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INDIA'S LEADING BUSINESS CONGLOMERATE OPTIMIZES DATA ANALYTICS AND CUTS COSTS BY 60% WITH AHANA'S MS FABRIC SOLUTION

Large organizations often face challenges in managing vast amounts of data spread across different systems. Traditional methods for handling data can cause delays in decision-making, errors in reporting, and increased costs. This case study outlines how Ahana helped a leading Indian business conglomerate overcome these challenges by implementing Microsoft Fabric, providing real-time analytics and driving significant cost savings.

Client Profile

Our client, one of India's largest business conglomerates, operates across diverse sectors including footwear, electronics, real estate, chemicals, flex manufacturing, coal mining, and panel products. Their commitment to innovation and excellence has established them as a leader in the panel industry.

The Challenge

Despite their success, the client struggled with managing data across various systems, which made ensuring efficient and accurate reporting a challenge. This hindered their ability to effectively utilize data for informed decision-making. The client encountered several challenges with their data systems:

- **Fragmented Reporting Systems:** Much of their reporting relied on native Excel and CSV files, which lacked the sophistication needed to scale and provide timely, actionable insights.

- **Integration Needs**: Data was spread across different sources like SAP S4 HANA, Oracle, and SQL Server. Integrating data from both on-premises and cloud environments was a complex task, leading to inefficiencies in reporting and decision-making.

- **Absence of Unified Data Model:** Without a unified data model, data consistency was a challenge, and the client was unable to leverage advanced analytics fully.

- **Real-Time Analytics Requirements:** The client needed a platform that could handle real-time analytics alongside batch processing and AI/ML workloads, which was crucial for staying competitive in their industry.

- **Cost-Effective Solutions:** The client was looking for a scalable, cost-effective platform that would avoid vendor lock-in while ensuring future growth.

Our Approach

Our team of Senior Business Analysts conducted extensive research through multiple visits to the client's production teams and stakeholders. Key steps included:

- **LDM and FSD Development:** Developed a Logical Data Model (LDM) and Functional Specification Document (FSD), tailored to meet the client's complex data integration and reporting needs. This step ensured that all data sources could be integrated efficiently and consistently.

- **Parallel Deployments and UAT:** Conducted a series of parallel deployments with the client's IT teams to ensure seamless integration with their existing systems. User Acceptance Testing (UAT) was carried out to validate the solution against business requirements and to ensure it met the client's expectations.

- **Medallion Architecture:** Implemented the Medallion Architecture, which divides the data processing pipeline into three layers: Bronze (raw data), Silver (refined data), and Gold (final, analytics-ready data). This approach ensured better data quality and optimized data flow.

- **Data Governance and Security:** Incorporated strong data governance practices, including metadata management, data lineage tracking, and stringent security measures, to ensure the integrity and security of the data at all times.

Ahana's Solution

Our Data Analytics Presales and Solution Architect team thoroughly analyzed the client's data needs and selected Microsoft Fabric for its efficient handling of batch processing, real-time analytics, and AI/ML workloads. Its robust data orchestration, governance, and security features made it the perfect solution to meet the client's requirements.

- **Integration Needs:** Designed a modern, unified data platform architecture that integrates open table formats (Delta Lake and Iceberg) for efficient data management.

- **Absence of Logical Data Model:** Developed a Logical Data Model (LDM) and Functional Specification Document (FSD) based on over 45 reports and complex dashboards.

- **Real-Time Analytics Requirements:** Chose Azure Fabric to support batch processing, real-time analytics, AI/ML workloads, data orchestration, governance, and security.

- **Cost-Effective Solutions:** Leveraged the SaaS platform's pre-built components and notebooks, reducing platform setup efforts and costs while ensuring optimal performance across various data domains.

- **Interoperability with No Vendor Lock-in:** Ensured interoperability to prevent vendor lock-in, providing flexibility for future growth.

- **Comprehensive Analytics Capabilities:** Integrated Power BI with Azure Fabric, offering a comprehensive solution for all data needs, from ingestion to reporting.

This solution marked a seamless transition from fragmented systems to an end-to-end data analytics platform within a short timeline of three to four months.
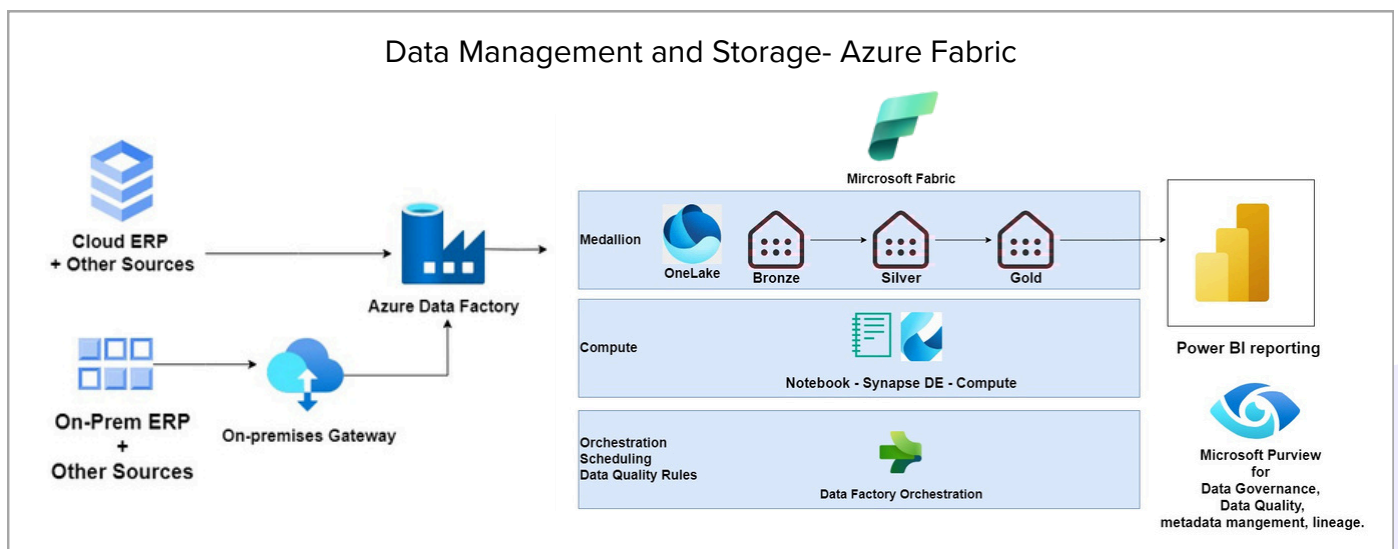
The Impact

The implementation of MS Fabric delivered significant improvements across the organization:

- **Unified Data Platform:** The client transitioned from a fragmented, Excel-based reporting system to a unified, modern data platform. This enabled them to access real-time analytics and insights, improving decision-making processes across the organization.

- **Improved Efficiency:** Power BI dashboards automated reporting, cutting down manual reporting efforts significantly and providing real-time insights for operational decisions.

- **Faster Decision-Making:** With real-time analytics and seamless data integration, the client could make quicker, data-driven decisions, leading to improved operational efficiency and responsiveness to market changes.

- **Achieved Cost Savings:** The solution helped the client reduce wastage management costs by 60%, optimize labor and materials management, and improve overall supply chain efficiency.

- **Enhanced Quality Management:** Data-driven insights allowed for improved quality management, with a threefold increase in quality control efficiency within production plants.

Conclusion

The modernization of data architecture is essential for organizations aiming to fully leverage their data capabilities. By implementing a Unified Data Platform, Ahana enabled the client to transition from fragmented reporting systems to a robust analytics framework. This transformation not only streamlined processes but also enhanced data governance and provided real-time insights, while reducing costs.

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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