ADVENTURE WORKS

OBJECTIVE

After seeing the impressive work you've done on the Global Superstore dashboard, your reputation in the market has soared. Your ability to transform complex data into insightful and actionable visuals has garnered widespread acclaim. Now, numerous companies are eager to collaborate with you, recognizing your expertise and innovative approach.

One notable example is the retail giant Adventure Works, which is keen to become your client. They have been impressed by your ability to create comprehensive dashboards that address both logical and real-world business challenges. Adventure Works sees great potential in leveraging your skills to enhance their data analytics and reporting capabilities, ensuring they stay ahead in the competitive retail landscape.

MAIL 1 (pg-1)

Adventure Works has a dedicated in-house business analyst team. This team has meticulously reviewed their needs and has forwarded a comprehensive list of requirements that they wish to see incorporated into the new dashboard. These requirements should be adhered to and fulfilled with the aim of enhancing data visualisation, improving decision-making processes, and providing actionable insights to support their strategic objectives. By meeting these specifications, the dashboard should serve the analytical needs of the organisation, ultimately driving more informed business decisions.

1- The team requires the inclusion of cards displaying essential details such as total sales, total costs, total orders handled and total quantity sold. These cards should provide a quick and comprehensive overview of the company's current market position. By summarising these key metrics, the dashboard should enable the team to instantly assess their performance, and make informed decisions to drive business growth and competitiveness in the market.

2- The company now seeks a detailed visualisation that illustrates the sum of sales and the sum of costs on a month-by-month basis. This chart should be designed in a way to easily visualise the months where the cost amounts are lower than the sales amounts. This visual should aim to provide the comparative view, the company should be able to easily identify periods of profitability, track financial performance trends over time, and pinpoint specific months where their revenue exceeds expenses, this should also help company to figure out if there are any months where the sum of cost is always lower than sum of sales when compared to different years.

3- The company also requires a fundamental visual representation to track the total quantity sold per quarter. This graph should also effectively measure quarterly performance across different years, enabling the company to assess sales trends and performance over time on a quarterly basis.

4- The company is interested in identifying the top 10 selling products annually and assessing whether these products consistently rank among the top 10 across different years. This analysis should provide insights into product performance trends over time, highlighting consistent best-sellers and identifying any shifts in consumer preferences or market dynamics.

MAIL 2 (pg-1)

Their business analyst team was constantly monitoring your dashboard and The adventure works have assigned a few more tasks for you.

1- On the report page, they are requesting a non-interactive visual that remains fixed, providing a clear snapshot of two key metrics: total sales and total orders placed. This visual is intended to provide immediate, at-a-glance insights into these critical performance indicators .

Additionally, they require a dynamic visual that tracks progress towards their ambitious sales target of $100 million for the year 2021. This target was established as part of their strategic plan spanning from 2016 to 2021. The visual will dynamically update to show how close the organisation is to reaching this milestone, offering ongoing motivation and strategic alignment with their long-term business objectives."

2- On the same page, the company requires two additional visuals: one depicting the sales trend over the years, providing a historical perspective on revenue performance, and another graph displaying the median unit price and median sales price trends over the year. Together, these visuals should offer invaluable insights into the company's financial trajectory and pricing dynamics. They should enable strategic decision-making by highlighting long-term sales patterns and pricing trends, empowering stakeholders to assess market performance, optimise pricing strategies, and align business operations with overarching strategic goals."

3- The company's Business Analyst team has also tasked you with enhancing the report page to ensure all the aforementioned visuals dynamically respond to product categories. This enhancement should provide a deeper, more nuanced analysis of sales performance and pricing trends across different product categories, empowering strategic insights and informed decision-making to the organisation."

[YOUR MANAGER ASKED YOU TO ADD CLEAR SLICERS OPTION FROM YOUR END SO THAT CLIENT DON'T HAVE TO FACE ANY ISSUE REMOVING THE SELECTED VALUES]

MAIL 3

Company reached out to you to do some more additional changes in the dashboard.

They wanted you to insert an image of the company logo on the first page of the dashboard.

And on clicking on the photo it should forward you to the link :-

MAIL 4 (pg-2)

They have provided you with a reseller dataset also now.

1. The Business Analysis team is preparing concise visuals for the CEO, who requires quick insights without delving deeply into the data. They've requested two map-based visualisations: one to depict sales by region, and another to show sales by country-region.

   The first visualisation should effectively visualise sales across regions, in such a way that size of some shape should determine the sum of sales of a region , more the sales greater will be the size of that shape.

   The second map will categorise country-regions based on sales volume: country-regions with sales under 1 crore should be marked in red, those between 1-5 crore in brown, and regions exceeding 5 crore in green.

2. The Business Analyst team has also tasked you with visualising the total sales and quantity sold over the years categorised by different reseller types. They are interested in understanding how sales and quantities have evolved annually across various types of resellers. This visualisation will provide insights into the performance trends of each reseller type over time, helping to identify which types contribute most significantly to sales and quantity sold annually.

3. You are also tasked with creating a visual representation of quantity sold per country-region. The team has specified that this visual should illustrate the performance relative to the top-performing country-region, which will be set at 100%. Other regions' performance should be compared as a percentage relative to this top performer.

   This visualisation should aim to clearly highlight which country-regions are leading in terms of quantity sold and how other regions compare in relation to the top performer.

4. The Adventure Works strategy team has identified significant potential in the bike segment. They are keen to analyse their current market position within this segment by examining sales across different bike categories over varying time frames: annually, quarterly, monthly, and daily.

This analysis will provide insights into the performance trends of each bike category over different time intervals, aiding in strategic decision-making to capitalise on the identified market potential.

MAIL 5 pg(3)

1- The team is interested in understanding customer colour preferences across different product categories. They have requested a visualisation showing the number of articles sold in each colour within each category. This analysis should provide insights into which colours are most popular within each product category, helping the team tailor their inventory and marketing strategies accordingly.

2- Companies have figured out that they are lagging in the trajectory to meet the target that was set in 2016, to improve their sales they wanted to see how the distribution of their resellers in each region and as per their type , so that if there is any lag they can work on filling that lag, create a visualisation for the same.

3- The company is undergoing restructuring and needs to assess the workload of its sales employees. They want to categorise employees based on the number of retailers they manage:

- Employees managing fewer than 1500 retailers are considered under burdened (represented in pink).
- Those managing between 1500 and 6000 retailers are neither overburdened nor underburdened (represented in green).
- Employees managing more than 6000 retailers are considered overburdened (represented in red).

The company requests a table displaying each employee's workload status, prioritising under burdened employees at the top. This visualisation should help identify workload imbalances and guide restructuring efforts to optimise employee efficiency.

4- The Business Analyst team is interested in understanding the distribution of resellers under each employee across different countries. This analysis should provide insights into how resellers are allocated among employees, highlighting potential areas for reallocation or support based on workload and geographical coverage.

5- Additionally, the BA team wants to visualise the sum of sales and costs per state using bar charts

6- Finally, the BA team is interested in analysing the quantity of products sold based on group, country. This analysis should provide a comprehensive view of sales performance across different geographical categories, enabling informed decision-making and targeted marketing strategies. Prepare a visual for the same in a way that the team moves to countries of those groups only where they are interested in.

MAIL 6

From the first visual (mail 5) client saw that product type components are being sold in almost every colour. Now the client is more interested to know more about this category.

They wanted that on the report page where there is the graph that you plotted for first visual (mail 5), you should create something , by clicking on which the BA team will land into the visuals created by you of Mail 1 and Mail 2 (pg-1) filtered by the product category - component