DATA ANALYSIS PORTFOLIO

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collaboratively but can also run with projects on my own,

with proven ability to work proactively in complex and fast-paced office environment. 1 **Portfolio Outline Professional Background Table of Contents Udemy Project Description** 3 The Problem 4

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Udemy Project Description identify opportunities to increase revenue and improve the company's business model, monitor the performance of the various courses, and identify the top twenty most popular courses.

Methodology I investigated Udemy consumer subscription trends in four (4) different subject areas. Using Google Sheets, the data was cleaned up of duplicates, blank cells were removed, and inconsistent data was corrected. To build the necessary charts and visuals, Google Sheets and Tableau were used to evaluate the clean data. The study's objectives are to pinpoint potential chances for revenue growth and monitor performance in the areas of web development, graphic design, business

Result/Conclusion up more revenue.

will help in Instruments providing information. To facilitate comprehension, the data is presented in descriptive, tabular, and visual formats. The analysis seeks to understand the subject with the total number of subscribers, the subject with the highest average content duration, price, and number of students, the subject with the highest free and paid courses, the level with the highest average price of web

20 most popular courses, and if content duration impact

The business problem is to analyze and measure the performance of different courses provided on the Udemy website, discover opportunities for additional revenue increase, and identify the top 20 most popular subject areas that members found interesting. The data analysis should be completed within three (3) weeks. Data from the following topics; Web Development, Graphic Design, Business Finance, and Musical

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According to the findings, Web Development has the highest income and outperformed the other subject areas. I used Tableau to visualize the data since it is better suited to managing large data sets and can provide a more detailed analysis.

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Total Subscribers Business Finance Graphic Design Musical Instruments

The result of the analysis revealed that Web Development has the highest average

Figure 2: Average Content Duration/Price/Number of

Figure 1: Total Subscribers by Subject

Finding 3 134 and 1069 respectively. Figure 3: Free/Paid by Subject

content duration, price, and number of students.

Figure 5: Top 20 Most Popular Courses by Subscribers Finding 6 The analysis showed that based on the trend, content duration do not have any effect or impact on the price of any course

Figure 6: Content Duration by Price

A Scatter Plot for Content Duration vs Course Price

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Analysis
My initial insight into the data is that Web Development
would have the highest number of subscribers among the
different subjects being studied because it is the most
popular of all the subject areas.
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My inferences include a likely decrease in revenue because most of the top Web Development courses were offered for free, and more advanced level Web Development courses had higher prices, which discouraged subscribers from

enrolling in additional Web Development courses.

Given that web development was responsible for the majority of revenue generated, there are possible prospects to grow revenue even higher. It may be necessary to calculate the total profit in relation to the number of subscribers enrolled in

Methodology

for revenue growth.

prospect of further sales growth.

Result/Conclusion

Conclusion

Whys Analysis

Capstone Project Description

I have chosen to study the provided video game sales which is in millions of dollars, and because it may be challenging to obtain data that is completely accurate. I quickly reviewed the data, found some problems, intuitively determined the likely cause of the problems and their potential impact on the

stakeholders, while keeping an open mind, and then analyzed the given data to support or refute my hypothesis. A decline in video game sales, a loss of profit, a high cost of video games, and lots more, were all part of my hypothesis.

I looked at how users ranked the sales of various genres of video games with over 100,000 copies sold. Using Google Sheets, the data were examined for

duplications, blank cells were removed, and inconsistent data were corrected. Global sales, however, varied and were modified accordingly. To develop the appropriate graphics and visuals, Tableau and Google Sheets were used to evaluate the clean data.

The study aims to establish user rankings, track video game sales performance, determine which geographical area made the most income, and find potential

Sales of video games, particularly those in genres that have proven popular with consumers, may increase as a result of appealing marketing and celebrity

Since 526.2 million dollars' worth of the top 20 games were published by Nintendo, it increases the likelihood that video game sales will increase. Management should avoid publicly criticizing the government, especially in the North America region, where it has recorded more sales and where there is a

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providing requisite information. The data is provided in descriptive, tabular, and pictorially to enable its understanding. The analysis seeks to understand the genre with the highest global sales, the genre with the highest sales among the top 20 video game global sales, the region with the total highest video game sales of genres, the publisher with the highest sales that made up to the top

20 video game global sales, the platform with the highest global sales, and the year and decade that

recorded the highest global sales.

Data Design

revenue growth.

Findings Finding 7

Adventure

Fighting

Platform

Puzzle

Racing

Shooter

Sports

Strategy

Simulation

Role-Playing

Finding 8

Finding 9

Finding 10

678.9 million dollars.

Figure 10: Yearly Global Sales

Figure 9: Average Global Sales by Genres

This data shows that the Platform genre recorded the highest average global sales

This data shows that the highest global sales were recorded in the year 2008 with

This data shows that PS2 platform had the highest sales globally, making up to

Platform has the highest average global sales of 0.938 million dollars.

Japan, and Other Sales respectively.

Misc

\$105.80

\$223.59

\$410.24

\$447.05

\$123.78

\$359.42

\$327.28

\$582.60

\$183.31

\$683.35

\$68.70

Figure 7: Global Sales by Genres

it for the data visualization.

Table 2: Total Sales by Genres This data shows that North America had the highest total sales of genres with 4,392.95 million dollars, while Other Sales was the lowest, with 797.75 million dollars among the regions. Action genre had the highest Global Sales and it also recorded a sum total Global Sales of 8,920.44 million dollars across Northern America, Europe, Japan, and Other Sales respectively. Genre \$877.83 \$525.00 \$159.95 \$187.38 \$1,751.18 Action

\$52.07

\$87.35

\$107.76

\$130.77

\$57.31

\$56.69

\$352.31

\$38.28

\$63.70

\$135.37

\$49.46

\$16.81

\$36.68

\$75.32

\$51.59

\$12.55

\$77.27

\$59.61

\$102.69

\$31.52

\$134.97

\$11.36

\$239.04

\$448.91

\$809.96

\$831.37

\$244.95

\$732.04

\$927.37

\$1,037.37 \$392.20

\$1,330.93

\$175.12

17

18

19

\$64.13

\$101.32

\$215.98

\$201.63

\$50.78

\$238.39

\$188.06

\$313.27

\$113.38

\$376.85

\$45.34

1,255.64 million dollars.

Figure 11: Global Sales by Platform

Finding 11

Analysis My first insight from the data is that there may be a drop in video game sales. This drop could be the result of the video

inadequate support facilities, etc.

5 Whys Analysis 02 04 05

- to have the potential to increase sales. Therefore, it is advised that future video game publishing be done using them. It is critical to resolve outstanding concerns with the current government and avoid unfavorable press.
- There is a possibility of boosting sales in many geographical areas.

As a data analyst for Udemy, I was tasked by my finance manager and senior leadership team to present data on course revenue in order to understand and

The provided data shows that web development is the most popular of all the subjects and also provided the highest revenue. Reduction of free web development most popular courses will further help drive Given that web development was the main source of most of the revenue, there may be opportunities to further boost revenue.

finance, and musical instruments.

The Problem

development courses, the subject with the highest top

the price of courses.

to analyze the clean data.

Musical Instruments.

Data Design

Findings Table 1: Total Subscriptions by Subject According to the provided data on the different course titles, the largest percentage (67.9%) of the subscribers enrolled in Web Development. The total number of subscribers is 7,981,935. subject SUM of num_subscribers 1868711 **Business Finance Graphic Design** 1063148 **Musical Instruments** 846689

7981935

11760483

Web Development

Grand Total

Finding 2

Finding 4

50.00

Finding 5

Price of Web 25.00

Students by Subject

This table shows that Web Development has the highest of free and paid courses at Free or Paid

The analysis showed that the Intermediate Level has the highest average price of

The result of the analysis shows that the top twenty most popular courses students subscribe for are the Web Development Courses compared to the other subjects.

Expert Level

8

9

10

11

Figure 4: Average Price of Web Development by Levels Average Price of Web Development Courses vs. Levels

Web Development Course compared to the other Levels.

195 095 95 0 100 95 0 105 0 0 105 8

The goal of the 5 why analysis is to identify and fix the root cause of the identified problems. The number of questions asked allowed for the identification of the root cause of the observed problem. According to the findings of the investigation, there is a chance to grow sales in various subject areas. **Analysis**

Whys Analysis

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the various subjects. Reducing the most popular free web development courses will help increase revenue. According to the data supplied, web development is the most popular of all subjects and also generates the most revenue.

Problem The business problem is to understand and measure the performance of various genres of video game sales with over 100,000 copies sold, identify opportunities for further revenue increase and identify the most popular genre, customers have found interesting. The data analysis is expected to be provided within three (3) weeks.

Data of various genres of video game sales from the following region; North America, Europe, Japan, and Other part of the world respectively will help in

of video games with over 100,000 copies sold. Using Google Sheets, the data were examined duplications, blank cells were removed, and inconsistent data were corrected. To develop the appropriate charts and visuals, Google Sheets and Tableau were used to evaluate the clean data. The study aims to establish user rankings, track video game sales performance, determine which geographical

area made the most income, and find potential for

Tableau is better suited to managing massive data sets and can offer a highly in-depth analysis; hence, I used

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I looked at how users ranked the sales of various genres

\$8,920.44 **Grand Total** \$4,392.95 \$2,434.13 \$1,291.02 \$797.75 16

Figure 8: NA Sales/EU Sales/JP Sales/Other Sales by Genres This data here shows that the Action genre recorded the highest sales across North America, Europe, and Other Sales respectively but didn't had the highest sales In Japan, while Strategy genre had the lowest sales across Northern America, Europe,

Finding 12 Figure 12: Top 20 Video Games Global Sales by Genres This data shows that Sports genre ranked highest in global sales among the top 20 video game sales globally.

Finding 13

Finding 14

The data showed that the highest global sales in a decade were recorded between the years 2000 and 2009. 20

games' expensive initial investment costs, poor marketing,

My research revealed things like diminishing sales, a lack

Finding the root cause of the problems that have been identified and fixing them is the main goal of the five-why analysis. It is important to ask up to five (5) questions in

There is a possibility of growing sales across all regions.

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of feedback, poor post-purchase assistance, etc.

order to identify the true cause of the issue.

Analysis

Whys Analysis

Figure 13: Top 20 Video Games Global Sales by Publishers The data showed that the publisher, Nintendo, had the highest sales among the top

20 video games globally with a sales of 526.2 million dollars.

Figure 14: Video Games Global Sales per Decade

The amount of video games sold globally has decreased.

Appendix Google Sheets Data Set for Udemy Project https://docs.google.com/spreadsheets/d/1UZRuDienzVk4unoTvuAMSP gvapYSgu4MoyUXFczaM-A/edit?usp=sharing **Tableau Data Visualization for Udemy Project** Google Sheets Data Set for Video Game Sales Capstone Project https://docs.google.com/spreadsheets/d/1TAqtZPG2csY1g-Lpkce7AyUdvKxqpxgP2FL6MaeokUA/edit?usp=sharing Tableau Data Visualization for Video Game Sales Project

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In particular, for the genres of video games that have shown to be appealing to the market after resolving outstanding difficulties with the government, attractive marketing and endorsements from celebrities may assist in increasing sales. Since 526.2 million dollars' worth of the top 20 games were published by Nintendo, it increases the likelihood that video game sales will increase. Nintendo appears

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