



INSTITUTE OF HEALTH MANAGEMENT RESEARCH

THE IIHMR UNIVERSITY, JAIPUR

DEVELOPMENT OF A HEALTHCARE ANALYTICS DASHBOARD

FOR BUSINESS PERFORMANCE EVALUATION AND
REVENUE OPTIMIZATION IN DIAGNOSTIC SERVICES



MBA IN HEALTHCARE ANALYTICS

Academic Batch 2024-26



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SUBMITTED TO

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DATE

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ROLL NUMBER

0015

DEVELOPMENT OF A HEALTHCARE ANALYTICS DASHBOARD

FOR BUSINESS PERFORMANCE EVALUATION
AND REVENUE OPTIMIZATION
IN DIAGNOSTIC SERVICES

A data-driven initiative to build an interactive dashboard for real-time monitoring of sales performance, client metrics, revenue, and business insights across Medanta Labs.



CHALLENGES BEFORE DASHBOARD



Multiple Excel Files

Data scattered across multiple files and formats



Manual Reporting

Time-consuming manual data compilation and reporting



No Single Source of Truth

Lack of centralized and reliable business data



Difficult Target Tracking

Challenges in tracking targets, achievements and gaps



Delayed Decision-Making

Delayed insights leading to slow and reactive decisions



PROJECT OBJECTIVE

To develop a centralized, interactive dashboard that enables **real-time monitoring** of business performance, identifies **revenue optimization** opportunities, and supports **data-driven decision-making**.



ORGANIZATION

Medanta Labs



DURATION

15 March – 15 July 2026



TOOL USED

Microsoft Power BI



DATA SOURCE

LIMS & Business Reports



STAKEHOLDERS

Sales Team,
Sales Admin,
Business Leaders,
Management

DEVELOPMENT OF A HEALTHCARE ANALYTICS DASHBOARD

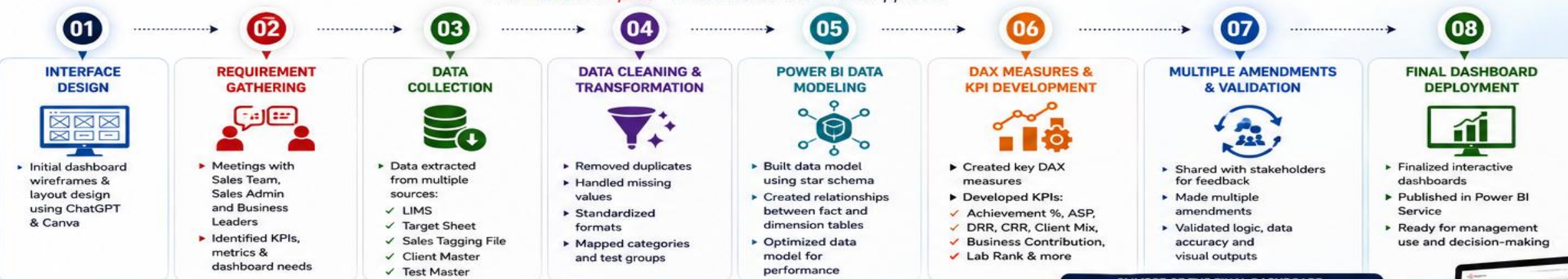
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DASHBOARD DEVELOPMENT JOURNEY

From *Idea* to *Impact* – A Structured & Iterative Approach



WHAT THIS JOURNEY DELIVERED



TECHNICAL EXECUTION

Data Sources, Architecture, Measures and Transformations



1. DATA SOURCES USED



Fact Data (Sales)

Daily test-level revenue, visits, lab, client and billing data



Sales Tagging File

Client mapping, business group and segment tagging



Target Sheet

Monthly target for labs, regions and business groups



Test Mix Master

Test classification into billing categories



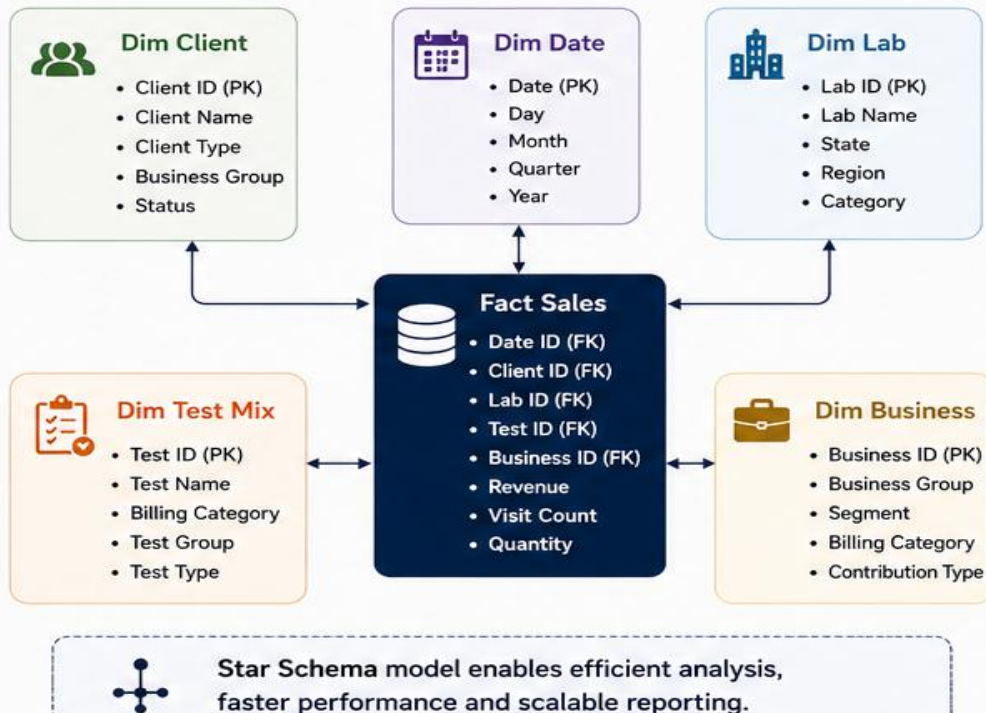
Client Master

Client details, type and onboarding information



All data files were extracted securely from LIMS and internal systems.

2. POWER BI DATA MODEL (STAR SCHEMA)



3. KEY DAX MEASURES & LOGIC



Achievement

SUM(Actual Revenue)



Achievement %

DIVIDE([Achievement], [Target])



ASP (Average Revenue per Visit)

DIVIDE([Achievement], [Total Visit])



DRR (Daily Revenue Run Rate)

DIVIDE([Achievement], DISTINCTCOUNT('Date'[Date]))



CRR (Client Run Rate)

DIVIDE([Achievement], DISTINCTCOUNT('Client'[Client ID]))



Lab Rank

RANKX(ALL('Dim Lab'[Lab Name]), [Achievement])



Client Mix Logic

Categorized as Existing, New, Churn using rules based on client onboarding and transaction history



Business Contribution Logic

Revenue share of each business group based on total achievement



Verification

- Data validation
- Cross-check with source files and stakeholders

4. DATA TRANSFORMATIONS & PROCESSING



Data Cleaning

- Removed duplicates
- Handled missing values
- Standardized formats



Data Mapping

- Mapped tests to billing categories
- Unified client & lab codes



Relationship Building

- Created relationships between fact and dimension tables



KPI Creation

- Built measures using DAX
- Created calculated columns where required



Verification

- Data validation
- Cross-check with source files and stakeholders



OUTCOME:

A robust, well-structured data model with accurate KPIs and business logic formed the backbone of the Sales Intelligence Dashboard, enabling reliable insights and data-driven decision-making.



Accurate Analytics



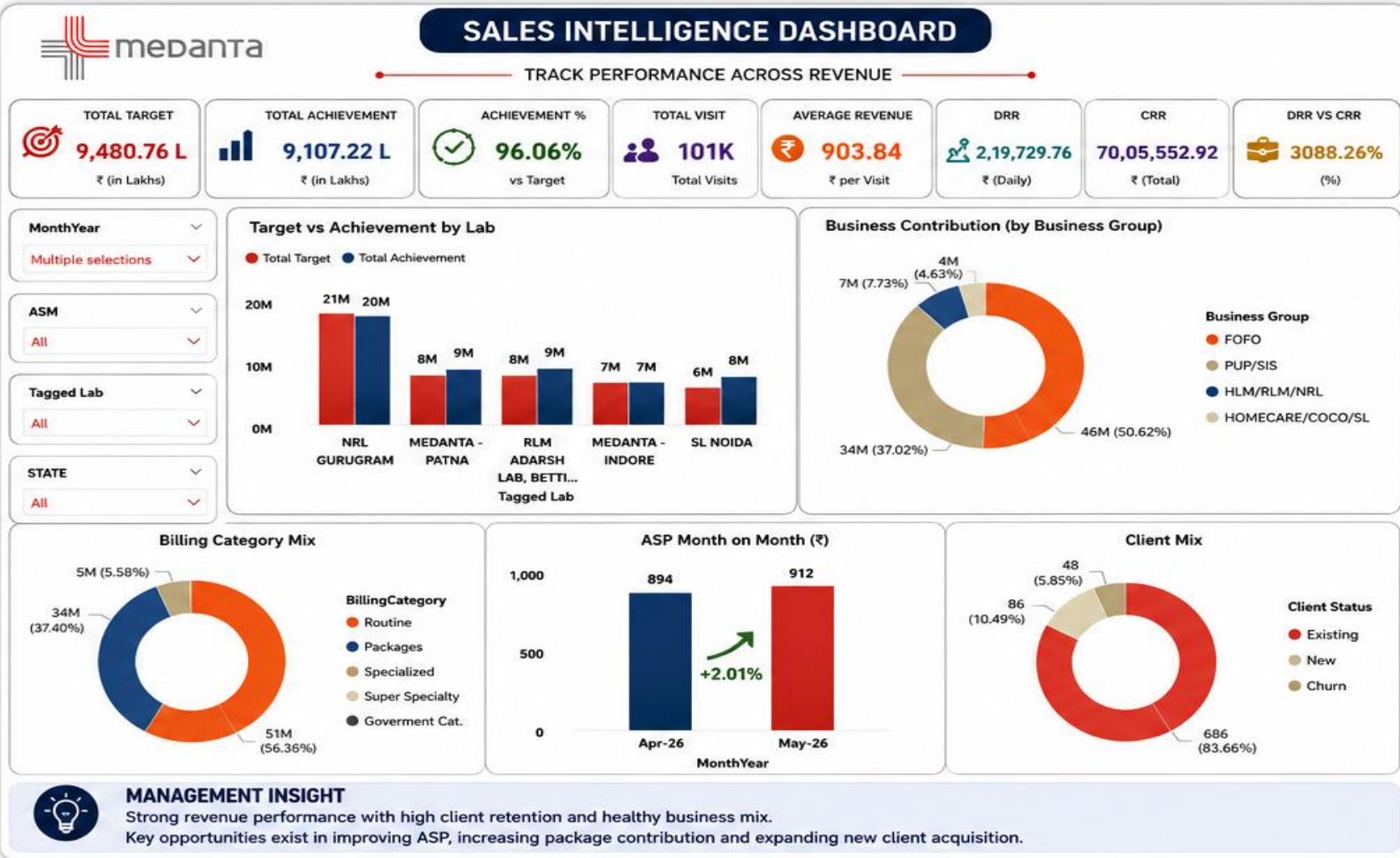
Reliable Data



Faster Performance



Scalable Insights





1. ORGANIZATIONAL IMPACT



Centralized & Single Source of Truth

Integrated multiple data sources into one reliable platform.



Faster & Data-Driven Decision Making

Real-time insights enabled quicker and smarter business decisions.



Improved Business Performance Visibility

Track targets, revenue, clients, labs and segments in real time.



Revenue Monitoring & Optimization

Identified revenue gaps and opportunities to improve ASP and test mix.



Enhanced Client Management

Monitored client retention, new acquisition and churn for better relationship management.



Lab-Wise Performance Analysis

Enabled benchmarking and performance improvement across labs.



2. CHALLENGES FACED & SOLUTIONS

CHALLENGE



Data inconsistency across multiple files



SOLUTION



Data cleaning, standardization and validation



Multiple data sources in different formats



Integrated data from LIMS and business reports



Test classification and categorization



Created Test Mix Master and billing categories



Complex relationships in data model



Designed star schema with proper relationships



KPI logic and measure development



Built DAX measures and business logic



Frequent amendments and user feedback



Iterative development and continuous improvement



3. KEY LEARNINGS



Healthcare Business Analytics

Gained deep understanding of diagnostic business metrics and revenue drivers.



Power BI Development

End-to-end dashboard development with data modeling and visualization.



DAX & Advanced Calculations

Created complex measures, KPIs and dynamic calculations.



Data Modeling & Transformation

Built robust data model and performed advanced data transformations.



Business Intelligence & Insights

Converted raw data into actionable insights for business impact.



Stakeholder Communication

Learned to understand business needs and deliver user-centric solutions.



4. PROJECT IMPACT SUMMARY

“ The dashboard transformed fragmented data into actionable insights, enabling Medanta Labs to monitor performance, identify revenue opportunities and support data-driven decision-making for sustainable growth. ”



96.06%

Achievement %
Strong overall performance



₹ 37.35 Lakh

Revenue Gap
Opportunity to bridge the gap



83.66%

Existing Clients
High client retention and loyalty



+2.01%

ASP Growth (MoM)
Positive average revenue per visit



Top Performer
SL PRAYAGRAJ

Achievement of
166.51% vs Target



WAY FORWARD



Expand dashboard to more metrics



Enhance predictive analytics



Automate data refresh and alerts



Strengthen data governance



Drive continuous business improvement