Empowering Business with Effective Insights - Tata Group

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AGENDA

- Introduction

- Data Processing

- Exploratory Analysis

- Recommendations

INTRODUCTION

- The purpose of this analysis is to show metrics that can evaluate business performance. The analysis can help in giving insights in expansion and showing revenue information of the company.

DATA PROCESSING

- The data is processed with Python by sorting and filtering the data to remove unwanted values that can interfere with the results of our analysis.

- We removed values from the quantity column that shows negative values.

- We also removed unit prices that are below $0.

- We also noticed that there are product information that has question marks on it depicting the information as unknown for those products, so we removed that as well in our analysis.

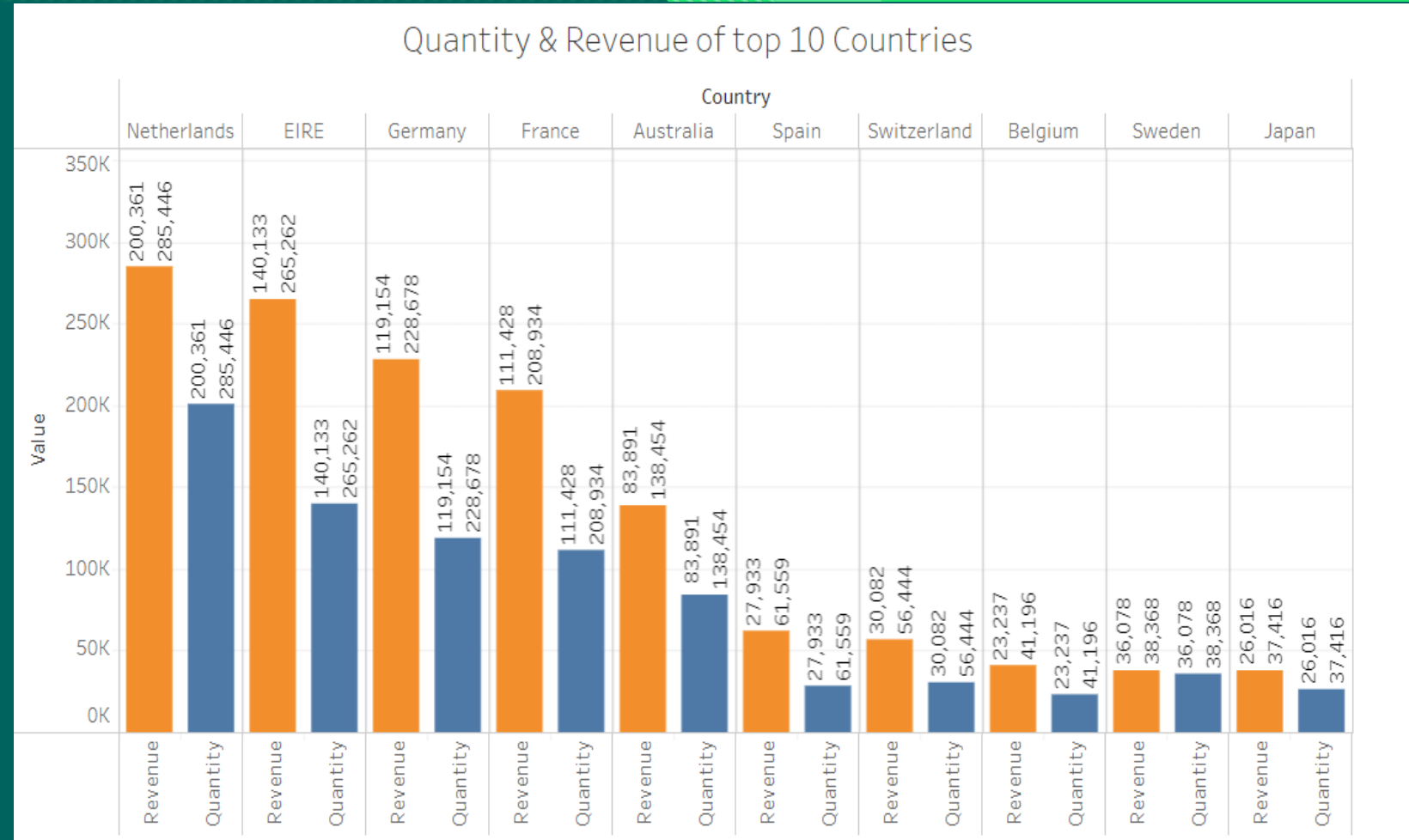- Aside from these corrections, the data is accurate and relevant to answer the business tasks.

EXPLORATORY ANALYSIS

- Here we can see the trend of revenue through the year 2011.

- August is when the revenue is going a positive direction through November.

- November is the month with the most revenue generated by the company. There is incomplete data about December to confirm seasonality of revenue.

Revenue by Month

Month

127,225 · 91,467 · 128,298 · 59,342 · 126,143 · 136,085 · 113,625 · 146,325 · 155,884 · 214,422 · 180,954 · 119,754

January February March April May June July August Septemb.. October November December

Revenue

200K

150K

100K

50K
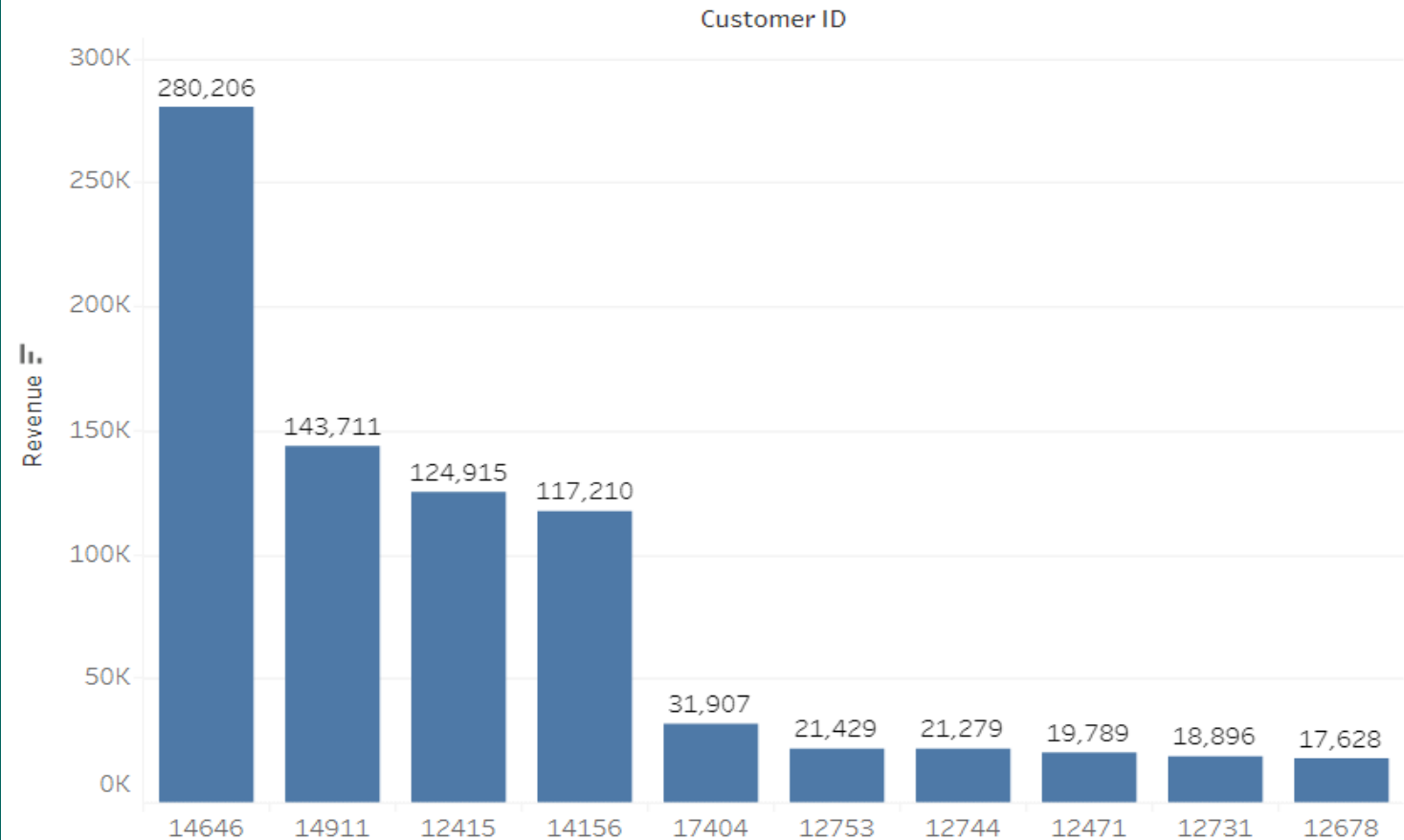
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EXPLORATORY ANALYSIS

- Netherlands is the country that generated the most revenue out of 38 countries followed by Ireland and Germany.

- We noticed that even though Netherlands is top 1, Ireland still has the second most quantity sold by product.

- The products sold in Netherlands might be cheaper compared to the ones sold in Ireland.

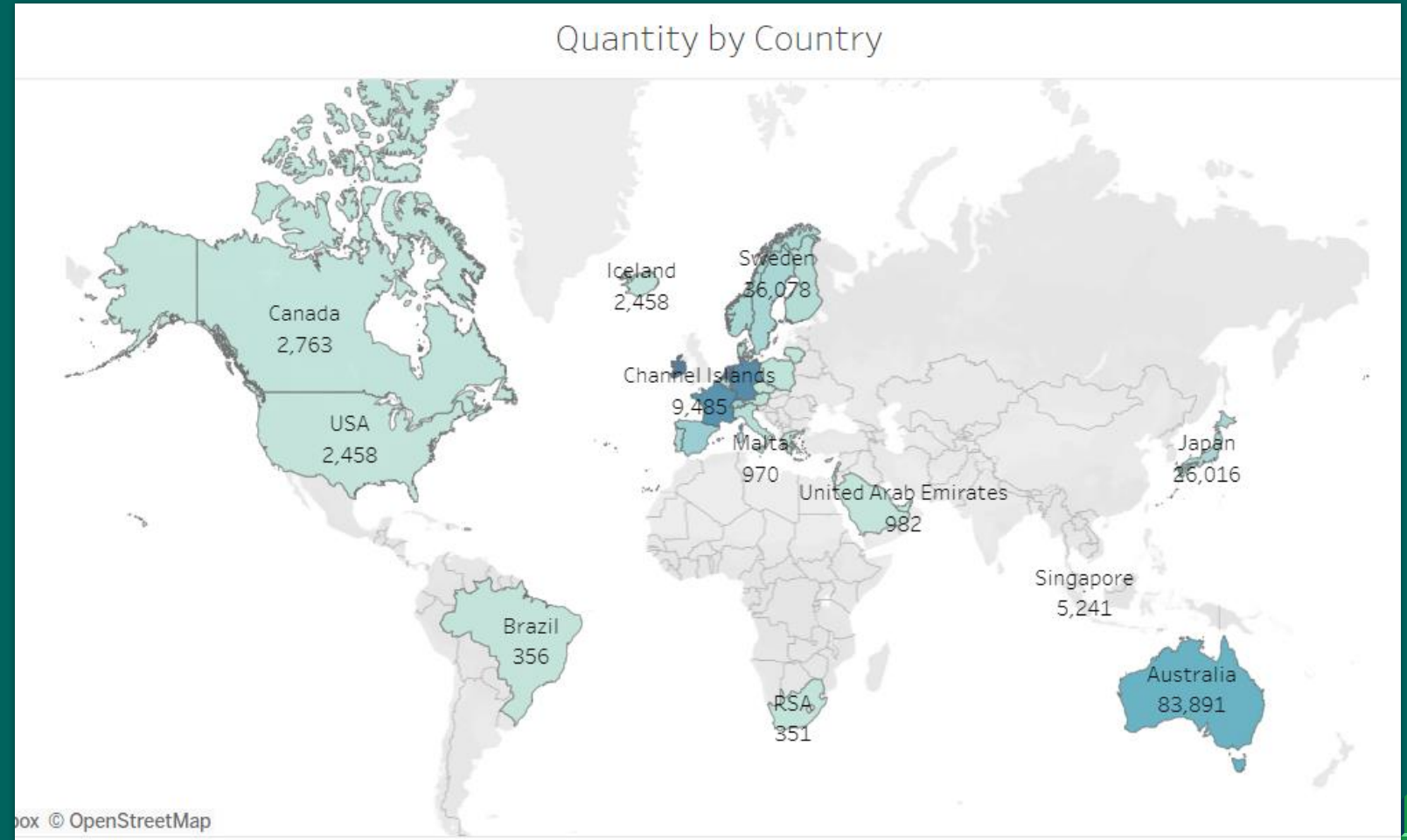Quantity & Revenue of top 10 Countries

EXPLORATORY ANALYSIS

- Here we see the top 10 customers by revenue. The top customer generated about $280,206.

- There are customers that generated an average of $135,000 to $106,800 in revenue which is customerID 14646 to 12678 respectively.

Revenue by Customer ID

EXPLORATORY ANALYSIS

- Netherlands is the country that has the highest revenue which makes it the best country for a business expansion.

- The surrounding areas around Ireland seems promising for the popularity of the business.

- Countries like Ireland, Germany and France has a significant customer base that can also be looked at for opportunities.

Quantity by Country

RECOMMENDATIONS

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- There is incomplete data in December but it shows a promising month since the November month we can see a steady uptrend of revenue.

- Netherlands and the surrounding areas has generated great revenue and the company has a significant customer base that we can tap into for expansion opportunities.

- The top customers has an average revenue starting with $135,000 then $106,000 then drastically falls from to $2,000 range.

- Data such as profit can be used in future analysis to evaluate more of the business performance

Thank You