PRODUCT SALES ANALYSIS

ARTIFICIAL INTELLIGENCE

Data Collection:

Gather relevant data on product sales. This can include sales records, customer information, inventory levels, and any other data that might be useful.

Data Preprocessing:

Clean and prepare the data. This involves handling missing values, removing duplicates, and converting data into a format suitable for analysis.

Feature Engineering:

Create relevant features or variables that can be used to better understand sales patterns. For example, you might calculate metrics like sales growth, seasonality, or customer segmentation.

Choosing an AI Model:

Select an AI model suitable for your analysis. Common choices include regression models, time series forecasting models, and clustering algorithms for customer segmentation

INTERNET OF THINGS

Data Collection with IoT Sensors:

Install IoT sensors and devices at various points in your sales ecosystem. These sensors could be on products, in-store locations, or in the supply chain. These devices can collect data on product movement, temperature, humidity, customer foot traffic, and more.

Data Transmission:

Ensure that the IoT devices are connected to a network that allows data transmission. This can be a local network or a cloud-based solution, depending on your needs.

Data Storage and Processing:

IoT devices generate vast amounts of data. Store this data securely and process it in real-time or periodically. Cloud platforms like AWS, Azure, or Google Cloud offer IoT services for data management.

Data Analytics:

Use analytics tools to process and analyze the IoT data. You can perform real-time analytics for immediate insights or batch processing for historical analysis. This may involve detecting patterns, anomalies, and trends in sales data.

Sales Forecasting:

Utilize machine learning models and algorithms to forecast sales based on historical data, current IoT data, and external factors. Predictive models can help you make informed decisions about product stocking and inventory management