Introis Technologies

A CASE STUDY

The VOB MIS Dashboard for Apollo Hospitals

Our Goals.

Apollo Hospitals Aimed To Create A Unified Dashboard To Efficiently Manage And Track Support Tickets Across Its Multiple Departments. The Primary Objective Was To Consolidate Data From Existing Tools Like Sapphire And NewGen Into A Single Platform, Streamlining Ticket Tracking And Ensuring Better Oversight. By **Centralizing Ticket Management**, The Goal Was To Enhance Operational Efficiency, Improve Monitoring Capabilities, And Simplify The Process Of Tracking Ticket Statuses Across Departments. Additionally, The VOB MIS Dashboard Was Designed To Provide Visualized Key Metrics, Empowering Stakeholders With Actionable Insights To Make Informed, Data-Driven Decisions.

1. Centralize Ticket Management
2. Consolidate Data From Multiple Tools
3. Enhance Efficiency In Tracking
4. Facilitate Informed Decision-Making

Objectives.

Centralize Ticket Tracking For Enhanced Monitoring Across Departments

The Dashboard Consolidated Data From The Various Ticketing Systems Into A Single Platform, Making It Easier For Staff To View, Track, And Manage Support Tickets From All Departments In One Place.

Ensure SLA Compliance And Reduce Response Times For Improved Customer Satisfaction

By Centralizing Ticketing Data And Providing Actionable Insights, The Dashboard Helped Ensure That Support Teams Adhered To SLAs. This Allows The Managers To Take Proactive Steps In Addressing Any Issues That Could Cause SLA Breaches.

Enable Role-Based Access To Ensure Data Security And Relevance To Users' Roles.

Enabling Role-Based Access Ensures That Users Can Only Access Data And Resources Relevant To Their Specific Job Functions, Enhancing Security By Limiting Exposure To Information To Their Respective Unit Levels. This Approach Helps Maintain Data Integrity While Ensuring That Each User Has The Appropriate Level Of Access Based On Their Role.

Requirement Analysis | Planning | Design | Development | Testing | Support

Requirements Analysis

Planning

Design

Development

Testing

Support

Development Phases.

1. Requirement Analysis

The Team Conducted A Detailed Analysis To Understand Apollo Hospitals' Needs, Which Included:

- **Stakeholder Meetings:** Engaging With Apollo's Support And IT Departments To Document Requirements For Ticket Tracking, SLA Compliance, And Access Controls.
- **Data Mapping:** Outlining The Data Integration Process Between Sapphire, NewGen, And Power BI.
- **Requirement Documentation:** Defining Key Functional Needs, Including Ticket Sorting, SLA Tracking, And Region-Specific Access.

2. Planning

Once The Requirements Were Clarified, The Team Outlined The Project Plan:

- **Milestone Setting:** Defining Timelines For Design, Data Integration, Testing, And Deployment.
- **Technology Stack Selection:** Choosing Power BI For Visualization, Along With APIs For Secure Data Integration.

3. Design

The Design Phase Focused On Creating An Accessible And Efficient Dashboard. Key Deliverables Included:

- **Data Model Design:** Defining Timelines For Design, Data Integration, Testing, And Deployment.
- **Power BI Dashboard:** Choosing Power BI For Visualization, Along With APIs For Secure Data Integration.
- **System Architecture:** Creating API Connections To Integrate Data From Multiple Tools Into Power BI.

4. Development

In This Phase, The Team Built The System According To Design Specifications:

- **API Integration:** Developing RESTful APIs To Connect Power BI With External Ticketing Systems Like Sapphire And NewGen.
- **Dashboard Creation:** Building Interactive Power BI Dashboards, Including Features Like Filtering By Ticket Status, Priority, And Location. Show-Casing Of Scorecards As Per The Region And Units Along With Inter-Linked Filters Enhances The User Experience. The Data Modeling And Transformation Methods Required Us To Ideate And Implement New Thoughts Which We Successfully Pulled Through.
- **Access Control Implementation:** Enabling Role-Based Access To Ensure Data Relevance And Security Based On User Roles. The RBAC Was Implemented Keeping "Security" In Mind As The Data Involves Various Units And Regions, It Was Necessary To Showcase Only The Relevant Required Data.S

5. Testing

The System Was Rigorously Tested To Meet Apollo's Requirements:

- **Unit Testing:** Verifying Individual Modules, Such As API Integrations And Dashboard Components, For Accuracy.
- **Integration Testing:** Ensuring Smooth Functionality Across The API, Database, And Dashboard.
- **User Acceptance Testing (UAT):** Engaging Apollo's Representatives In Testing To Confirm That The Dashboard Met User Expectations.

6. Deployment And Support

The Deployment Of The VOB MIS Dashboard On Apollo's Network Marked A Critical Phase In The Project, Where The System Transitioned From Development To Live Operation, With Ongoing Support To Address Issues And Accommodate Updates Based On Feedback.

This Step Involved Several Stages To Ensure Smooth Integration, Functionality, And Accessibility Within Apollo's Existing Infrastructure.

USED TECHSTACKS

REST API

POWER BI

AZURE ID

Technical Stack.

1. Data Integration

- **RESTful API:** For Data Synchronization From External Systems (Sapphire And NewGen).

2. Dashboard And Visualization

- **Power BI :** Used For Data Visualization, Creating A Central, Interactive Dashboard With Multiple Views And Filters.

3. User Access And Security

- **Role-Based Access :** Structured User Roles (Admin, Regional Manager, Unit Manager, And User) For Secure And Relevant Data Access.
- **Azure AD Integration:** Used For Managing Users And Permissions.

This Technical Stack Was Selected For Its Capability To Handle Data From Multiple Sources, Deliver High-Quality Visualizations, And Provide Secure User Access, Aligning With The Needs Of Apollo's Ticket Management And Tracking System.

Results

The VOB MIS Dashboard Has Met Every Objective And Its Purpose As Follows:

Centralized Ticket Management

Automated SLA Tracking

Enhanced Data Visualization

Role-Based Access Control (RBAC)

- The Centralized Data Allowed Teams To Monitor Ticket Assignments Effectively, Escalations, Enhancing Operational Efficiency, Leading To Faster Response Times And More Efficient Task Allocation.
- The Dashboard Implemented Role-Based Access Control (RBAC), Which Restricted Data Access Based On The User's Job Role. Secure Access Based On User Roles Ensured That Users Only Accessed Relevant Data, Supporting Data Privacy And Compliance
- The VOB MIS Dashboard Was Integrated With Power BI, Has Enabled Advanced Data Visualization, Reporting Capabilities And Empowering Teams To Identify Recurring Issues And Track Performance Metrics. The Dashboard Provided Dynamic And Interactive Reports, Offering Teams At Apollo Hospitals Deep Insights Into Their Operational Data.
- One Of The Standout Features Of The Dashboard Was Its Automated SLA Tracking Capabilities. The System Helped Reduce Response Times And Has Helped To Ensure That All Tickets Were Handled Within The Specified Timeframes, Reducing The Chances Of SLA Breaches And Improving Customer Service Standards.