

The background of the slide is a blurred image of various financial items: several Euro banknotes (including a 10 Euro note) and gold coins are scattered across the top and middle. In the bottom right foreground, there is a silver-colored metal coin or medallion with a detailed globe design. The bottom of the slide features a solid purple-to-blue gradient bar, and a thin rainbow-colored bar is visible at the very bottom edge.

**SLASHING DATA PROCESSING TIME BY 50%-  
HOW A SMALL FINANCE BANK ACHIEVED  
FASTER INSIGHTS**



Enterprise Data Warehouses (EDWs) are the backbone of data-driven decision making for organizations, especially in the financial sector. By consolidating information from various sources, EDWs empower comprehensive analysis and strategic planning. However, a critical challenge emerges ensuring timely and accurate data flow. Slow data loads, integration failures, and inconsistencies can significantly hinder the effectiveness of an EDW, impacting everything from informed decisions to personalized customer experiences.

Imagine a scenario where your data pipeline sputters. This can significantly hinder your ability to make informed decisions and personalize experiences for your customers. This case study demonstrates the power of a strategic approach to EDW optimization.

## Client Profile

Our client, a scheduled commercial bank in India, provides a diverse array of banking services, encompassing savings accounts, current accounts, fixed deposits, recurring deposits, loans, and other financial products. Tailored to meet the requirements of underserved and unserved segments of the population, these offerings aim to address financial inclusion challenges prevalent in the market.

## Challenges

The client faced significant hurdles in optimizing their Enterprise Data Warehouse (EDW) infrastructure. These challenges included:

- **Data Processing Inefficiencies:** The client encountered low throughput and prolonged job runtimes, impacting the efficiency of data processing. Issues such as archive, undo, and tablespace constraints, along with object inconsistencies, created bottlenecks in the data flow. Additionally, inadequate temp space and buffer configurations exacerbated these challenges, leading to delays in data processing.



- **Connectivity and Database Issues:** Connectivity disruptions and database-related challenges further hindered data integration efforts. JDBC login timeouts, discrepancies in data types, and database slowness impaired the seamless flow of data, affecting the reliability and timeliness of insights derived from the EDW.
- **Informatica Infrastructure Complexity:** The client grappled with several complexities within their Informatica infrastructure. Scheduled issues during application service restarts, connectivity problems for users, and domain configuration issues added layers of difficulty to the management of EDW processes. Moreover, the intricacies involved in user privilege management and folder permissions for executing Informatica objects contributed to operational challenges.
- **Performance Bottlenecks:** Slow data load times and failures in data integration, particularly due to connectivity issues with Informatica and OCI, posed significant hurdles. Long-running stored procedures exacerbated ETL job failures, leading to data inconsistencies and delays in data processing. These performance bottlenecks hindered the client's ability to derive timely insights from their data assets.
- **Locking and Blocking Issues:** Contentions and concurrency problems arising from locking and blocking issues in stored procedures, notably within the Wizard system, further compounded performance challenges. These issues led to degraded performance and prolonged processing times, impacting the client's ability to leverage their EDW effectively.

Addressing these challenges was essential for realizing the full potential of their data assets and driving data-driven decision-making processes.

## Ahana's Solution

To address the identified challenges and optimize EDW load processes, a multi-pronged approach was implemented. This approach involved a series of targeted interventions aimed at improving data flow, resolving connectivity issues, and enhancing database performance.

- **Object Identification and Resolution:** Ahana conducted a system analysis to identify root causes of errors like "Objects No Longer Exist." By running statistics at the dictionary object level, these issues were effectively addressed.
- **Buffer Size Configuration:** Buffer size adjustments at the Data Integration Service (DIS) level specifically targeted slowdowns experienced with BRNET STG loads, resulting in faster completion times.
- **JDBC Login Timeout Resolution:** Configuration changes were made on connection properties at the setting level to optimize connection timeouts and ensure jobs completed within the expected timeframe.
- **Heap Memory Allocation:** To address long-running CBS STG loads, Ahana recommended adjustments to the JVM heap memory size at the DIS level, leading to faster processing times.
- **Network Connectivity Optimization:** The L2 support team identified and resolved network configuration issues and firewall restrictions that were hindering seamless connectivity between Informatica and OCI.
- **Stored Procedure Performance Improvement:** L2 support conducted performance profiling to pinpoint inefficient queries, missing indexes, and locking issues. Collaborating with the L3 team, they optimized SQL queries, implemented necessary indexes, and adjusted transaction isolation levels to improve performance and reduce execution time.
- **Database Locking and Blocking Resolution:** The L2 team employed database monitoring tools, query profiling techniques, and Informatica logs to analyze blocking scenarios. By sharing logs and SQL details with the database administration (DBA) team, they were able to clear blocking sessions and improve overall database performance.

## The Impact:

Ahana's intervention resulted in significant improvements for in our client's EDW operations.

- **50% Reduction in Data Processing Time:** Faster data extraction, transformation, and loading processes enabled quicker access to critical insights for informed decision-making.
- **40% Enhancement in Data Accuracy:** Improved data accuracy minimized errors and ensured data integrity across the organization, fostering trust in data-driven decision-making.
- **Improved Customer Experience:** By enabling faster data analysis, ESFB gained the ability to personalize services, deliver targeted marketing campaigns, and enhance fraud detection capabilities, ultimately improving customer experience within the competitive ESF banking sector.
- **Effective Issue Resolution:** The L2 support team's proactive approach in coordinating with relevant teams, providing resolutions, and delivering Root Cause Analysis (RCA) reports ensured a streamlined issue resolution process.

## Conclusion

By tackling data flow bottlenecks, resolving connectivity issues, and enhancing database performance, organizations can unlock the true value of their data. The results speak for themselves: faster access to actionable insights, improved data accuracy for confident decision-making, and the ability to personalize experiences that keep customers engaged.

Investing in robust data management solutions isn't just about keeping up with the times – it's about gaining a strategic advantage. By optimizing your EDW load processes, you empower yourself to make informed choices, gain a competitive edge, and propel your organization towards data-driven success.

## About Ahana Systems and Solutions

Ahana Systems & Solutions is a leading IT Infrastructure Management Services and Digital Transformation company based in Bengaluru, India. Our expertise extends to a wide range of solutions, including Cloud, RPA, DB & EDW, BI & Analytics, and Application Development. Our 100+ roster of clients relies on us for our deep domain expertise, skilled resource base, and proven partnership with the best technology providers.

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