Challenge Objective

For the **Maven Sales Challenge**, you'll play the role of a BI Developer for MavenTech, a company that specializes in selling computer hardware to large businesses. They've been using a new CRM system to track their sales opportunities but have no visibility of the data outside of the platform.

In an effort to become a data-driven organization, you've been asked to create an **interactive dashboard that enables sales managers to track their team's quarterly performance**.

Deal Stages

"Deal prospecting" involves identifying and evaluating potential opportunities or leads before any formal engagement or negotiation occurs. It's about **finding potential clients or partners who may be interested in doing business with you.**

"Deal engaging," on the other hand, involves actively interacting with those identified prospects to negotiate and finalize a business agreement. It's about **initiating and maintaining communication, presenting proposals, addressing concerns, and ultimately reaching a mutually beneficial agreement.**

"Deal won" refers to successfully closing a business agreement or transaction with a client or partner. It means that the negotiations were successful, terms were agreed upon, and **the deal was finalized, resulting in a positive outcome for the company**.

On the other hand, "deal lost" refers to a situation where a business agreement or transaction fails to materialize despite efforts to negotiate and finalize terms. It means that **the company was unable to secure the deal, either due to competing offers, disagreement on terms, or other factors.**

Data Transformation

1. **Data Extraction**: Extracted data from four Excel files containing sales information. The data includes four files- accounts gives details of the each company, product gives details of each product such as price and series, sales teams gives details of sales agent, manager and region of each, sales pipeline includes detail of each deal happened in 2017 such as revenue, time to close a deal, stage is deal, etc.

2. **Data Transformation**: Cleaned and shaped the data using Power Query. Applied transformations like formatting data types to prepare the data for analysis. Conducted operations such as removing duplicates, renaming columns and replacing values. Created a separate date table.
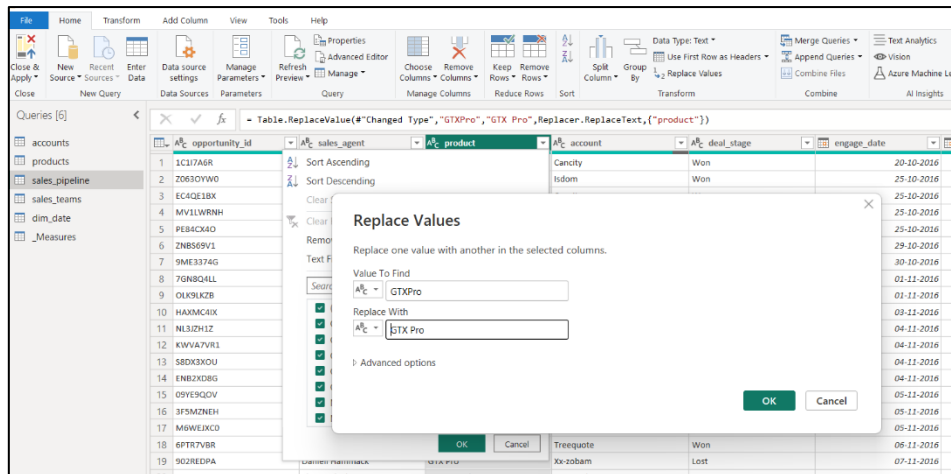
3. **Data Modelling**: Created relationships between related columns. Defined calculated columns and measures using DAX for additional insights into the data.

Data Model View
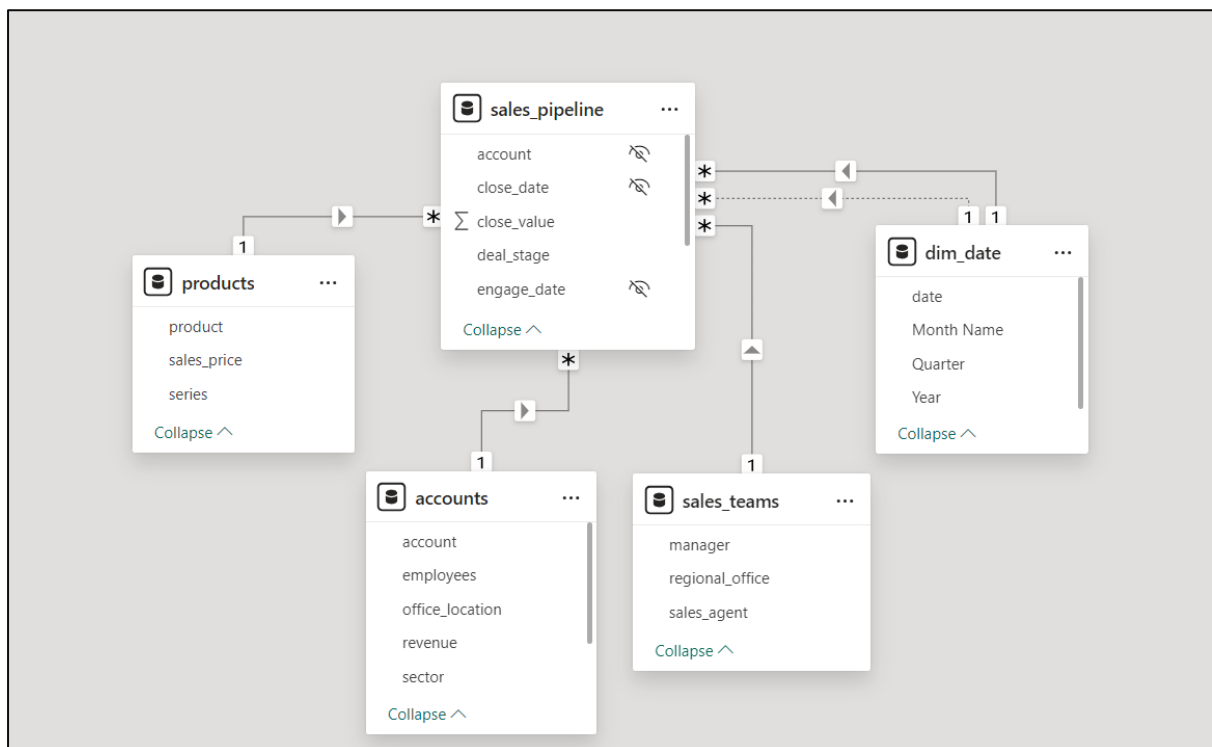
4. **Report Designing and Visualization**: Selected appropriate visualization types from the Visualizations pane. Designed the layout of the report, arranging visuals in a logical and intuitive manner. Added titles, subtitles, and other text elements to provide context and guidance. Ensured consistency in formatting and styling throughout the report for a professional look.

5. **Adding user-friendly features in report**: Implemented dynamic tooltips to provide additional context and information to users on hover. Configured tooltips to display relevant details based on the data being visualized, enhancing user understanding and interaction. Created page navigation to facilitate seamless exploration across different sections of the report. Added buttons or links to navigate between pages, allowing users to easily access specific insights or analysis.

Important Metrices

Deals Win: This measure calculates the total number of deals that have been won by the company. It counts the number of deals where the outcome is marked as "won". This measure helps track the success rate of closing deals. Knowing the total number of deals won provides a clear indication of the company's ability to convert leads into closed deals. It is a fundamental metric for assessing overall sales performance and evaluating the effectiveness of sales strategies.

Win Percentage: This measure calculates the percentage of deals won out of the total number of deals pursued (won/lost). I haven't included deals which are engaging or prospecting. It offers insights into the efficiency and effectiveness of the sales process. A high win percentage indicates strong sales performance and efficient use of resources, while a low win percentage may indicate areas for improvement or inefficiencies in the sales process.

Average SCL (Sales Cycle Length): This measure calculates the average length of time it takes to close a deal, also known as the sales cycle length. It is measured in days and is calculated by averaging the sales cycle length for all closed deals. Here I have calculated SCL with respect to won deals. A shorter sales cycle length typically indicates faster deal closures, which can lead to improved cash flow, increased productivity, and better customer satisfaction. Monitoring the average sales cycle length helps identify bottlenecks, streamline processes, and optimize resource allocation.

Revenue from Each Deal: This measure calculates the total revenue generated from each individual deal. It sums up the revenue associated with each closed deal. This measure provides insights into the financial impact of individual deals. Knowing the revenue generated from each deal helps assess the value and profitability of different sales opportunities. It enables sales teams to prioritize high-value deals, allocate resources effectively, and focus on opportunities that contribute the most to the company's bottom line.

Average Revenue: This measure calculates the average revenue generated per deal. It is calculated by dividing the total revenue from all deals by the total number of deals. Average revenue per deal is a key indicator of deal profitability and overall sales performance. It represents the average value of each closed deal and provides insights into the company's revenue generation capabilities. Monitoring average revenue per deal over time helps identify trends, track performance against targets, and make informed decisions about pricing, product offerings, and sales strategies.

Important Insights

Top 10 Sales Agent by wins in 2017

Darcel Schecht has highest deals won in 2017. He has 63.1 win percentage with average sales cycle length 49.4 and generated $11,53,214 revenue.

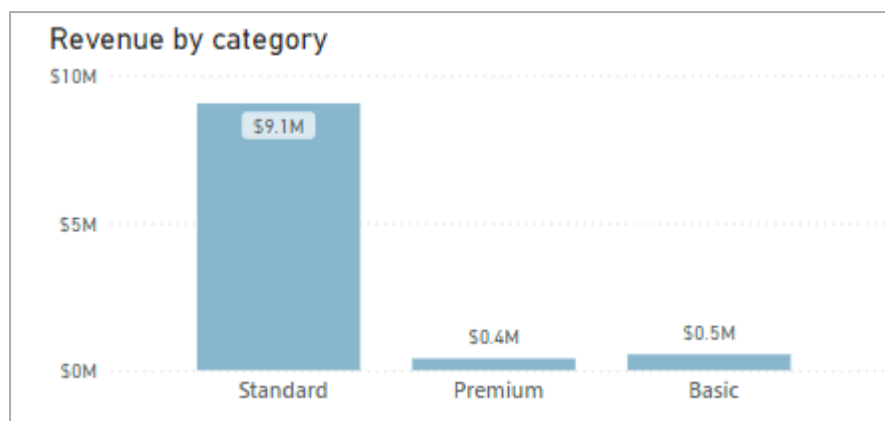| Product by agent	Wins	Win %	Avg SCL	Revenue	Avg Revenue
Darcel Schlecht	349	63.1%	49.4	$11,53,214	$3,304.3
Vicki Laflamme	221	63.7%	53.6	$4,78,396	$2,164.7
Kary Hendrixson	209	62.4%	53.0	$4,54,298	$2,173.7
Anna Snelling	208	61.9%	52.0	$2,75,056	$1,322.4
Versie Hillebrand	176	66.7%	51.8	$1,87,693	$1,066.4
Kami Bicknell	174	64.0%	50.0	$3,16,456	$1,818.7
Jonathan Berthelot	171	64.8%	51.3	$2,84,886	$1,666.0
Cassey Cress	163	62.5%	48.8	$4,50,489	$2,763.7
Zane Levy	161	61.7%	46.9	$4,30,068	$2,671.2
Donn Cantrell	158	57.5%	53.3	$4,45,860	$2,821.9

Revenue by product series

GTX product is generating highest revenue among all products. GTK product is costly among all products hence it's bought by very few companies for specific purpose.
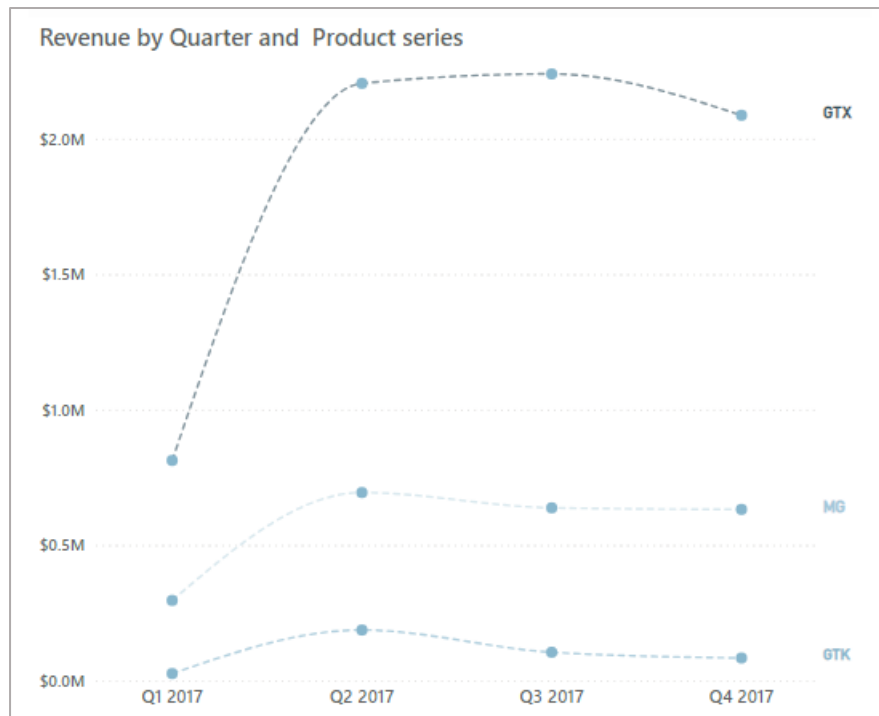
Categorizing revenue in three parts

I have categorised products in three parts according to the price of the products to analyse the impact on revenue by price. Three parts are:
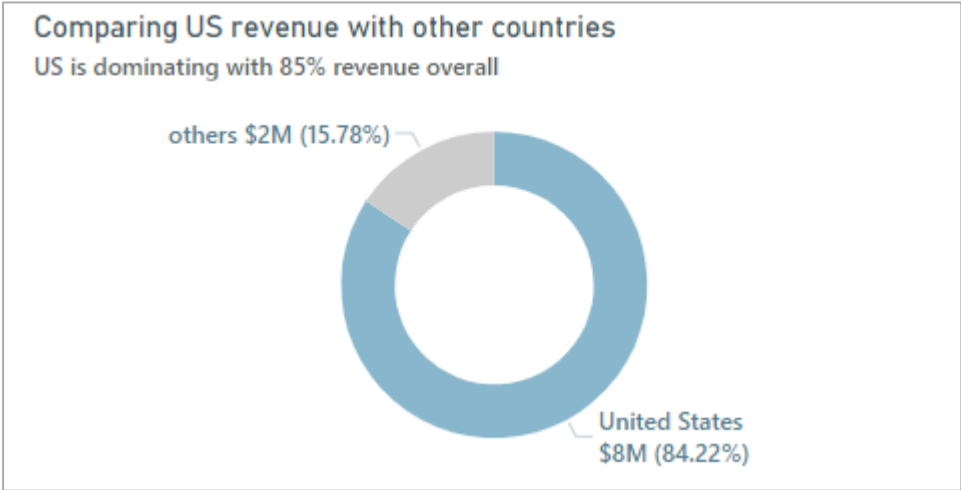
1. Basic which includes products with less price (GTX Basic - price 550 and MG Special - 55)

2. Standard includes products with medium price range (GTX Pro, MG Advanced, GTX Plus Pro and GTX Plus Basic)

3. Premium includes high price products (GTK 500)

Which product is generating highest revenue?

Product	Revenue
GTX Pro	$3.5M
GTX Plus Pro	$2.6M
MG Advanced	$2.2M
GTX Plus Basic	$0.7M
GTX Basic	$0.5M
GTK 500	$0.4M
MG Special	$0.0M
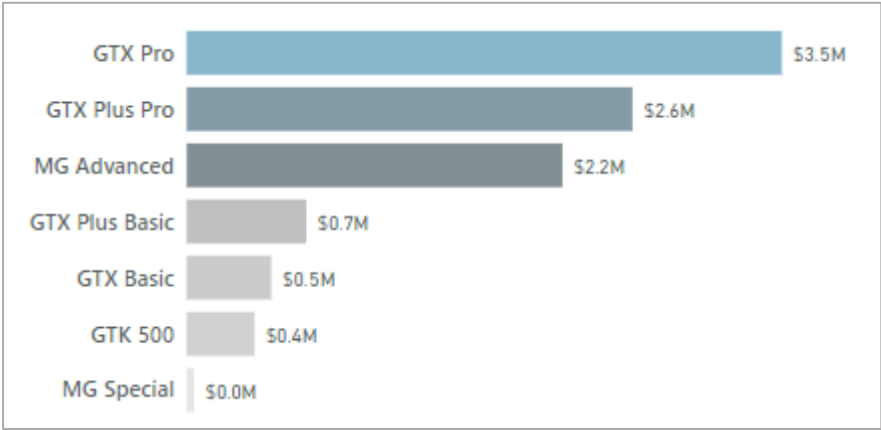
Which country is dominating in generating revenue in computer hardware market in MavenTech company?

Comparing US revenue with other countries
US is dominating with 85% revenue overall

others $2M (15.78%)

United States $8M (84.22%)

Which sectors in US are using MavenTech computer hardware?

Sector	Revenue
retail	$1.45M
medical	$1.16M
software	$1.08M
technolgy	$0.97M
finance	$0.95M
entertainment	$0.69M
telecommunications	$0.65M
marketing	$0.65M
employment	$0.44M
services	$0.39M
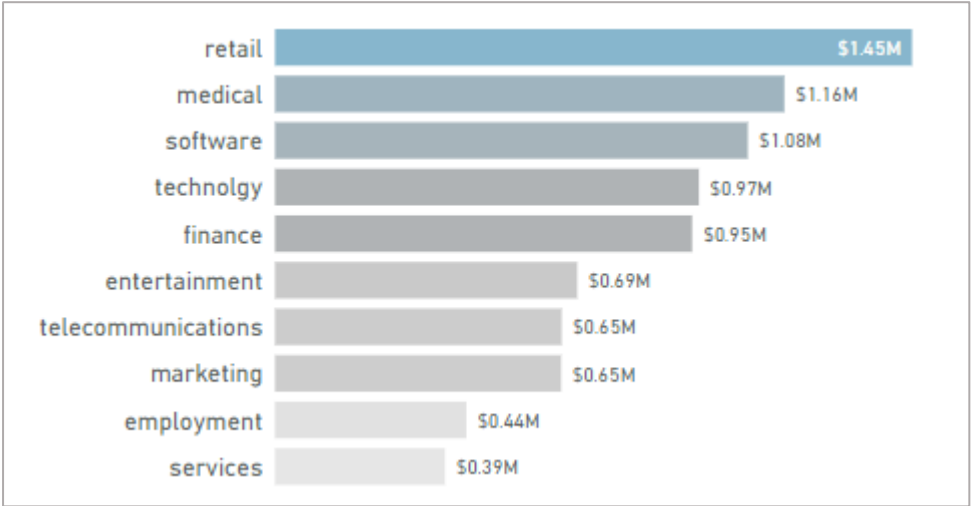
In which other countries does the company sell its products besides the US?

country	sector	Wins	Win %	Avg SCL	Revenue	Avg Revenue
Korea	technolgy	111	57.5%	55.8	$1,94,957	$1,756.4
Panama	technolgy	75	75.0%	59.7	$1,51,777	$2,023.7
Belgium	retail	63	60.6%	59.5	$1,17,463	$1,864.5
Italy	retail	54	62.1%	45.8	$1,14,352	$2,117.6
Kenya	medical	53	61.6%	42.1	$1,07,408	$2,026.6
Jordan	marketing	52	64.2%	49.4	$1,63,339	$3,141.1
Norway	technolgy	50	58.8%	53.9	$1,15,712	$2,314.2
Philipines	medical	50	58.8%	51.0	$90,991	$1,819.8
Japan	retail	46	61.3%	55.7	$1,23,506	$2,684.9
Poland	marketing	45	66.2%	40.3	$1,06,754	$2,372.3
Germany	services	37	72.5%	47.7	$82,622	$2,233.0
China	technolgy	33	68.8%	46.8	$86,690	$2,627.0
Brazil	services	32	61.5%	53.5	$63,103	$1,972.0
Romania	retail	23	56.1%	40.4	$59,905	$2,604.6

Sectors in other countries besides US MavenTech selling products

Sector	Value
technolgy	$0.55M
retail	$0.42M
marketing	$0.27M
medical	$0.20M
services	$0.15M
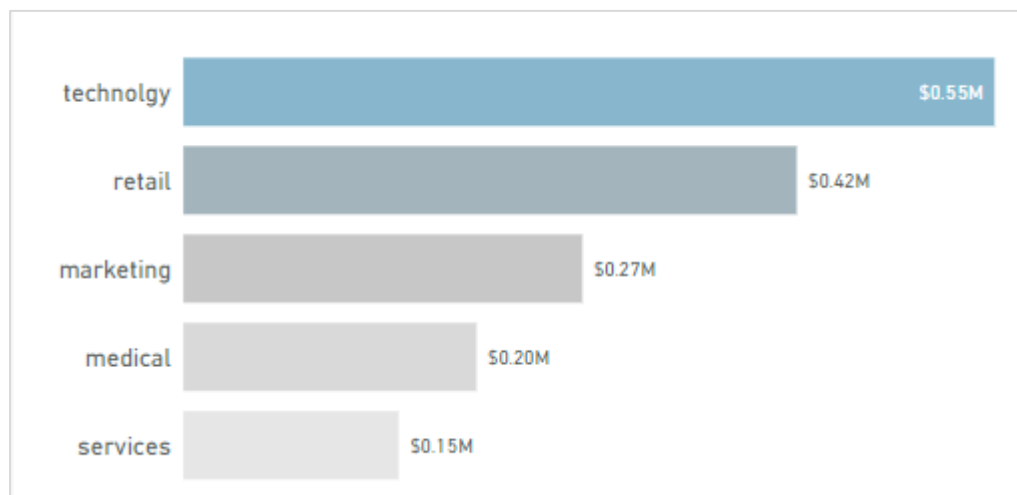
US is the only country where costliest product GTK 500 is sold

	Manager: All			Products: GTK	

country	sector	Wins	Win %	Avg SCL	Revenue	Avg Revenue
United States	entertainment	4	57.1%	58.0	$1,08,498	$27,124.5
	employment	2	100.0%	47.0	$50,033	$25,016.5
	finance	2	66.7%	42.0	$55,406	$27,703.0
	medical	2	100.0%	26.0	$51,131	$25,565.5
	retail	2	66.7%	97.5	$55,237	$27,618.5
	marketing	1	50.0%	120.0	$29,617	$29,617.0
	software	1	50.0%	92.0	$25,791	$25,791.0
	telecommunications	1	50.0%	92.0	$24,899	$24,899.0

Sales agents who sold GTK 500 product

product by agent	Wins	Win %	Avg SCL	Revenue	Avg Revenue
GTK 500					
Elease Gluck	7	58.3%	37.4	$1,84,632	$26,376.0
Rosalina Dieter	5	83.3%	77.6	$1,32,452	$26,490.4
Markita Hansen	3	60.0%	103.7	$83,528	$27,842.7