Market Analysis Report for National Clothing Chain

REVIEW

HISTORY

Meets Specifications

Congratulations on passing the project! It's not often I get projects that pass on the first attempt. You definitely have a clear understanding of how to work with DAX, measures and creating visuals in Power BI.

I wish you all the best and I hope you'll be able to apply what you've learned in this project to future courses, projects and even your career! Have a great day!

Power Query

✓

The joined data on the 'Product Inventory' table of the Customer List is split into 6 columns, each labeled with correct formatting and no resulting Power Query errors.

Submission: Screenshot of final table in Power Query (include applied steps)

Submission: Also submit a final copy of your Power BI file along with all screenshots.

AWESOME

The Product Inventory table has been correctly modified and split into six columns. This step incorporated some of what you've learnt in the previous lessons and you did well to prepare this table for the project. Good job!

✓

The 'Purchase List' table is un-pivoted, organized, and has a date column that is correctly formatted as a date. There should be no resulting Power Query errors for any of the columns or rows.

Submission: Screenshot of the final table in Power Query (include applied steps)

Submission: Also submit a final copy of your Power BI file along with all screenshots.

AWESOME

The Purchase List table was also prepared, un-pivoted and shows a date column with the correct format. Excellent work. Again, this step is crucial for making use of the time series data and I'm pleased to see that you've correctly prepared it.

DAX

✓

The income categories should be defined using a DAX formula. The DAX formula should aggregate the different predicted customer incomes into buckets which can be used to create a histogram. The appropriate bin size for the histogram can be determined by the student but should still be a good reflection of the range, distribution, and shape of the data. It is recommended that the histogram contain at least 4 columns. Refer to the histogram example in the instructions section.

Submission: Screenshot of DAX formula
Submission: Also submit a final copy of your Power BI file along with the screenshots.

AWESOME

The income categories were calculated using a DAX formula and placed the predicted income into buckets! This is excellent work and conveys that you have a great understanding of how to use DAX! Several bins were created to give a detailed breakdown of the income distribution of the customers!

✓

The product recommendations should be defined using a DAX formula. The DAX formula should use logic to determine which products are recommended to different income categories. The recommended product for each income category can be determined by the student.

Submission: Screenshot of DAX formula

Submission: Also submit a final copy of your Power BI file along with all screenshots.

AWESOME

The product recommendations have been defined using a DAX formula. Good work!

As for suggestions, you could also recommend the products by including weather data, such as the average temperature per State. This could involve an external weather dataset. The premise you could use is that in colder states, customers would be more inclined to buy more sweaters. In warmer states, they would be more inclined to buy t-shirts. This is an optional addition, but should offer insights to improve the clothing chain's product recommendation system.

Visualization & Analysis

The histogram shows the distribution and shape of predicted income by category. The histogram is created using a column chart and DAX formula (the calculated column created earlier) to define the ranges/bins of the columns.

Submission: Screenshot of histogram
Submission: Also submit a final copy of your Power BI file along with the screenshots.

AWESOME

The histogram has been created and uses the income buckets from the Customer List. Good work!

A formula is created that can be used to predict customer incomes based linear regression of sales and income. Using y = mx + b, the m and b variables are replaced with the actual values and presented in the written summary.
• Submission: The formula is included in the written summary and Power BI file.
• Submission: Screenshot of the formula found in the Power BI file.
• Submission: Also submit a final copy of your Power BI file along with all screenshots.

AWESOME

I'd like to commend you on creating a Regression Table and calculating the relevant columns such as X^2, Y^2, XY and measures such as SUM_X, SUM_X^2, SUM_Y, SUM_Y^2, b, m and n. I also see that the predicted income column was created successfully using a DAX formula. Great work in retrieving the values for b and m from the Regression table!

The scatter plot with trendline and correlation coefficient quick measure (on a card) is used to perform a regression analysis of the relationship between average household income by state and average 6 months sales by state.

Submission: Screenshot of scatterplot and card

Submission: Also submit a final copy of your Power BI file along with all screenshots.

AWESOME

A scatter plot was provided on the Income & Sales tab that plots the Average Income vs Sales. You did well to show the correlation between the two by providing the correlation between the two and using a quick measure to calculate R-squared (R2)! The current value shows there's a strong correlation between the two variables being compared.

The heatmap is used to visualize income household income distribution across the US.

Submission: Screenshot of the heatmap

Submission: Also submit a final copy of your Power BI file along with all screenshots.

AWESOME

The report includes a heat map to visualize the household income distribution across the US.

Cross-filter:
The histogram columns can be used to update the heatmap.
The scatterplot can be used to update the histogram.
The scatterplot can be used to update the map.

Submission:
Screenshot of cross-filtered histogram and heatmap
Screenshot of cross-filtered scatterplot and histogram
Screenshot of cross-filtered scatterplot and heatmap

Submission: Also submit a final copy of your Power BI file along with the screenshots.

AWESOME

I checked the cross-filtering between the visuals and it works as expected. Good job!

The 1-2 page written report provides a detailed summary of the results, conclusions and recommendations of the analysis. The document reads like a well-written executive summary and includes the following:
• All 5 of the analysis questions are addressed with 1-2 sentences
• The formula for predicting customer incomes
• The scatterplot relationships with R-Squared values
• Findings from the research of 1-2 additional variables (as noted in the instructions) are included
• Any findings that are used to inform the marketing strategy
• Specific visuals that speak to the narrative of summary are included in the summary.
• Final recommendations are presented and are based on the results of the statistical analysis.

Submission:
A 1-2 page document (a little longer is ok)

AWESOME

I'd like to commend you on putting the report summary together. You did well to answer all the required questions.

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