SUPPLY & DEMAND

Mengjie (Marianna) Wang

ABOUT ME

MENGJIE (MARIANNA) WANG

- Business Analyst Intern at AppleOne
- Recent Analytics graduate from UC Berkeley
- Passionate about leveraging data to solve complex problems and make informed business decisions.

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COLLEGE OF ENGINEERING

TABLE OF CONTENTS

- Introduction
- Data Analysis Process & Visualization
- Key Findings
- Conclusion

OBJECTIVE OF THE ANALYSIS

Objective: Leverage data analysis and visualization to derive actionable insights from job orders and placement data.

Comprehensive Reporting: Identify the current business mix for both supply and demand based on job function categories.

Monitoring Trends: Track trends over time to understand changes in demand and supply for different job function categories.

Efficient Resource Management: Guide resource allocation and future planning through data insights.

OVERVIEW OF THE DATASET

We looked at Interviews, Job Orders and Placements for all US staffing brands from January 2018 to June 2023.

All data came from OA (People, JO, Placement)

This report excludes National account

DATA ANALYSIS PROCESS

Power BI

Power BI was chosen as the primary tool for its powerful data integration, transformation, visualization, and analytical capabilities.

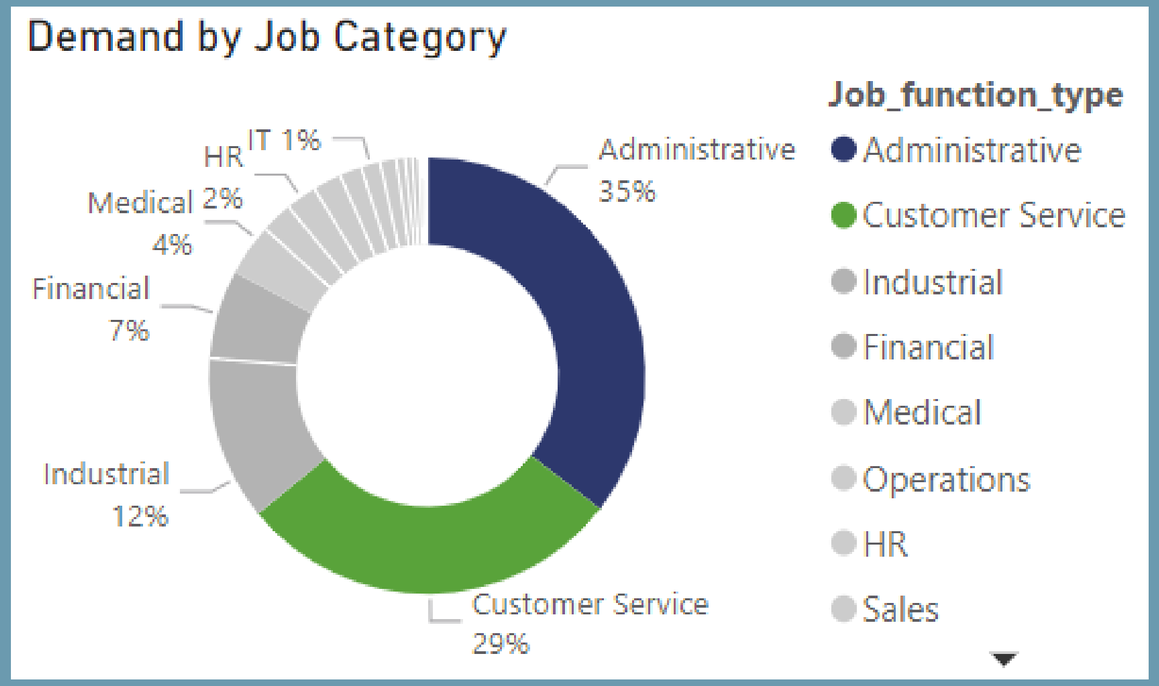
1. Data Integration: Using Power BI, I was able to easily connect and integrate data from different sources, such as job orders, placements, and supply datasets. This helped create a unified view of the business situation.

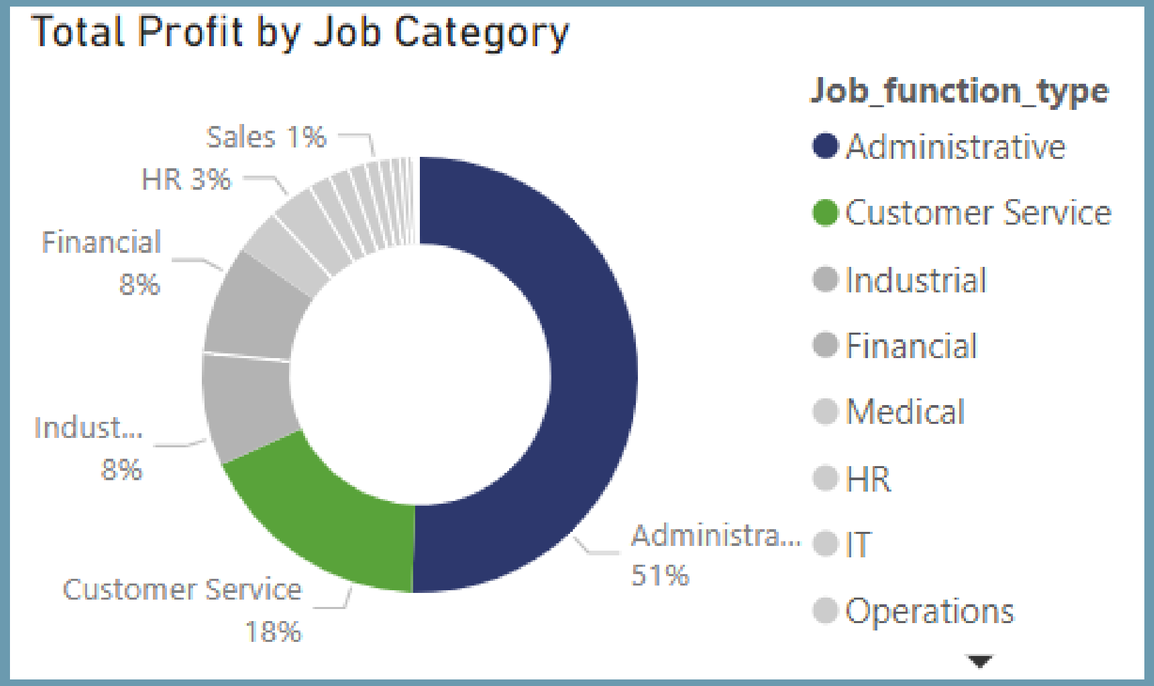
2. Data Transformation: Power BI's query editor was used extensively for data cleaning and transformation. Tasks like handling missing data, changing data types, creating new calculated columns, and categorizing data were all made easier with Power BI.

3. Data Analysis: Using DAX (Data Analysis Expressions), I created various measures and calculated columns. This allowed me to perform complex computations across different tables, enhancing the depth of the analysis.

4. Data Visualization: Power BI's drag-and-drop visual interface made it simple to design and create interactive dashboards. I used a range of visualization tools including charts, tables, and slicers to effectively communicate the insights derived from the analysis.

DATA VISUALIZATION

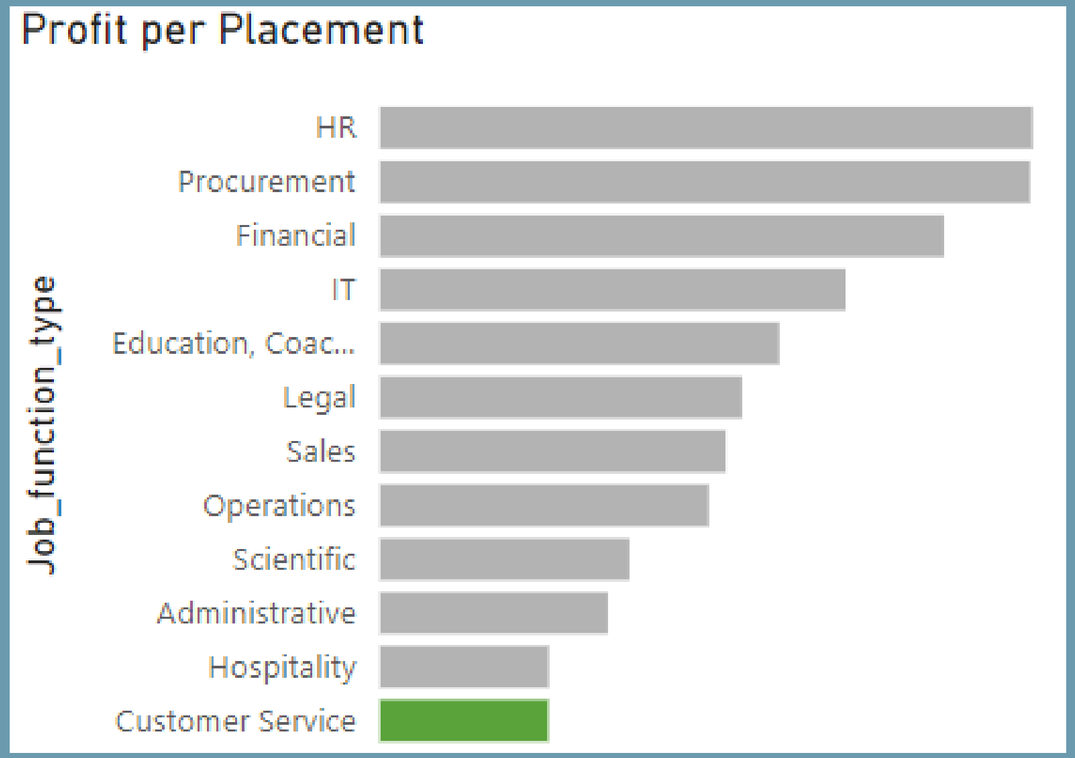




'CUSTOMER SERVICE' AND 'ADMINISTRATIVE' ROLES MAKE UP A SIGNIFICANT PORTION OF OUR DEMAND - AROUND 29% AND 35% RESPECTIVELY.

'CUSTOMER SERVICE' ONLY CONTRIBUTES TO 18% OF OUR TOTAL PROFIT.

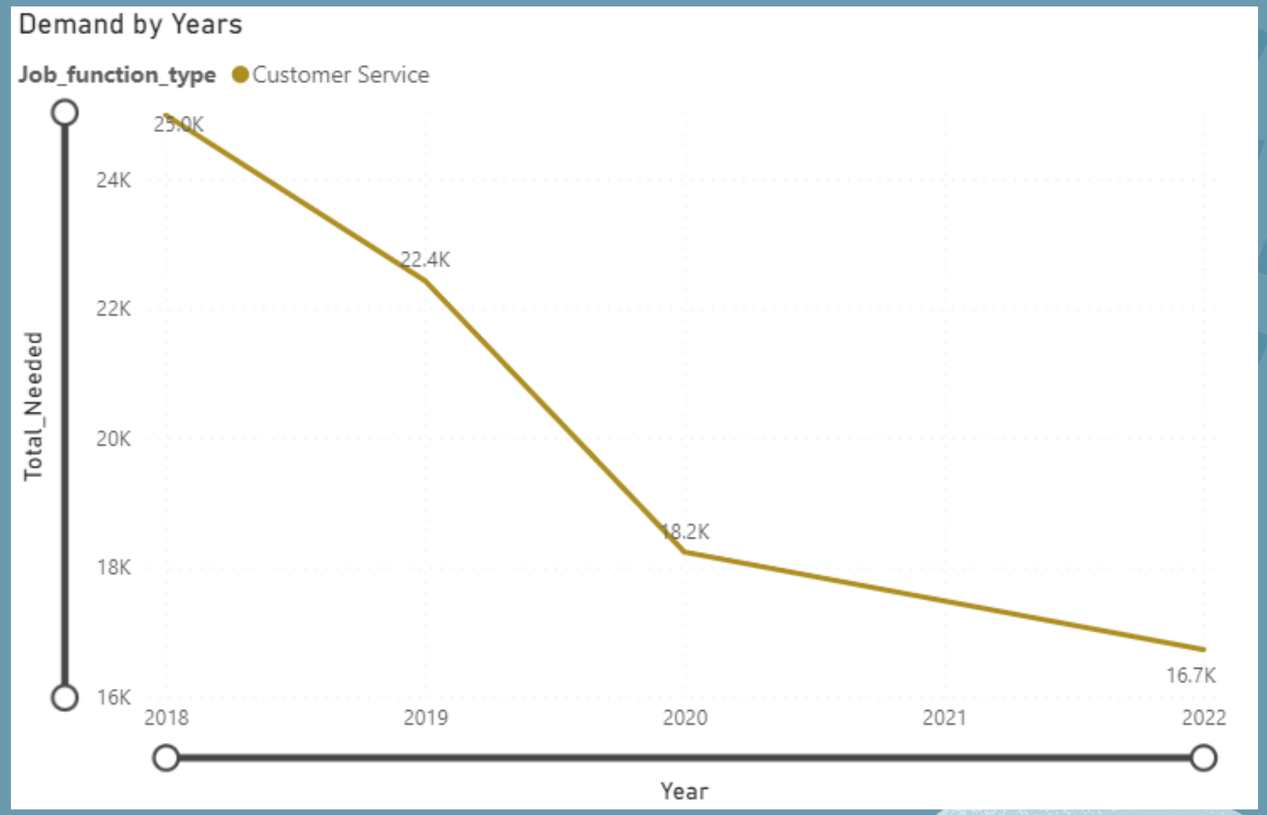
PROFIT PER PLACEMENT



"Customer Service" has one of the lowest profit per placement.

CUSTOMER SERVICE DEMAND FALLING

The demand for Customer service experienced a **33%** decrease from 2018 to 2022.

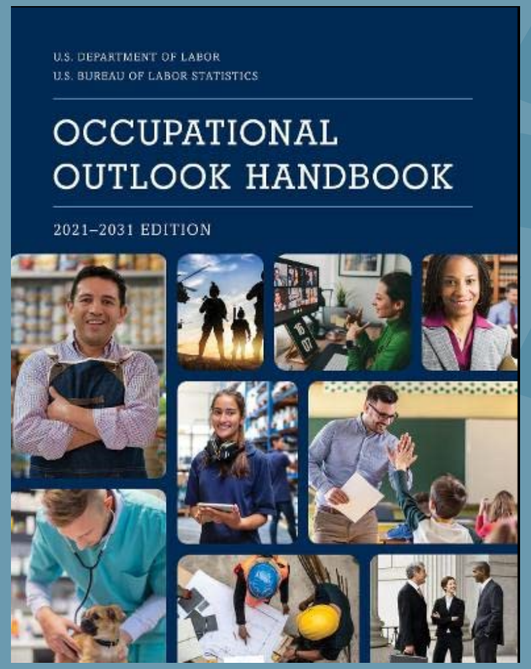


FUTURE DEMAND PROJECTED TO FALL FURTHER...

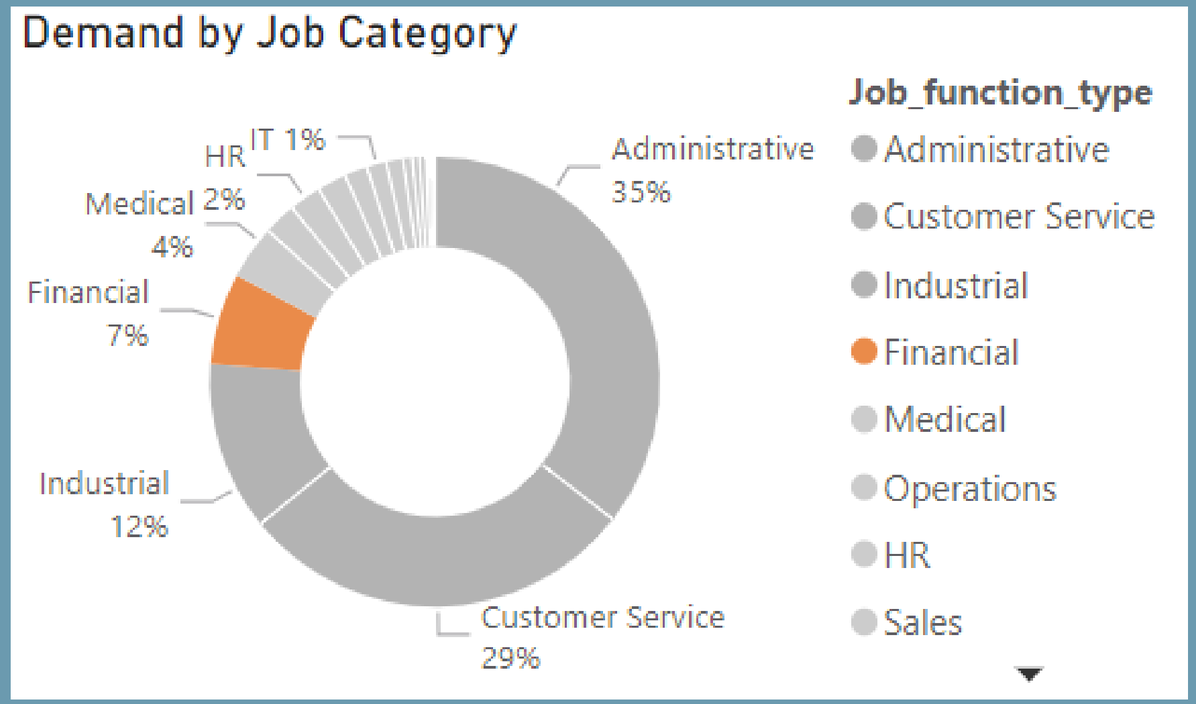
Customer Service Representatives (2021-2031):

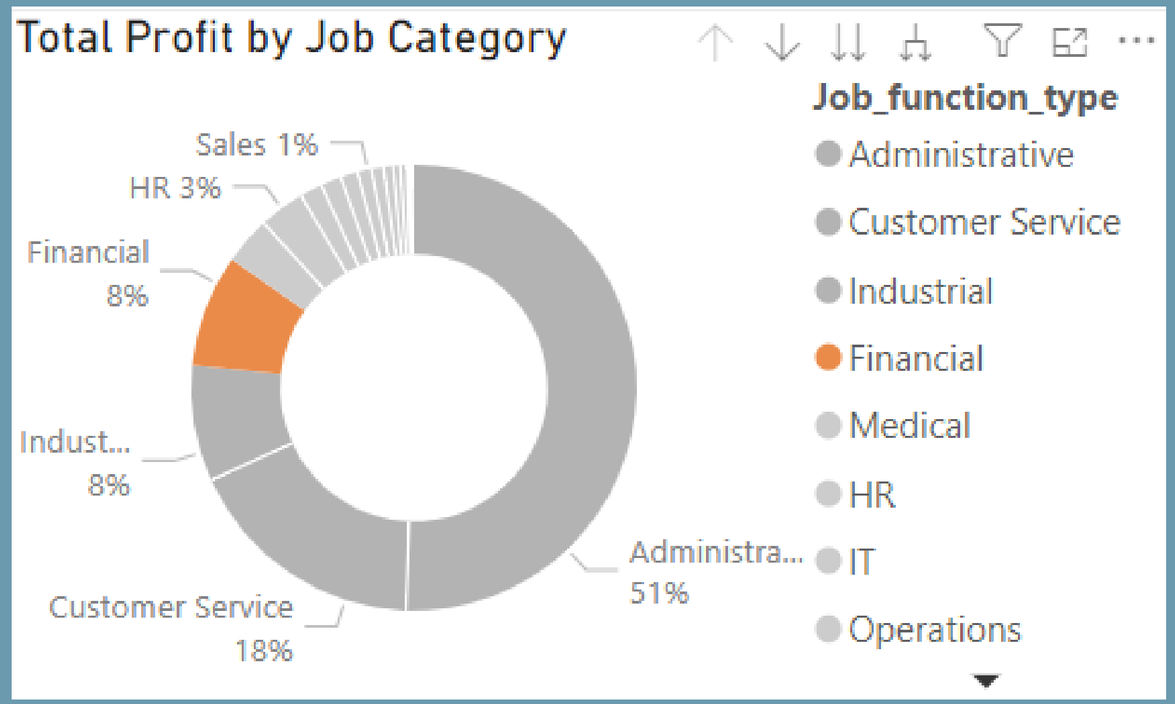
4% Decline

100K Job loss



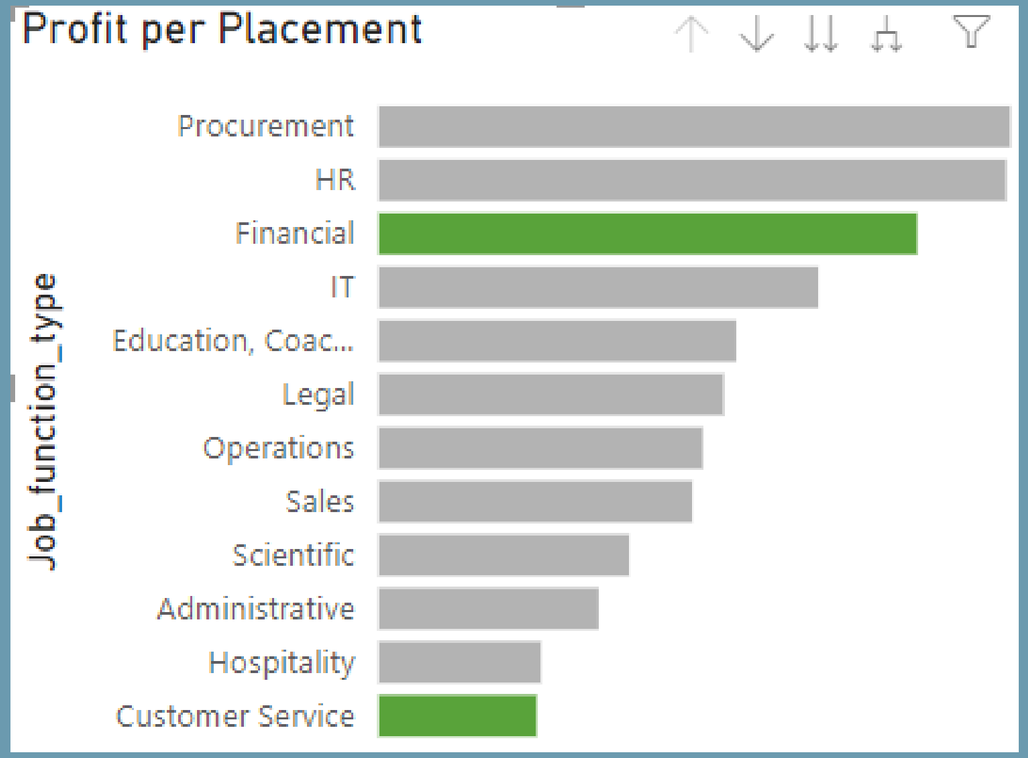
ALTERNATIVE TO CUSTOMER SERVICE...





While the demand for the "Financial" category is 6%, it contributes to an impressive 8% of our total profit.

PROFIT PER PLACEMENT FOR FINANICAL



"Financial" category outshines almost all other categories.

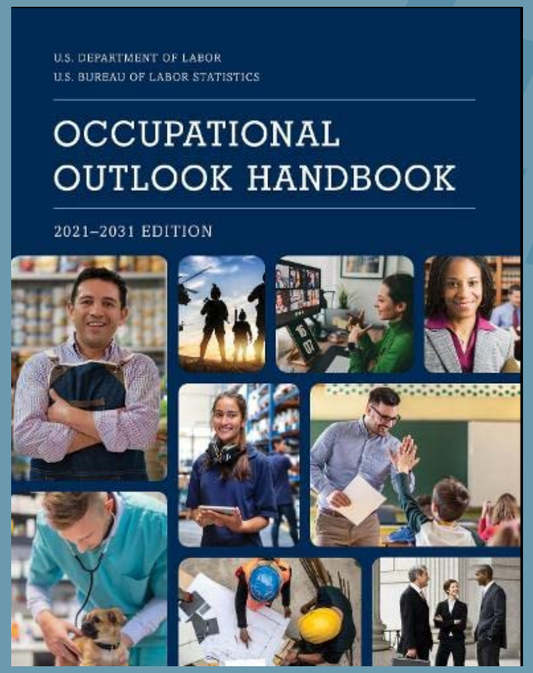
The profit for one placement in Financial category is 4 times of the profit for one placement in Customer Service category

FUTURE DEMAND PROJECTED TO GROW

Financial Occupations (2021-2031):

7% Growth

700K New Jobs



FINANCIAL VS CUSTOMER SERVICE

Financial:

High profit per placement

7% growth over the next decade

VS

Customer Service:

Low profit per placement

4% decline over the next decade

THE OPPORTUNITY AND THE SHIFT

Now, consider this - what if we could shift our focus from just meeting the high demand to optimizing for profit per placement? We can significantly increase our profitability by directing more of our efforts towards building demands to the Financial category.

HIGH DEMAND → PROFIT PER PLACEMENT

CUSTOMER SERVICE → FINANCIAL

An increase of 5% in demand for Financial category will lead to an additional 330K in profit.

CERTIFICATE OF COMPLETION

AppleOne
Intern-to-Dream®

Certificate of Completion

This is to certify that
on Friday, August 18, 2023

Mariana Wang

successfully completed all the necessary coursework
in AppleOne's 2023 Intern-to-Dream® Summer
Internship Program in the capacity of

Business Analyst Intern

Brett W. Howroyd, President

THANK YOU
FOR LISTENING