Streamlining Employee Attendance Tracking with AWS

for a US based Biotechnology Company

About the Customer

A US based leading biotechnology company, is renowned for its groundbreaking medical innovations. With a vision to make a significant impact on people's lives, customer continuously strives to enhance its operations. One area of focus was employee attendance tracking, which posed challenges in terms of efficiency, data management, and visualization.

- **100 Best Companies To Work (Fortune Magazine 2022)**
- **13,500+ Employees**
- **40+ Medicines on the Market**
- **20K+ Patents Received**
- **39 FDA Breakthrough Therapy Designations**

Key Challenges

Customer faced the following key challenges in managing employee attendance:

Efficient Attendance Tracking

Manually tracking employee attendance through badge swipes was proving to be cumbersome and time-consuming.

Secure Data Management

Storing and managing vast amounts of employee attendance data required a robust and secure solution.

Comprehensive Dashboard

Creating a centralized dashboard for easy access and visualization of attendance data was essential for informed decision-making.

Data Integrity and Reliability

Ensuring the accuracy and reliability of attendance data was crucial for making data-driven decisions.

Business Solution

To address these challenges, customer partnered with Incedo to implement a state-of-the-art attendance tracking solution leveraging AWS services. This solution encompassed the following components

Data Integration and Collection

Badge swipe data from the on-premises SQL Server was integrated seamlessly using AWS Glue, ensuring data integrity and security through Amazon VPC.

Effective Communication and Notifications

Amazon SES was utilized to send timely and important notifications to employees regarding their campus presence.

Data Storage and Visualization

Processed attendance data was stored efficiently in Amazon S3, offering scalable and durable storage. Amazon Redshift powered data visualization, enabling the creation of the Tableau Dashboard. AWS CloudWatch provided logging and monitoring to maintain system integrity and performance.

Automated Data Processing and Loading

AWS Lambda automated the transfer of data to AWS Redshift, triggered by changes in S3 data. AWS Secrets Manager securely managed credentials, enhancing data security.

AWS Services and Technology Stack

The solution employed a combination of powerful AWS services:

- ▶ **AWS Glue:** Data integration
- ▶ **Amazon VPC:** Secure connection
- ▶ **AWS Lambda:** Automated data loading
- ▶ **AWS Secrets Manager:** Credential security
- ▶ **Amazon SES:** Communication
- ▶ **Amazon S3:** Scalable storage
- ▶ **Amazon Redshift:** Data visualization
- ▶ **AWS CloudWatch:** Logging and monitoring

Business Impact

The implementation of this solution yielded several positive impacts on customer's attendance tracking and reporting process, directly aligning with the established success metrics

Real-time Attendance Insights and Manager Reporting:

- The Tableau Dashboard provided managers with real-time access to employee attendance data (100% data capture), enabling them to identify trends and address any issues promptly.
- All managers received email reports and Dashboard access for their respective employees (100% manager reporting).

Enhanced Decision-making and KPI Accuracy:

- Managers could make informed decisions regarding employee attendance patterns, resource allocation, and overall workforce management (95% KPI accuracy).

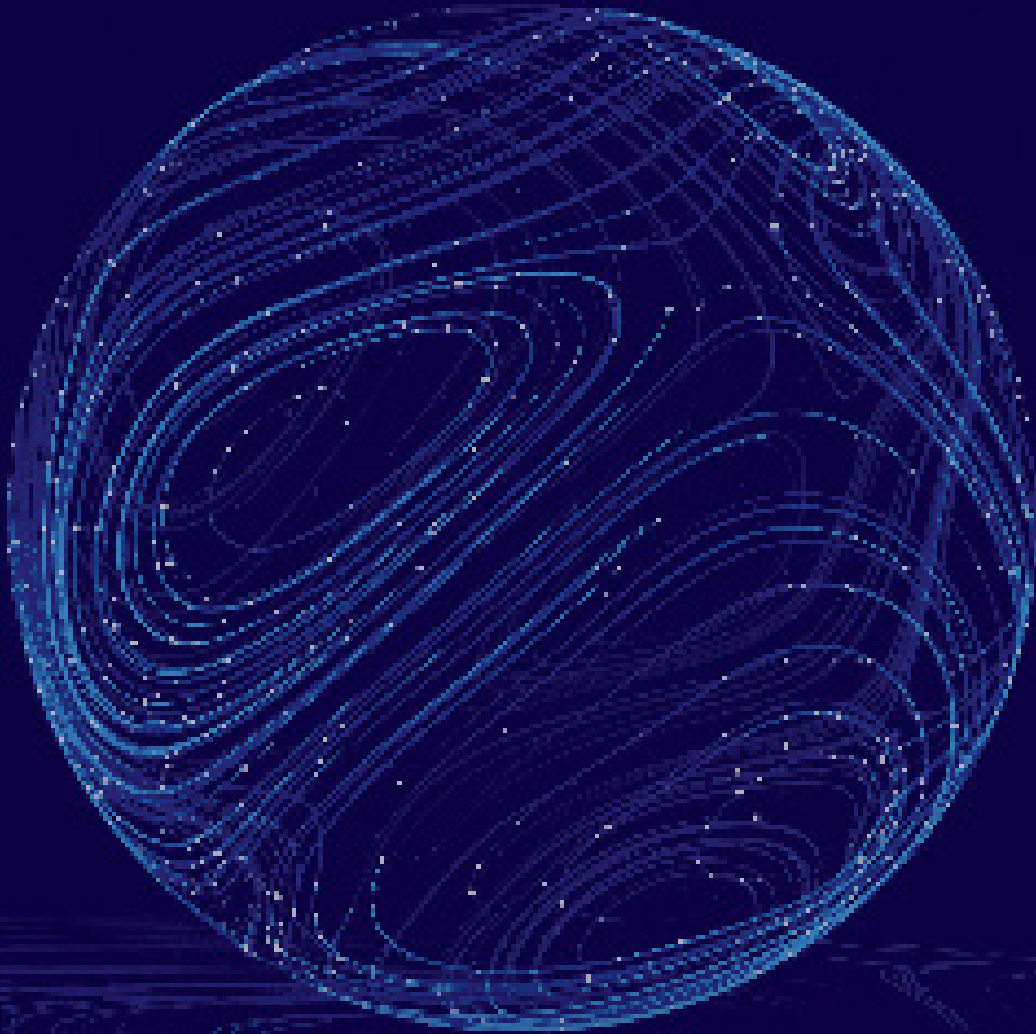**Improved Communication and Collaboration:**

- Timely notifications and centralized data access enhanced communication and collaboration among managers and employees (streamlined attendance tracking).

Streamlined Attendance Tracking and Daily Data Loads:

- The automated data processing and loading eliminated manual data entry, saving time and reducing errors (daily data loads).

Transforming Data Processing and Modernizing Rewards Management Application

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About Incedo

Incedo is a digital transformation expert empowering companies to realize sustainable business impact from their digital investments. Our integrated services and platforms that connect strategy and execution, are built on the foundation of Design, AI, Data, and strong engineering capabilities blended with our deep domain expertise from digital natives.

With over 4,000 professionals in the US, Canada, Latin America, and India and a large, diverse portfolio of long term, Fortune 500 and fast-growing clients worldwide, we work across financial services, telecom, product engineering, and life sciences industries.

9+
Fortune 500 Customers

10+
Global Locations

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