

Energy Storage Solutions Company Improves Reporting Capabilities with Migration to the Cloud



Introduction

In today's fast-paced digital world, relying on outdated data management methods like Excel can lead to a multitude of issues for large organizations. Cumbersome updates and limited reporting capabilities can hinder the end goal of efficient and effective data management. To overcome these challenges, modern cloud-based applications work as a gateway for advanced reporting capabilities, improved efficiency, reduced risk, and provide faster, more accurate, and secure data storage. By adopting these applications, organizations can stay ahead of the curve and maximize their potential for success in an increasingly competitive landscape.

About the Customer

Our client's expertise in the renewable energy sector is highly respected, having successfully delivered over 150 projects globally over a span of 15 years. Their extensive experience enables them to provide customized solar and energy storage solutions to utility, commercial, industrial, and public sector clients. Furthermore, the client's commitment to sustainable and innovative solutions has earned them the reputation of a reliable and trusted partner. Their team of highly skilled professionals is dedicated to delivering exceptional results, making them a top choice for clients seeking clean energy solutions.

Challenges

Like many large organizations, our customer aims to make informed decisions based on data related to their ongoing projects. To achieve this, they sought a comprehensive understanding of key project details, including timelines, budgets, and allocated resources. The client's goal was to obtain precise and comprehensive reports to support informed decision-making. However, the use of Microsoft Excel to store data hindered the reporting process due to:

- Collection of data was prone to human error
- Limited scaling capability to accommodate large amounts of data
- Difficulty in updating and tracking constant changes by various stakeholders
- Lack of security or restriction of access to data as per roles
- Inability of stakeholders to work on the data together in real-time

Business Objective

The client had built a legacy application. The purpose of this application was to serve as the primary source of data collection and processing before the client sought to use Microsoft Excel. The Solaris application was built using Microsoft Access, including its database and user interface components such as forms and reports. CloudMoyo proposed that the client migrate these from on-prem platforms to Microsoft Azure. This would then help create a single source of truth simplifying the data extraction process. With the implementation of the solution, the client expected an increase in data processing and real-time data collaboration.

Solution

CloudMoyo resorted to a complete revamp of the system responsible for generating accurate and rich Power BI reports. We provided a customized solution using Power Apps, Azure SQL Server, and Power BI for analytical reporting:

- Developed an application using Power Apps for an intuitive UI, with the backend supported by SQL Server as a database hosted in Azure and Power BI
- Created an Operational Data Source (ODS) hosted on Azure as a new database for analytics and connected to application for Power BI
- Designed database schema based on the business use case, and the existing MS Access database
- Redesigning the database structure to integrate the data in various forms
- Migration of data from MS Access database to Azure SQL server database, and change in database structure to add missing columns from MS Access
- Grouping of data based on functional data points
- Improved form presentation using PowerApps with a master table and drop-down function for user convenience
- Restricted field-level security to access data based on the roles

Value Delivered

CloudMoyo's implementation has revolutionized the way the client collects, manages, and analyzes data by providing a more efficient application and enabling valuable insights for decision-making. The new system established by CloudMoyo has numerous benefits for the client:

- Improved reporting capabilities for informed decision-making
- Highly scalable system to accommodate large amounts of data
- Real-time collaboration for efficient decision-making
- Automated data collection and restricted access ensure data accuracy
- Increased team efficiency and faster project delivery
- Single source of truth simplified data extraction for Power BI
- Cost savings by reducing the need for on-prem infrastructure

About CM

CloudMoyo is a global digital engineering firm headquartered in Bellevue, WA, with an innovation center in Pune India. We're at the intersection of cloud and AI for enterprises across manufacturing, technology, retail, transportation, distribution, and more.

We work with various partners to deliver innovative solutions. With Icertis, we utilize our domain expertise to accelerate end-to-end, organization-wide contract intelligence business solutions, empowering our clients in self-governance, automatic risk, and compliance monitoring, and AI-based legacy migration. Our partnership with Microsoft allows us to empower our clients in democratizing data, infusing operations with AI, and innovate with cloud-native applications and integrate solutions at litepeed using our CloudMoyo Application-Analytics Framework (CAF). Our customer-focused approach dedicates SMEs and engineers to create a unique team to serve you.

Trusted by our clients to address their unique business needs, whether strategy and design or implementation, CloudMoyo is fueled by the fast-evolving and innovative world of cloud, data, AI/ML, and digital engineering platforms. We're determined to continue supporting our customers in transforming with resilience and thriving despite the challenging macroeconomic outlook ahead. Our track record includes developing enterprise solutions for a variety of clients, including several Fortune 1000 companies.

As a reflection of our FORTE values, CloudMoyo was honored as the Icertis Partner of the Year – Forte Values in 2022. CloudMoyo is also recognized by Seattle Business Magazine as a "Top Company to Work For" for the fourth consecutive year, ranking one on the prestigious list for 2022.

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