

PRODUCT SALES ANALYSIS

Phase 1

Problem Definition and Design Thinking

01 . problem Definition :

Product sales analysis is an essential process for any business that wants to improve its bottom line. By understanding how products are selling, businesses can make better decisions about inventory, pricing, marketing, and other key areas. IBM Cognos Analytics is a powerful business intelligence platform that can be used to perform comprehensive product sales analysis

02 . Design Thinking :

A . Analysis Objectives :

Define specific insights and objectives:

Identify top-selling products.

Analyze sales trends over time.

Understand customer preferences and behavior.

B . Data Integration and Transformation:

IBM Cognos facilitates the integration of data from multiple sources, including sales databases, CRM systems, and external data feeds.

Data transformation capabilities enable organizations to clean, normalize, and enrich sales data, ensuring accuracy and consistency.

C . Data Modeling and Preparation :

Users can create data models and define relationships between sales data and relevant dimensions, such as time, geography, and product categories.

This module allows for the preparation of data for subsequent analysis, ensuring that it is in a format suitable for reporting and visualization.

D . Data Collection :

Determine sources and methods for data collection:

Transaction records from sales databases.

Product information from inventory databases.

Customer demographics from CRM systems.

Specify data collection frequency and volume.

E . Visualization Strategy :

Plan the visualization of insights in IBM Cognos:

Design interactive dashboards and reports.

Choose appropriate chart types (e.g., line charts, bar charts).

Ensure data visualizations align with analysis objectives.

F . Actionable Insights :

Identify how insights will guide inventory management and marketing strategies:

Recommend inventory adjustments based on top-selling products.

Suggest marketing campaigns based on sales trends.

Develop customer segmentation strategies.

03 . Design Thinking Stages :

1. Empathize :

Problem Definition: Understand the pain points and challenges faced by sales teams and decision-makers in analyzing product sales data using IBM Cognos.

User Interviews: Conduct interviews with sales teams, managers, and data analysts to gather insights into their needs and frustrations.

2. Define :

Problem Statement: Create a clear problem statement that outlines the specific challenges and objectives of your project. For example, "Improve the efficiency and effectiveness of product sales analysis using IBM Cognos."

User Personas: Develop user personas to represent different types of users and their specific needs.

3. Ideate :

Brainstorming Sessions: Organize brainstorming sessions with a cross-functional team, including sales, IT, and analytics experts, to generate ideas for improving sales analysis.

Ideation Workshops: Use design thinking techniques to foster creative thinking and innovative solutions.

4. Prototype :

Dashboard Design: Create prototypes of interactive dashboards within IBM Cognos that incorporate innovative data visualizations and user-friendly features.

Report Templates: Develop customizable report templates to address various user needs and preferences.

User Stories: Map out user stories to understand how different features and functionalities will benefit users.

5. Test :

Usability Testing: Conduct usability testing with representative users to gather feedback on the prototypes.

Feedback Analysis: Analyze user feedback to refine and improve the IBM Cognos-based solution.

6. Implement :

Development: Develop the final IBM Cognos-based product sales analysis solution based on the refined prototypes.

User Training: Provide training and guidance to sales teams and analysts on how to use the new tools effectively.

7. Evaluate :

Monitoring: Continuously monitor the impact of the implemented solution on sales analysis and decision-making.

Feedback Loop: Maintain an ongoing feedback loop with users to ensure that the solution remains aligned with their evolving needs.

8. Iterate :

Iterative Improvement: Use iterative cycles to make further improvements to the IBM Cognos solution based on user feedback and changing business requirements.

Scaling: Consider how successful elements of the solution can be scaled to benefit other departments or regions within the organization.