POLESTAR
..Delivering Excellence

ANALYTICS
DIAGNOSTIC KIT

CUSTOMER TURN AROUND STORY

DELHI INDIRA GANDHI INTERNATIONAL AIRPORT

ABOUR CLIENT: Asia's 5th busiest Airport with as many as 40 million footfall of passengers every year. The Airport is currently operated by **GMR group** having revenue of 6 billion dollars in 2020.

CHALLENGES

Even after investing more than INR 10 Million -

- Reload Job was of 9.5 Hrs which caused unnecessary user Delay due to which user Adoption suffered drastically
- Per Click time on Dashboards was of 3 - 4 mins which reduced user session depth

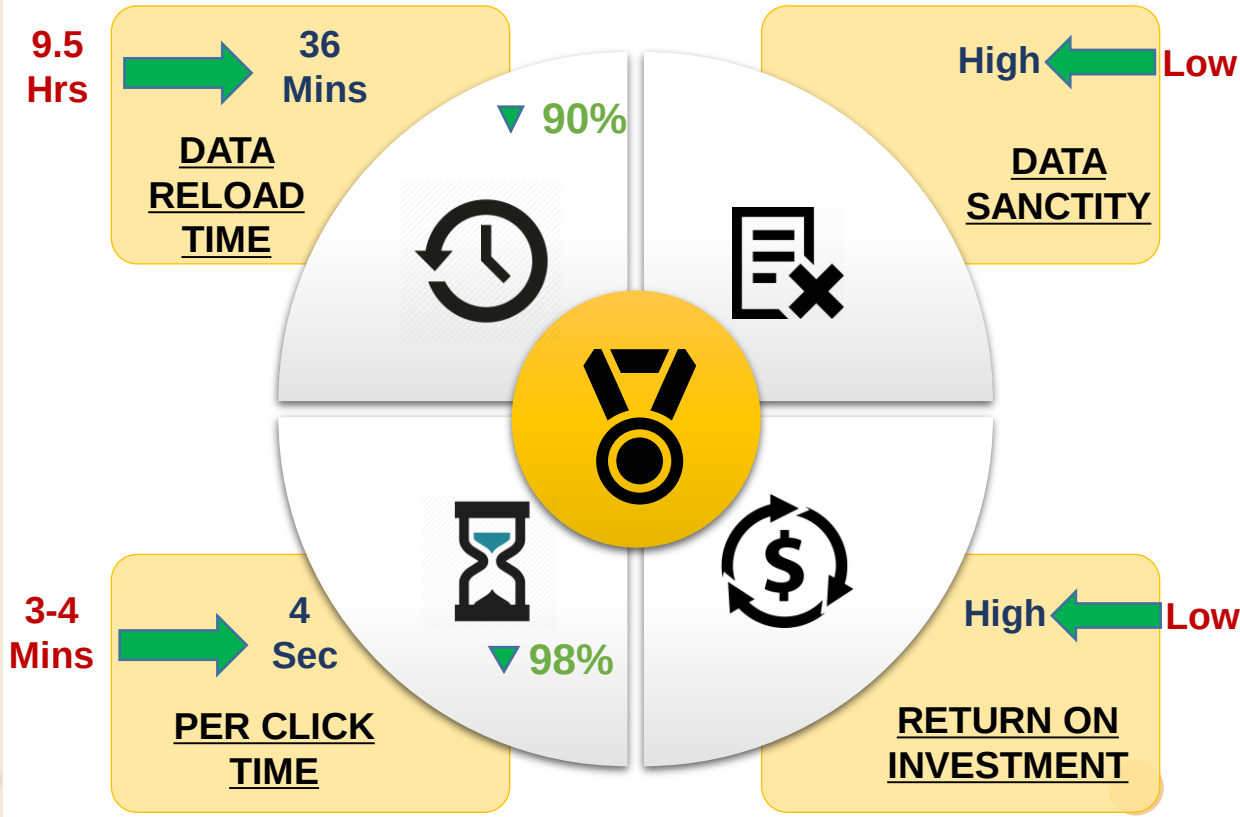
This led to poor feedback for BI Initiative by users.

SOLUTION IMPLEMENTED

- Polestar team diagnosed the current systems and highlighted gaps on Requirement Gathering and Data Modelling.
- Polestar team conducted requirement gathering workshops as well as 1 on 1 sessions - BRD were created.
- ETL scripts were redesigned and best practices were implemented.

OUR APPROACH

BUSINESS BENEFITS

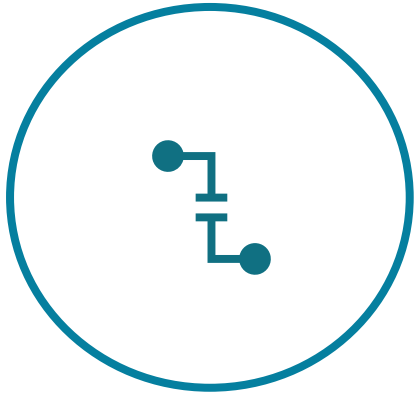


PAIN AREAS WE CAME ACROSS THE MOST

Tools are great only when they are implemented well. Even small inefficiencies in the Implementation can lead to Poor User Adoption and Low Return On Investment.

Long Data Reload Time
Data Reloading taking hours instead of minutes

Slow UI
Selection filter takes a long pause before it applies



Data Inconsistency
Numbers are not matching with Actuals

Lack of Insights
Analysis is not adequate to provide good insights

3 EASY STEPS TO OPTIMIZE YOUR SETUP

Diagnosis

Our expert will understand the existing challenges and take a look at your Analytics implementation in detail. This will help us in identifying issues & bottlenecks in your existing application.

Audit Report

Basis our diagnosis, we'll provide you with our Audit Report. We'll also suggest corrective measures to bridge the gap between best-practices and current set-up (in brief)

Optimization

If you want us to optimize your Analytics implementation, we'll provide the estimated timelines, effort and plan to do the same. Post your approval, the team will start resolving the issues and provide you with the optimized analytics applications

SAMPLE DIAGNOSTIC REPORT

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1 Audit Observations & Findings

1.1 Extraction Layer

This section focuses on the data extraction from various data sources. The data sources being used here are SAP ERP system (primary sales data), Tally (secondary sales data) & excel files.

1.1.1 Full load followed instead of Incremental load

xxxxxxxxx.qvw takes approximately 8 Hours for reload. This is because no incremental load has been written in the application for data extraction. The table fetched in the application contains about 675 million records all of which are extracted every time the application is executed. The output qvd created has a final size of about 2.8 GBs.
Best Practices require incremental load to be used reducing the reload time of the application which is more than 8 hours.

1.1.2 Incorrect Incremental script coded

xxxxxxxxxx.qvw contains incorrect incremental script. The incremental logic created for VBRK is incorrect and extracts data from 2006 onwards. Exist() function is used to get relevant primary keys for which data needs to be extracted from XXXX table. The function works on VBRK primary keys which are pertaining to data from 2006 onwards in turn extracting XXXX table from 2006 as well.
The script being executed needs to be corrected which will reduce the reload time.

1.2 Transformation Layer

This section focuses on the data manipulation practices being used to apply the desired business logics on the raw data extracted from the data sources.

SAMPLE DIAGNOSTIC REPORT

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1.3.7 Flat Tables present in the data model

The data model is completely against the fundamentals of BI reporting as the tables loaded for UI data model are made flat tables which includes all Dimension table fields as is. This impacts not just the rendering of charts but will also consume lot of RAM & CPU. Due to the Flat nature, these tables cannot be even normalized to form a star model with one layer ahead and must undergo complete change to follow best practices of BI reporting.

2 Auditor's Comments

- Incorrect incremental script is being used in data extraction. This leads to increased data extraction time & load or data source server.
- Clear deviation from best practice of Qlik for script writing. Multiple stages of Transformation (data manipulation) been formed contrary to Qlik's Standard Practices.
- Large number of QlikView (.qvw) files are linked to a single task as observed from the QMC due multistaging as described in the previous point.

There are approximately 50 plus such expressions used in the UI layer impacting the UI performance.

1.3.5 Unused fields present in the applications

It has been observed that there are a lot of fields present in both the applications out of which many are neither being used on the UI nor are they key fields. Such fields should be removed from the data model. If they are not being used in the data manipulation operations should not be extracted from the data source itself thus reducing the extraction time.

Examples (Primary Sales) – 100 out of 450 fields are unused (approx.)

Vendor_Designation
Vendor_Email
Vendor_Mobile
Vendor_Name1
Vendor_Name2