

Optimizing Workforce Data and Onboarding for a Global AI Engineering Leader

ABOUT CLIENT

- A global leader in AI-powered quality engineering solutions, helping brands transition from traditional testing to innovations like automation, AI, blockchain, and XR.
- The company aims to reduce business risks in digital adoption by offering omni-industry-friendly solutions in technology, finance, healthcare, and defense
- With over 7k+ engineers and 400+ B2B, and B2C customers globally, they ensure end-to-end value, operating across regions like the US, UK, Germany, and Asia.

PROBLEM STATEMENT

The company highlighted multiple challenges in its current recruitment workflow when we first sat together for a discussion. Here are the key issues we identified:

Visualization Needs:

The client required advanced data visualizations, more streamlined to say the least, to track and analyze HR data, including employee performance and hiring trends.

Onboarding Automation:

We found the need to streamline the onboarding process to reduce manual work, improve efficiency, and enhance new employee integration.

Performance Issues with Large Datasets:

Working with large datasets (10-15 GB), the client faced slow data processing and visualization. Optimization was needed to improve system performance and refresh rates.

Hiring Data Consolidation:

The client's hiring data came from multiple sources (LinkedIn, Naukri, SuccessFactors), requiring a consolidated approach to improve data analysis and management.

Learning and Development (L&D) Tracking:

The client came to us for a solution to effectively track employee participation, progress, and outcomes in L&D programs to align with organizational goals.

Industry

Technology & Software

Services Used

- Azure Data Engineering
- Business Intelligence (BI),
- Data Analytics
- Data Warehousing
- Digital Transformation
- ETL
- Power BI

Region

North America

Function/Department

- Human Resources (HR)
- Operations Management

Engagement Model

Staff/Resource Augmentation

SOLUTION

Our experts implemented a robust, streamlined workflow to address the company's HR data management and analytics challenges. Here's how our team of experts solved their issues:

Optimized Data Model:

- Reduced dataset size from 10-15 GB to under 1 GB by optimizing the data model, resulting in faster processing and visualizations in Power BI.

Data Consolidation for Hiring:

- Collected data from LinkedIn, Naukri, and SuccessFactors, and created an ETL pipeline with Azure Data Factory and Databricks, ensuring a single source of truth for hiring data.

Onboarding Automation:

- Developed a workflow with Power Automate to send automated emails and tasks to new hires, integrated with HR systems like ADP and Anaplan for smooth onboarding.

L&D Program Tracking:

- Created a Power BI dashboard to track course enrollments, completion rates, and skill improvements, sourced from SharePoint and processed through Power Query.

TECHNICAL ARCHITECTURE



Our experts implemented a robust, streamlined workflow to address the company's HR data management and analytics challenges. Here's how our team of experts solved their issues:

Data Sources:

- **Hiring Data:** LinkedIn, Naukri, SuccessFactors, ADP, Anaplan
- **L&D Data:** SharePoint and SuccessFactors (course details and completion tracking)
- **Performance & Attendance Data:** Collected from internal HR systems and stored in Azure

Data Processing:

- **Power Query:** Data cleansing and preparation (filtering unnecessary data)
- **Azure Data Factory (ADF):** Automated data extraction from sources
- **Databricks:** Used for complex transformations and optimizations, with Delta Tables for efficient querying and storage

Data Storage:

- Data is stored in Azure Block Storage, managed using Databricks Catalog
- Power BI datasets and dataflows are used for visualization, with Delta Tables ensuring fast data retrieval

Data Visualization:

- **Power BI:** Used for advanced dashboards to track performance, attendance, hiring trends, and L&D success
- Custom visuals to display workforce trends, distributions, and metrics for easy insights and reporting

BUSINESS IMPACT

Accurate Workforce Data:

100% accurate tracking of employee headcount, gender, and diversity metrics.

Resignation Monitoring:

90% real-time insights into active resignations, improving retention strategies.

Hiring Efficiency:

85% improvement in tracking hiring demand, and optimizing resource allocation.

Optimized Recruitment Funnel:

80% improvement in tracking candidate journeys, making recruitment more efficient.

Enhanced Recruitment Source Reporting:

75% improvement in analyzing recruitment sources, leading to better sourcing strategies.

Increased Candidate Feedback Insights:

70% more feedback was captured, improving the recruitment experience.

Enhanced L&D Tracking:

95% clear tracking of course enrollments, 90% better reporting on ongoing training, and 85% improvement in understanding course impact.

Candidate Support System:

90% functionality in the ticketing system, speeding up query resolution.

Seamless Onboarding Automation:

100% automated email workflows, ensuring timely communication for new hires.

The system improved key HR functions by making workforce tracking accurate and resignation monitoring easier. Recruitment became faster, with better tracking of candidates and sourcing. Learning and development tracking got clearer, showing enrollment and course impact. The ticketing system solved queries faster, and onboarding automation ensured timely communication for new hires

