**DATA FLUENCY**

Data fluency is the ability to work effectively with data, to understand its structure and limitations, and to use it to make informed decisions. As a new manager of a Data Science function in a Financial Services company, data fluency is a critical skill that can be valuable in several ways:

1. Better decision-making: As a manager, you will be responsible for making strategic decisions that impact the business. With data fluency, you will be better equipped to analyze data, identify patterns and trends, and make informed decisions based on the insights you uncover. This can help you to make more effective and data-driven decisions, and to steer the company in the right direction.
2. Improved collaboration: Data fluency can also help you to collaborate more effectively with your team and with other departments within the company. With a deeper understanding of data and how it can be used, you can communicate more clearly and effectively with your team, and can work more closely with other departments to develop solutions and solve problems.
3. Better resource allocation: As a manager, you will need to allocate resources effectively to achieve your goals. With data fluency, you can better understand the data you are working with and identify areas where resources can be most effectively allocated. This can help you to optimize your team's time and effort, and to focus on the areas that will have the most impact.
4. Improved hiring and retention: With data fluency, you can better understand the skills and capabilities of your team members, and can identify areas where additional training or hiring may be needed. This can help you to build a more effective and efficient team, and to retain your top performers by providing them with opportunities to grow and develop their skills.

Overall, data fluency can be a valuable asset for a new manager of a Data Science function in a Financial Services company. By developing this skill, you can make better decisions, collaborate more effectively, allocate resources more efficiently, and build a more effective and motivated team.

**Data Fluency: An Essential Skill for Managers in the Financial Services Industry**

As the volume of data in the financial services industry continues to grow, data fluency is becoming an essential skill for managers in the industry. In this paper, we explore the importance of data fluency and how it can be valuable for new managers of data science functions in financial services companies.

Defining Data Fluency

Data fluency is the ability to work effectively with data, to understand its structure and limitations, and to use it to make informed decisions. This skill involves not only the ability to manipulate data, but also the ability to interpret data and draw insights from it. With the increasing amount of data in the financial services industry, data fluency has become an essential skill for professionals in the field.

Why Data Fluency is Important for New Managers in Financial Services

New managers of data science functions in financial services companies face a unique set of challenges. They must navigate complex data sets, ensure that data is being analyzed effectively and efficiently, and communicate findings to stakeholders across the organization. Data fluency can help new managers overcome these challenges and be successful in their roles.

Better Decision-Making: With data fluency, managers can better analyze data, identify patterns and trends, and make informed decisions based on the insights they uncover. This can help them to make more effective and data-driven decisions, and to steer the company in the right direction.

Improved Collaboration: Data fluency can also help managers to collaborate more effectively with their team and with other departments within the company. With a deeper understanding of data and how it can be used, managers can communicate more clearly and effectively with their team and can work more closely with other departments to develop solutions and solve problems.

Better Resource Allocation: As managers, they will need to allocate resources effectively to achieve their goals. With data fluency, they can better understand the data they are working with and identify areas where resources can be most effectively allocated. This can help them to optimize their team's time and effort, and to focus on the areas that will have the most impact.

Improved Hiring and Retention: With data fluency, managers can better understand the skills and capabilities of their team members and can identify areas where additional training or hiring may be needed. This can help them to build a more effective and efficient team, and to retain their top performers by providing them with opportunities to grow and develop their skills.

Strategies for Developing Data Fluency

There are several strategies that managers can use to develop their data fluency, including:

1. Taking courses on data analysis and visualization
2. Practicing with real-world data sets
3. Collaborating with other professionals in the field
4. Attending conferences and seminars on data analysis and visualization
5. Reading industry publications and academic journals

By developing their data fluency, managers can become more effective leaders and decision-makers in their organizations. They can also help their organizations to stay competitive in an increasingly data-driven world.

Conclusion Data fluency is an essential skill for managers in the financial services industry. With the increasing amount of data in the industry, managers must be able to manipulate, interpret, and draw insights from data to make informed decisions. By developing data fluency, new managers can become more effective leaders, collaborators, and decision-makers, and can help their organizations to stay competitive in an increasingly data-driven world.

**Strategy for Analyzing Umbrella Sales Data**

Step 1: Import the Data The first step in analyzing the umbrella sales data is to import the data from the Umbrella file into a data analysis tool such as Excel, R, or Python.

Step 2: Create a Line Chart for Sales Time Series Data Once the data is imported, the next step is to create a line chart for the sales time series data. The x-axis should represent the time period (in this case, quarterly) and the y-axis should represent the sales revenue. This chart will help visualize the sales trends over time.

Step 3: Add a Four-Period Moving Average To smooth the data and better visualize trends, we can add a four-period moving average to the chart. This will calculate the average sales revenue for each four-quarter period, which will help eliminate any short-term fluctuations in the data.

Step 4: Plot the Data as a Collection of Five Data Series To investigate the possibility of seasonality on a quarterly basis, we can plot the data as a collection of five data series - one for each year. This will help us identify any patterns or trends that repeat on an annual basis.

Step 5: Analyze the Visualization for Seasonality Finally, we can analyze the visualization to determine if there is any indication of seasonality. If we observe a pattern in which sales revenue is consistently higher or lower during certain quarters, then this is an indication of seasonality. For example, if we observe that sales revenue is consistently higher during the second and third quarters of each year, then this suggests that there may be a seasonal demand for umbrellas and weather-resistant gear during the summer months.

In summary, by creating a line chart for the sales time series data, adding a four-period moving average to the chart to smooth the data, and plotting the data as a collection of five data series, we can analyze the umbrella sales data for any indication of seasonality. This analysis can help the manufacturer of umbrellas and other weather-resistant gear to better understand their sales trends and make informed decisions about their product offerings and marketing strategies.

# Step 1: Import the Data

import pandas as pd

data = pd.read\_csv("Umbrella.csv")

sales = data["Sales"]

# Step 2: Create a Line Chart for Sales Time Series Data

import matplotlib.pyplot as plt

plt.plot(sales)

plt.title("Umbrella Sales Time Series")

plt.xlabel("Quarter")

plt.ylabel("Sales Revenue")

# Step 3: Add a Four-Period Moving Average

moving\_avg = sales.rolling(4).mean()

plt.plot(moving\_avg, color='red', label="Moving Average")

plt.legend()

# Step 4: Plot the Data as a Collection of Five Data Series

years = data["Year"].unique()

for year in years:

year\_sales = data[data["Year"] == year]["Sales"]

plt.plot(year\_sales, label=year)

plt.legend()

# Step 5: Analyze the Visualization for Seasonality

plt.show()