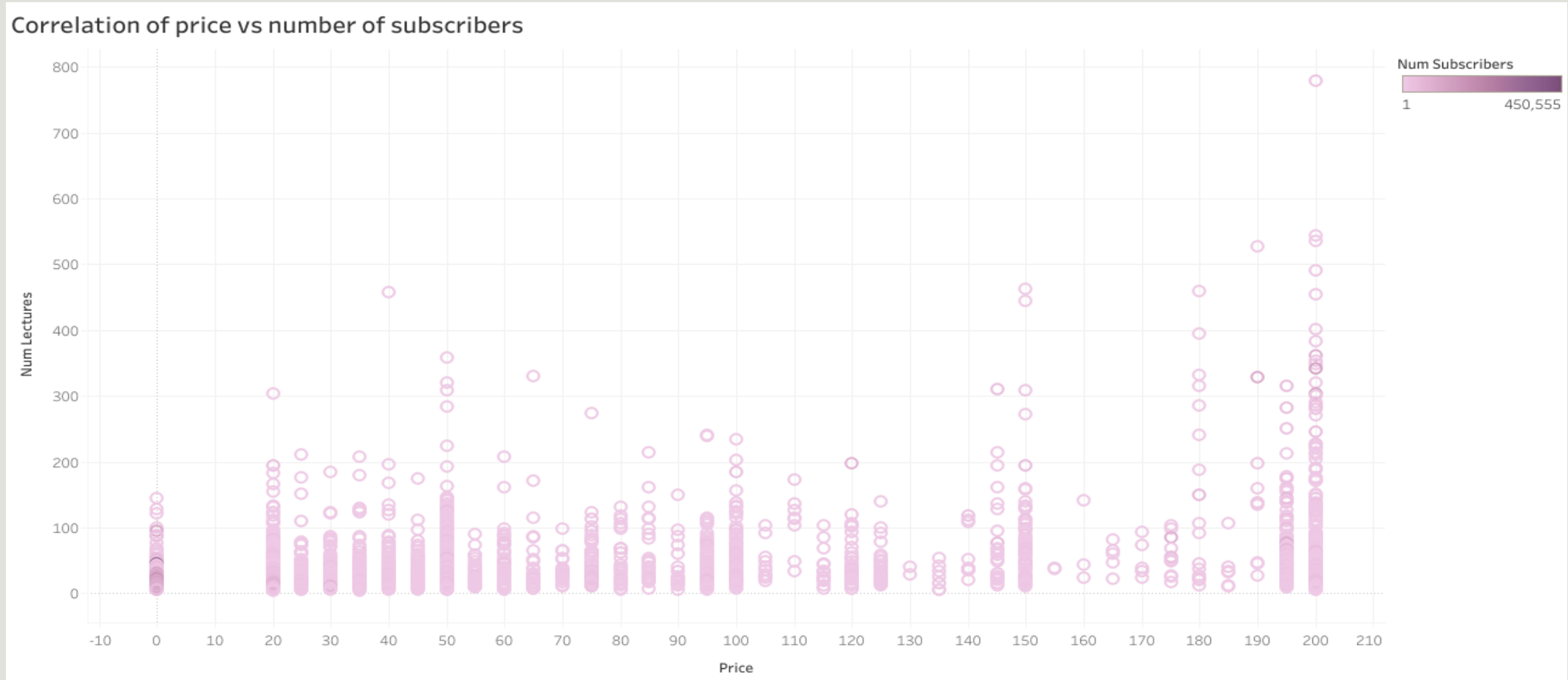


The following chart shows Web Development has the most free courses.

Free and paid courses for each subject



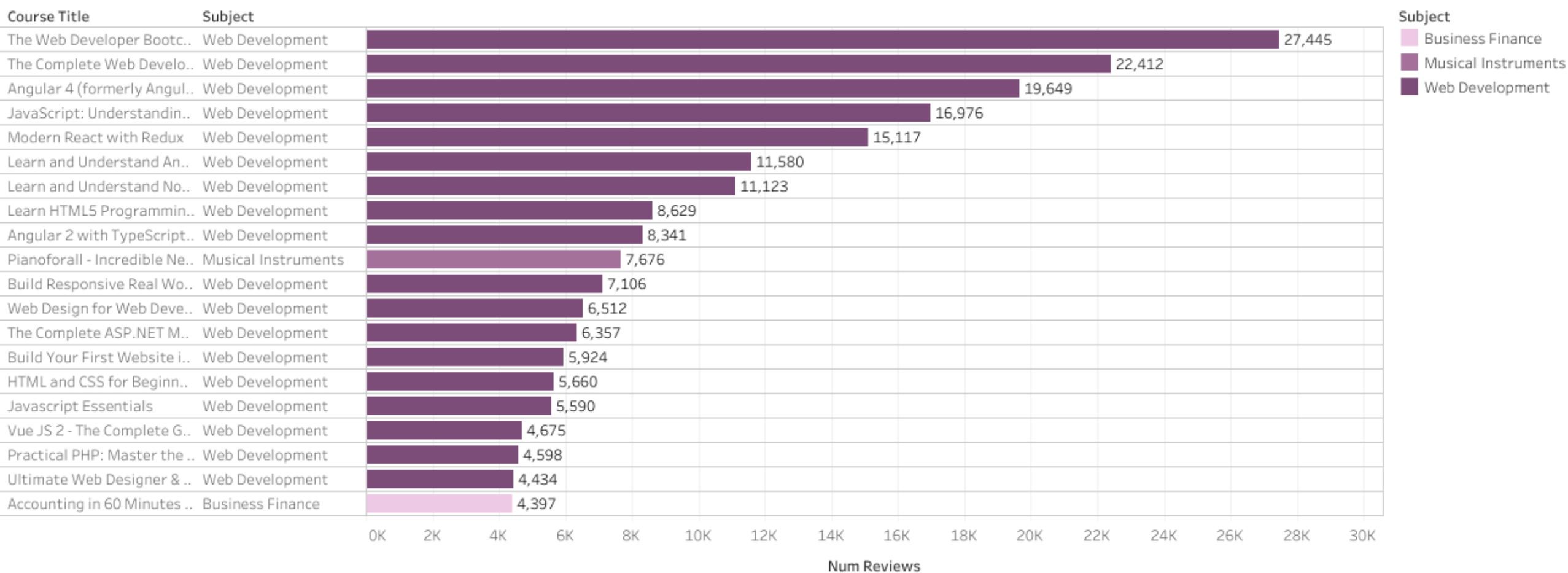
This analysis reveals that price and number of subscribers are independent and changes in price does not have a substantial impact on the other.



Finding 3

The analysis reveals the top 20 with most reviews are Web Development courses owning up 99% of top 20 highest reviews.

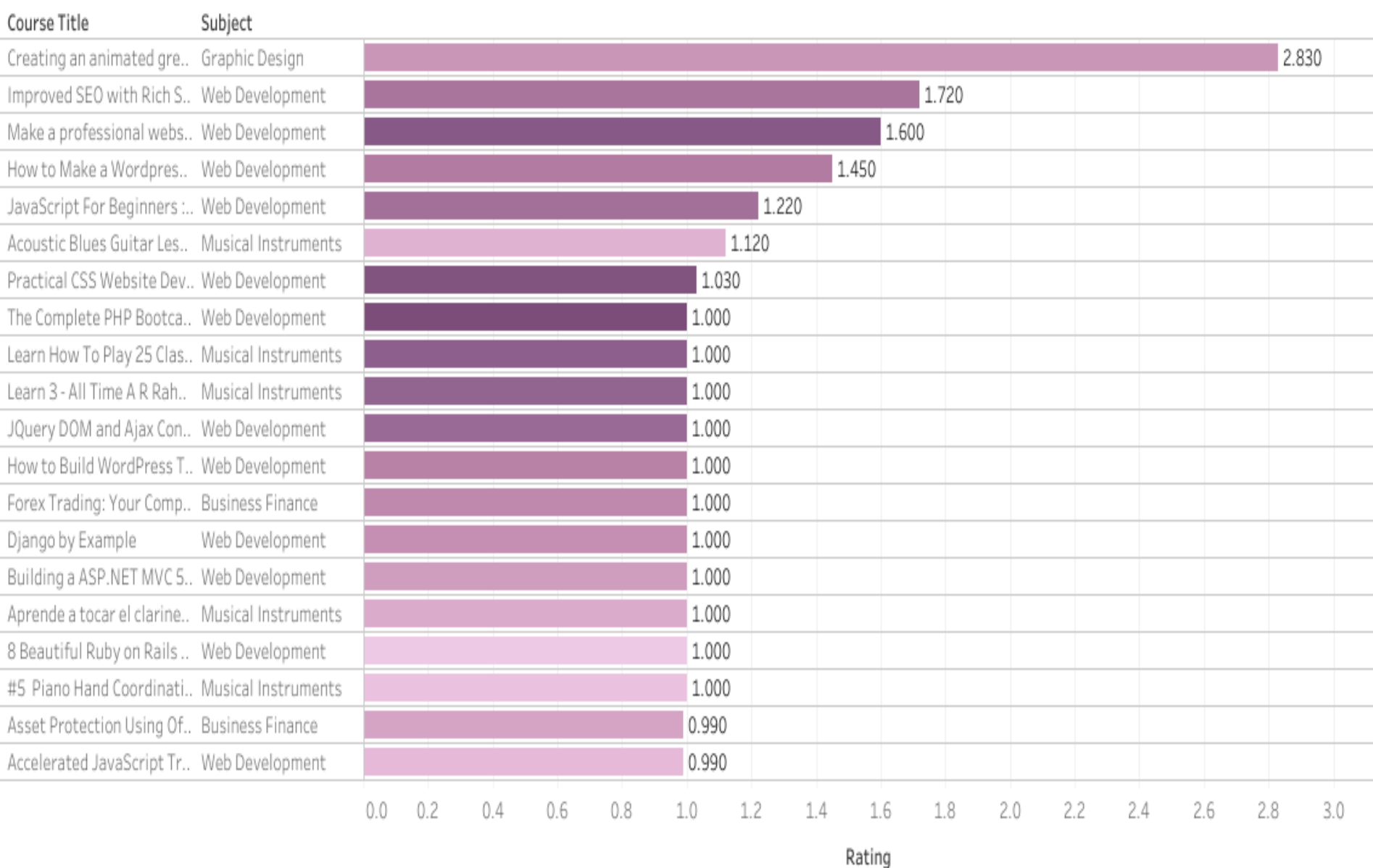
Highest course reviews



Finding 4

The analysis reveals the top 20 most rated courses are Web Development courses owning up 95% of top 20 most rated.

Highest course ratings



- Course Title
- 8 Beautiful Ruby on Rails Apps in 30 Days & TDD - Immersive
 - #5 Piano Hand Coordination: Piano Runs in 2 Beats Eb Key
 - Accelerated JavaScript Training
 - Acoustic Blues Guitar Lessons
 - Aprende a tocar el clarinete.
 - Asset Protection Using Offshore Companies
 - Building a ASP.NET MVC 5 Membership Website
 - Creating an animated greeting card via Google Slides
 - Django by Example
 - Forex Trading: Your Complete Guide to Get Started Like a Pro
 - How to Build WordPress Themes: A Web Designer's Guide
 - How to Make a Wordpress Website 2017
 - Improved SEO with Rich Snippets and MicroData
 - JavaScript For Beginners : Learn JavaScript From Scratch
 - JQuery DOM and Ajax Concept Explained for Beginners
 - Learn 3 - All Time A R Rahman Hits on Carnatic Flute!
 - Learn How To Play 25 Classic Hip Hop Songs
 - Make a professional website - 30 Day Guarantee. Discounted!
 - Practical CSS Website Development: Crash Course
 - The Complete PHP Bootcamp Course With Video Sharing Project

Analysis

My initial insight from the data is that Web development courses has the highest number of subscribers, reviews and is the most rated of all the different subjects been considered which makes it the most popular of all the subject areas.

The most popular course is HTML5 and it is a free course.

There is opportunity to increase price for Web Development courses because it has the highest number of free courses, ratings ,reviews and has the highest number of subscribers. This shows a high industry demand in Web Development courses.

Marketing and advertising should be tailored towards courses with high demand and has a high customer satisfactory review and ratings .

My inferences include a possible increase in Web Development courses and a well targeted marketing and advertising because, it is in high demand and it is the most highly sort after with a significant number of reviews, ratings, and enrollments which measures high positive customer satisfaction and perceived value of each courses.

Recommendation

1. HTML5 course is the most popular free course should be monetized.
2. Target marketing and advert should be tailored to top rated courses, high demand courses to attract the larger audience.

Why Analysis

The essence of the 5 why analysis is to establish the root cause of the identified problems and fixed them. The number of questions asked enabled the establishment of the root cause of the identified problem.

Problem: Low number of subscribers/popularity

1. why?

Lack of awareness

2. why?

Lack of targeted marketing

3. why?

Insufficient market research

CAPSTONE PROJECT

Description

Since it may be impossible to get data that is perfect , I have decided to analyze the Netflix userbase data provided. I did a quick review of the data provided, Identified some problems ,intuitively determine the likely cause of the problems and possible impact in the organization albeit with an open mind, and analyzed the provided data to confirm or contrast my hypotheses.

My hypotheses included a reduction in number of subscribers, loss of profit.

Methodology

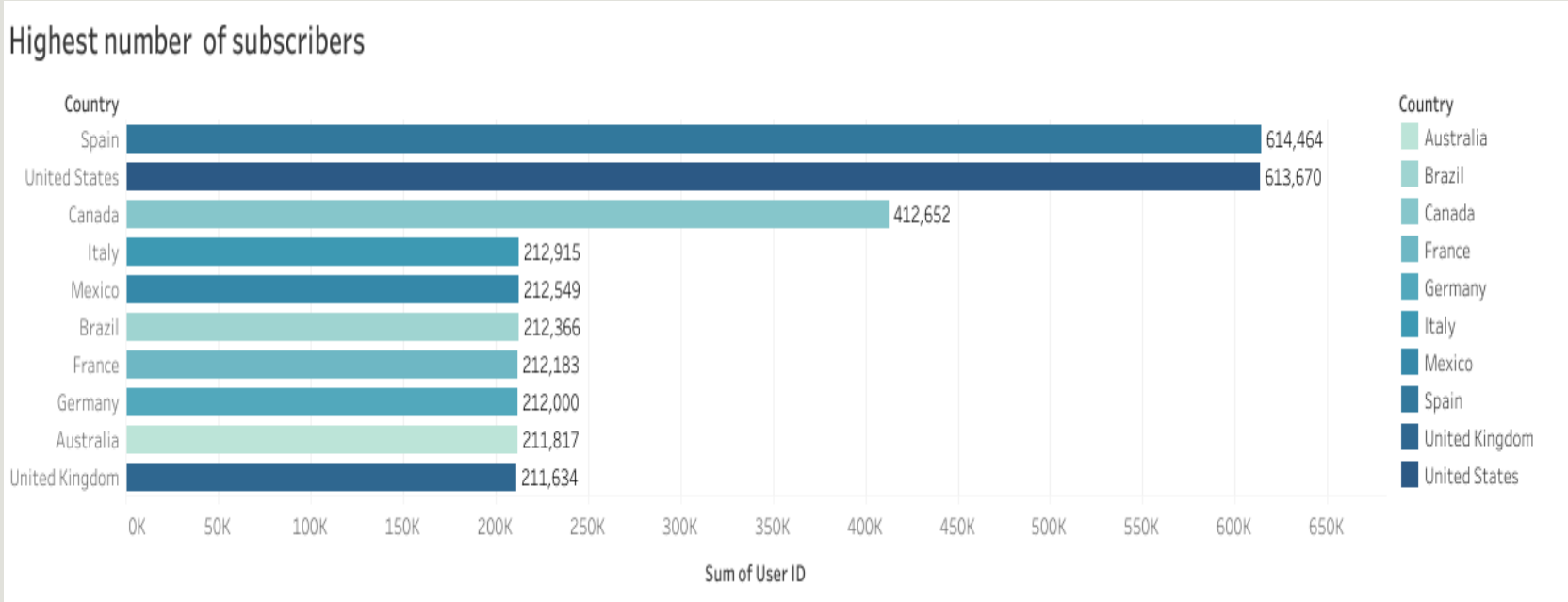
I have studied subscription rates on Netflix subscribers over different regions from 2021 to date with recorded subscriptions of over 600,000. The data was checked for duplicates , blank cells and inconsistent data adjusted accordingly using google sheets. The clean data was analyzed using Tableau to create necessary visuals.

The study aims to track active subscribers and identify regions with high subscribers, and their preferred subscription plans.

Findings

Finding 1

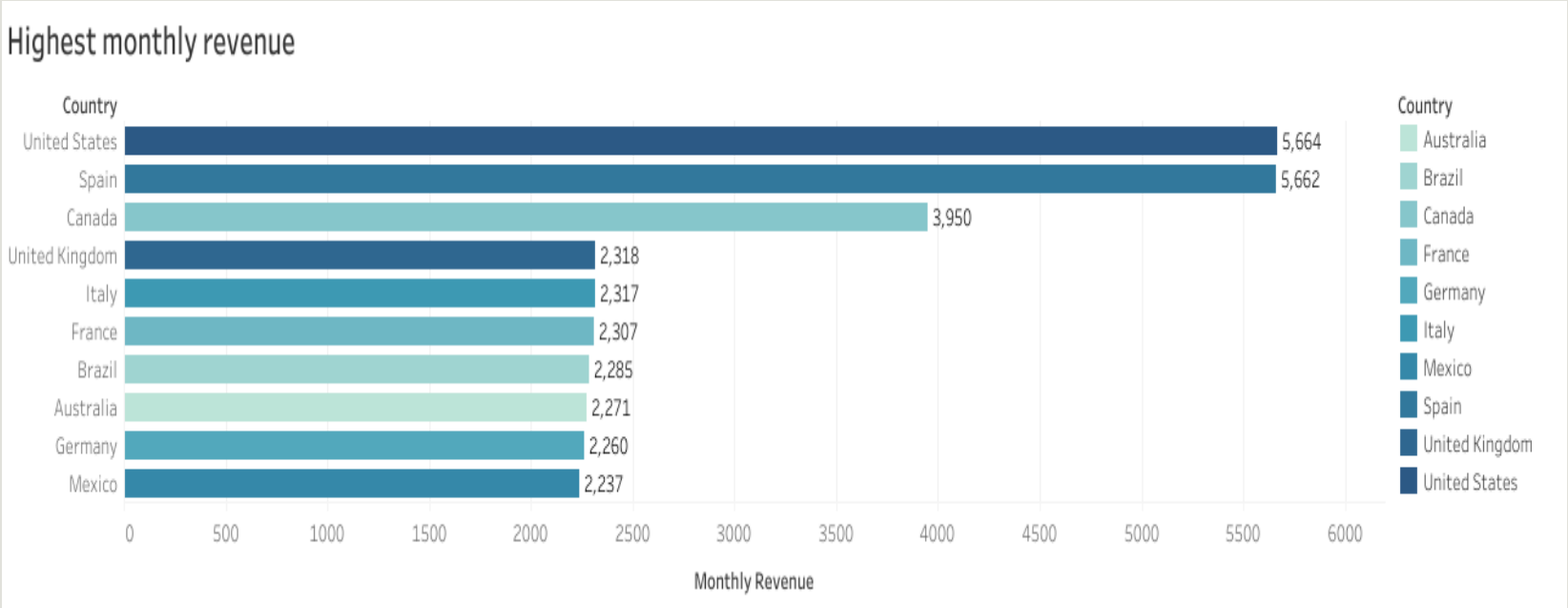
The data shows the number of subscribers by region with Spain been the highest followed by the United States and Canada.



IDs	SUM of User ID
Australia	211817
Brazil	212366
Canada	412652
France	212183
Germany	212000
Italy	212915
Mexico	212549
Spain	614464
United Kingdom	211634
United States	613670

Finding 2

The analysis shows potential revenue by regions with United States as the highest region with the most revenue, followed by Spain and Canada.

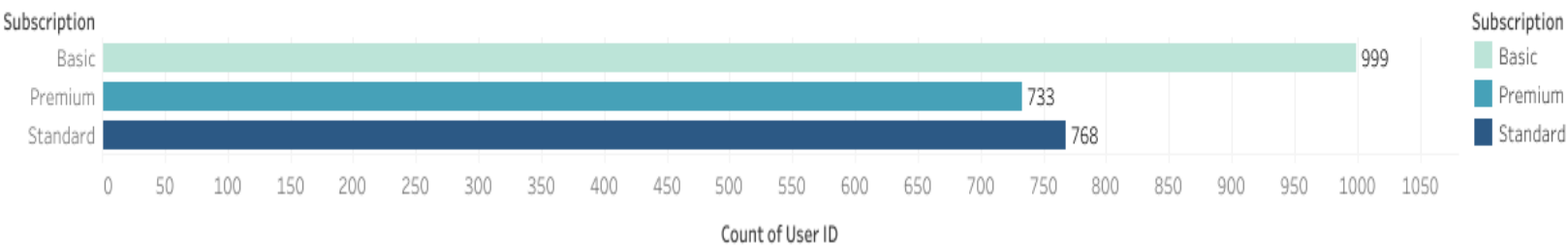


Country	SUM of Revenue
Australia	2271
Brazil	2285
Canada	3950
France	2307
Germany	2260
Italy	2317
Mexico	2237
Spain	5662
United Kingdom	2318
United States	5664

Finding 3

The data shows the most preferred subscription plan by subscribers is the basic plan and it has the most subscribers followed by the standard plan and the premium plan.

Subscription vs count of subscribers

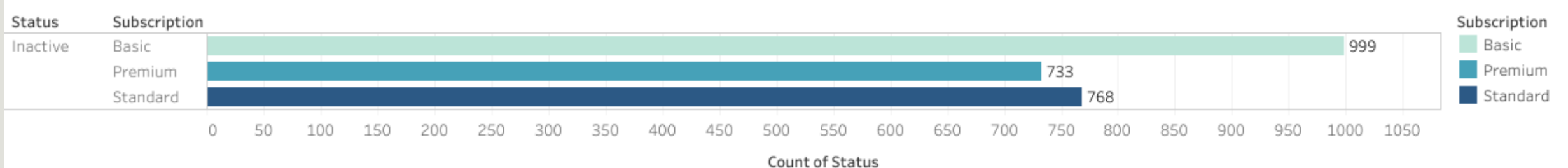


<i>Subscription</i>	SUM of User ID
Basic	1250460
Premium	915638
Standard	960152

Finding 4

The chart shows that there are no present active subscribers across the 10 regions analyzed.

Count of active/inactive subscribers



Analysis

My initial analysis from the data is a possible decline in customer retention . This decline may result from a lack of personalization, competitive pressure, communication gaps, limited engagements etc

My inferences include decline in revenue ,poor customer satisfaction etc There is an opportunity

For customer retention across the different regions.

Why Analysis

Problem: Customer retention

1. Why?

Lack of personalization strategy

2. Why?

Limited data collection insight

3. Why?

Inadequate customer segmentation

4. why?

incomplete customer profile

Recommendation

Develop marketing strategies specifically designed to retain existing customers ,such as personalized email campaigns and exclusive offers.

Continuously analyze customer behavior and preferences to identify trends and patterns that can inform retention strategies.

Develop re-engagement campaigns to bring back inactive or dormant customers with tailored offers.

Regularly collect feedbacks from customers and use it to make improvements to services and overall customer experience.

Develop and offer loyalty programs that reward repeat customers.