Case Study

In the bustling city of San Francisco, there was a small bike shop called "The Bike Haven" that sold various products in the categories of bikes, clothing, accessories, and components. The owner, John, was a bike enthusiast who started his business with a passion for cycling and a dream of making cycling accessible to everyone.

John's journey began when he was a young boy growing up in a small town. He fell in love with cycling and spent every spare moment tinkering with his bike, improving it, and making it faster. As he grew older, John became a competitive cyclist and won several local races. He even traveled around the world to participate in international competitions.

After several years of racing, John decided to retire and focus on his passion for bikes in a different way. He opened The Bike Haven, a small shop that sold high-quality bikes and accessories to cycling enthusiasts. Initially, business was slow, and John struggled to make ends meet. However, he refused to give up and worked tirelessly to make his shop a success.

As word spread about the quality of products and excellent customer service offered by The Bike Haven, the shop began to attract more customers. John's love and knowledge of bikes meant that he could offer his customers expert advice on everything from bike maintenance to choosing the perfect bike for their needs. Soon, The Bike Haven became the go-to shop for anyone in the city who was serious about cycling.

Today, The Bike Haven is a thriving business that offers a wide range of products, including bikes, clothing, accessories, and components. John has even opened a second shop in a nearby town, and he continues to expand his business, making sure that every cycling enthusiast has access to the best products and advice. The Bike Haven has become a symbol of John's passion and commitment to cycling, and he hopes to inspire others to fall in love with the sport, just as he did.

Chris Who is the sales manager of The Bike Haven, He was determined to take the company to new heights. When he joined the company, He knew that the quality of the products was exceptional, but the sales figures didn't reflect that. So, He set out to revamp the sales strategy, introduce new products, and make some much-needed changes to the company's marketing and branding.

He started by conducting thorough market research to understand what the customers were looking for. Armed with this information, He introduced new products that were tailored to the needs of the customers.His marketing team launched several successful campaigns that helped to increase the company's visibility and reach. As a result of his efforts, the sales figures began to climb steadily. Customers began to flock to The Bike Haven, not just because of the quality of the products, but because of the exceptional customer service that his team provided

Recently, Chris realized that our sales reports needed a revamp. Our existing reports were static and did not provide much insight into our sales performance. He knew that we needed to move

to visual dashboards to get a better understanding of our sales performance. This is the reason he hired you as a Bi analyst.

He wrote his requirements in an email as follows:

Greetings,

We're aiming to enhance our online sales reports by transitioning from static reports to interactive dashboards. Our focus is on tracking the sales volume of products, clients, and timeline. It would be helpful to have filters that allow sales representatives to see data specific to their customers and products. I've attached a budget spreadsheet for 2023 that we use to compare values against our performance, and typically we analyze sales data from the previous **two years.** Please let me know if you require further information.

Thank you.

Attached file: [Spreadsheet](#)

Dataset

You can download the .tar database file from [here](#) and the budgets.csv from [here](#)

Please restore the database provided into pgAdmin. It contains 7 tables including customer, sales, date, product, category, subcategory, and geography. Utilize SQL to merge tables where necessary, such as combining the product, category, and subcategory tables. You may also join the customer and geography tables. Remove any unnecessary columns and take data as per your needs. Once this preprocessing is complete, you may download the merged tables in CSV format from postgres for loading into Tableau Desktop.

Task

I am excited to have you on board as part of our team at The Bike Haven. As you know, our goal is to take the company to new heights, and I believe that your expertise in business intelligence can help us achieve that.

Your task is to create a visually interactive and informative dashboard that will help me understand the sales figures better. I want to be able to see how each product category is performing, which products are selling the most, and which ones need more attention. I also want to be able to see how our sales figures compare to the previous year, and which months were the most successful.

The dashboard should be easy to navigate and understand, with charts, graphs, and tables that are visually appealing and easy to interpret. I want to be able to access the dashboard on any device, including my laptop, tablet, and smartphone.

I believe that your skills and expertise will be critical in helping us achieve our goals, and I am excited to see what you can do. If you have any questions or need any assistance, please don't hesitate to reach out to me.

Thank you for your hard work and dedication to helping us take The Bike Haven to new heights.

Best regards,

Chris

Below are some visualizations that you have to add to the dashboard. The five visualizations mentioned below must be present in the dashboard/ story, you may add more visualizations as per your understanding of the case.

- **Top 10 products by sales amount**: This will allow you to see which products are generating the most revenue for the company.
- **Top 10 customers**: This will help you identify your most valuable customers, and allow you to focus on providing them with excellent customer service and building long-term relationships.
- **Sales figures vs. budget**: You could create a chart or table that compares your actual sales figures to your budgeted sales figures for each month. This will help you identify any months where you're falling short of your goals, and allow you to take action to improve performance.
- **Sales figures by region/city**: If you have multiple store locations, you could create a chart or map that shows sales figures by region. This will help you identify any regional trends or opportunities for growth.
- **Product categories vs. sales amount**: Creating a chart or graph that shows product category vs. sales will give you an overview of how each product category is performing. This can help you identify which categories are generating the most revenue for the company and which ones need more attention.
- You can add other information to the dashboard to show your creativity, you can also create a story instead of dashboard.

Remember to keep the dashboard user-friendly and easy to navigate, so that Chris can quickly and easily access the information he needs.The dashboard/story should be created in A4 portrait size and should be saved in a **pdf format** only. Good luck with the project!

NOTE: After creating your dashboard, it is necessary to record a video demonstrating its interactivity and functionality of the created filters. This video will showcase how the dashboard responds to user actions and provide insight into the effectiveness of the filters(refer this document to know more about how to record this video). The recorded video can be shared by either uploading it to your Google Drive and sharing the link or by uploading it to your YouTube channel and sharing the link. This ensures that the video is easily accessible to the intended audience and can be viewed at their convenience.You also have to upload the pdf file to your drive and then copy both the links into one word/ pdf file and share that word/pdf file (**Must be having links of both dashboard and video)** with us.