Data Visualization for TechStacks
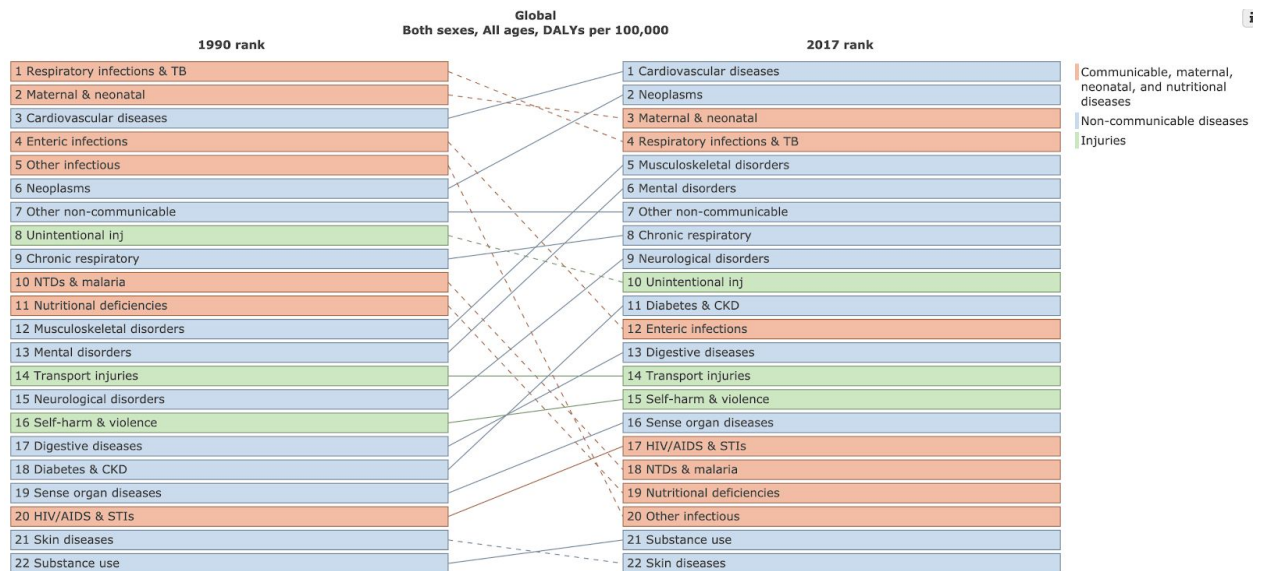
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Group 2

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1. Tracking the trend of products being sold. Compare rankings of products sold over a period of time. This is relevant to our stakeholder because the popularity of products being sold can help the business maximize profit and minimize loss. Understanding market trends can also help the business predict what might change in the future and be better prepared for these changes.
    - Use an Arrow Diagram
        - Pros
            - Clearly see the change in rankings with a side by side comparison with arrows
            - Can categorize products into product types using colors and a legend to compare relationships

Ex.

Global
Both sexes, All ages, DALYs per 100,000

1990 rank	2017 rank
1 Respiratory infections & TB	1 Cardiovascular diseases
2 Maternal & neonatal	2 Neoplasms
3 Cardiovascular diseases	3 Maternal & neonatal
4 Enteric infections	4 Respiratory infections & TB
5 Other infectious	5 Musculoskeletal disorders
6 Neoplasms	6 Mental disorders
7 Other non-communicable	7 Other non-communicable
8 Unintentional inj	8 Chronic respiratory
9 Chronic respiratory	9 Neurological disorders
10 NTDs & malaria	10 Unintentional inj
11 Nutritional deficiencies	11 Diabetes & CKD
12 Musculoskeletal disorders	12 Enteric infections
13 Mental disorders	13 Digestive diseases
14 Transport injuries	14 Transport injuries
15 Neurological disorders	15 Self-harm & violence
16 Self-harm & violence	16 Sense organ diseases
17 Digestive diseases	17 HIV/AIDS & STIs
18 Diabetes & CKD	18 NTDs & malaria
19 Sense organ diseases	19 Nutritional deficiencies
20 HIV/AIDS & STIs	20 Other infectious
21 Skin diseases	21 Substance use
22 Substance use	22 Skin diseases

Communicable, maternal, neonatal, and nutritional diseases
Non-communicable diseases
Injuries

2.Analyze the rate at which services are sold based on service type, customer age, and when it was sold during the year. This would allow stakeholders to identify which services are most popular so that they can invest in improving those services. They can also analyze the sales of services to plan discounts and sales during the year. Finally, they can also examine the relationship between age and the services that are being ordered and create a more effective advertising strategy.

A bubble chart could be used to analyze this information, with the color of the bubbles representing the service type, the axis being the sales generated from those services in a year, and the other axis measuring customer age.

Risk Assessment for Q1 Opportunities

Additionally, service sales can be analyzed through the year using a line graph such as the one included below to monitor the sales of each service category through the year. The x-axis would include each month of the year while the y-axis would measure the sales revenue for each month. The different colors can represent various service types.
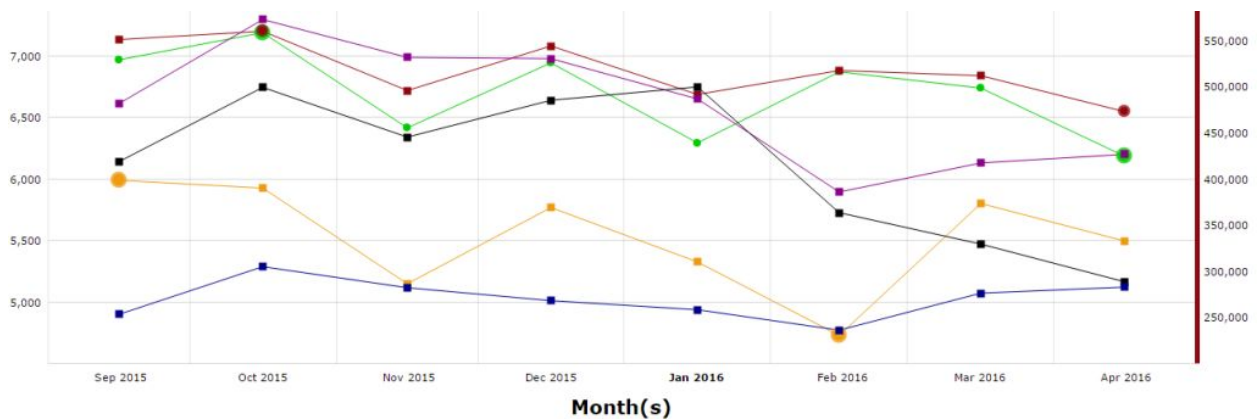
3. Look at the price of the item vs quantity of items sold. This essentially asks the question, "how does price affect the items being sold?" This helps the business to better determine how to price items in the grand scheme of the market. They can then also take into consideration the average price of these items globally to see if they're selling them above or below the average. Modeling this kind of information can increase sales

if done correctly. People are more inclined to buy cheaper prices, and the data can show what the best price would be for both revenue and cost.

Below is an example of a line plot that expresses a specific point's position relative all of the data in the dataset at a particular x axis. The x axis would be price, the y axis would be sales. The thin, dark line represents the store or cluster of stores being assessed and it's sales per price point. The shaded region represents data on all stores' sales and prices for comparison within the market. Lastly, the two colors would be different years.