

A CORETELLIGENT CASE STUDY

LEVERAGING DIGITAL TRANSFORMATION: A MULTIPHASE CASE STUDY

HOW AN EQUIPMENT LEASING & FINANCING COMPANY LEVELED UP WITH INTEGRATED DIGITAL TRANSFORMATION SERVICES

Application Development | Data Warehousing | Workflow Automation | Visualizations





DIGITAL TRANSFORMATION TOTAL SOLUTION CASE STUDY

Full Service Solution for Equipment Leasing & Financing Client

Coretelligent offers the most sought-after digital transformation solutions requested by financial, life sciences, and professional services clients today, including **Analytics**, **Data Management & Business Intelligence**, **Workflow Automation**, **Compliant Infrastructure for Life Science**, and **Emerging Technology**, **Application Development**, **and Application Integration**. With expertise across multiple technical disciplines, we provide both standalone integrations and comprehensive solutions that address all areas of need.

In this three-part case study, we explore how our client leveraged Coretelligent's full digital transformation capability to maximize the power of our complementary service offerings and transform their equipment and leasing financing lifecycle.

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WEB APPLICATION BOOSTS PRODUCTIVITY

Digital Transformation Begins with User Interface Development

Coretelligent built a web app that uses visualizations and custom assets built with React.js and webpack to optimize business flow for our equipment leasing and financing client. Brokers can now serve customers using a state-of-the-art Broker Portal web application system that employs the latest microservices, data warehousing, and ecommerce technologies packaged in a sleek UI.

CHALLENGE

Our client is an equipment leasing and financing company with customers in construction, healthcare, refrigeration, and other industries. Customers apply for financing through client-approved, third-party brokers who collect and submit applications on their behalf. Our client evaluates the applicant's creditworthiness and creates leasing options based on their findings.



The method for collecting data from brokers was no longer serving the client. Their existing Broker Portal was time consuming, not user friendly, and did not integrate well with the client's Salesforce CRM and other systems. These limitations led to low user adoption and brokers relying on slow, manual processes. Additionally, both brokers and the client were unable to easily gain insights into aggregated data, which made it difficult to analyze the deal lifecycle.

The client's leadership successfully worked on another project with Coretelligent and sought them out for their aptitude in the web application space. Coretelligent was tasked with replacing the existing Broker Portal with a state-of-the-art system employing the latest technologies to produce a best-in-class broker solution.

SOLUTION

Coretelligent led the UI development of the project, gathering requirements, designing wireframes and mockups, and developing the User Interface of the Broker Portal web application.

The team determined the Broker Portal web application would be composed of five distinct micro frontends, or separate user interfaces, that come together under one container app. These components include an application flow section to create new loan applications; a dashboard



WEB APPLICATION BOOSTS PRODUCTIVITY

to track applicant progress; a portfolio to track existing customer and broker data; a deal maker to complete the financing process; and a resource center for Q&A support.

UI Components and Micro Frontends

Application Flow

Previously, brokers submitted applications in a Salesforce-driven UI, but the existing flow was too lengthy, incorporating over 100 fields just to initiate an application. Right away, the team sought to simplify and streamline this process and capture data more effectively while still leveraging Salesforce. A formerly 20-minute process now takes only five minutes to complete.

Applicant Progress Dashboard

Dashboards were created to track an application's progress and subsequent approval or denial.

Applications can be viewed on a case-by-case basis or in bulk. These insights benefit both the brokers, who can track progress from the road, and the client, who can evaluate a broker's progress and identify problems such as a broker with too many denied applications.

Existing Customer Portfolio

Dashboards were added to showcase the total lifecycle of all funded applications, detailing broker management, customer status, payment status, and more.

Deal Maker

A dashboard was created for brokers to easily see and manage deal options for approved clients.

Resource Center

A new, reorganized Resource Center was also created in the Broker Portal. Instead of calling into customer service, Brokers can go directly to the center and pull up information faster for their customers.

React.js and UI libraries plus webpack were used to build the web app and its assets. Each area was developed as a separate micro frontend, creating a series of high-level container projects that all come together as one. The web app was deployed using Azure App Services on the client side.

RESULTS

The new Broker Portal consolidates multiple points of business logic into one flow in a user-friendly, mobile-responsive UI. New dashboards showcase aggregated data to provide insights for both the brokers and the client, all in the same accessible web application. These easy-to-use visualizations provide deep, real-time information about customer's application or deal status. Brokers can now track performance metrics in a user-friendly web app that can be accessed in the office or on the road.

In addition to enhanced insights, the web app also saves time. The application process has been trimmed down from a 20- to now 5-minute process thanks to new web screens. While credit check and other third-party validation systems were previously used for the application lifecycle, they were dealt with as separate functions. Now, these validations are consolidated into the web app, making the entire process more efficient. In addition, prequalification mechanisms were added using business logic to ensure that only qualified customers continue in the application process. This cut down extra work for brokers and saves time and hassle for unqualified prospects.

Microservice architecture and micro frontends were both used in this project. Each allow updates to be made to different parts of the application without impacting the rest. By separating resource development allocations across different projects, a single or set of developers can really focus on a specific micro frontend. This makes development easier and more secure and provides a total end-to-end service.





WORKFLOW AUTOMATION PROVIDES FLEXIBILITY, EFFICIENCY

Created using Microservice Architecture

Coretelligent used microservice architecture create workflow automation that eliminates productivity roadblocks and reduces overhead using Azure serverless functions built in .NET framework using C#. Now users can input and receive data quickly and effectively in a single platform while maintaining privacy, lowering license costs, and making independent modules easier to service.

CHALLENGE

Our equipment leasing and financing client uses Salesforce as a single source of record for business transactions such as new loan applications and equipment financing options. Traditionally, the client's business users would login into Salesforce to access information and perform their daily tasks. This was becoming costly because of the large quantity of individual licenses required. The client sought a solution that would reduce this expense.

The client also wanted to hand off some data entry work to the brokers. As third-party users, brokers did not have direct access into the client's Salesforce CRM; instead, they were expected to submit their data through the existing Broker Portal system. But the existing Broker Portal was not working, leading many brokers to email loan application details and documents to the client's business users, who would then need to manually enter this information into Salesforce. This process not only delayed progress but created more instances of manual errors within documentation. The client wished to provide data input functionality to the brokers so they could submit their applications online through a website that would inject their data directly into the client's database.

Following a thorough evaluation, Coretelligent determined that an overhauled, all-in-one version of the Broker Portal

web application would fulfill the client's needs. The team also recognized opportunities where other third-party systems, which are also part of the deal lifecycle, could be brought into the new business flow, creating a more streamlined application lifecycle.

SOLUTION

In order to capture data from the Broker Portal web application into Salesforce, Coretelligent's microservices experts created a Data API layer on top of Salesforce that allows the website data to directly integrate into the client's CRM. This eliminates the need for multiple costly licenses because access is now available via one integration

BENEFITS

- Reduced costs, by eliminating unnecessary product licenses
- Improved efficiency, thanks to CRM, data layers, and APIs connected in an all-in-one web app
- Faster results, by reducing manual data entry and improving data access while retaining privacy and security



WORKFLOW AUTOMATION PROVIDES FLEXIBILITY, EFFICIENCY

account from a web application. This also works as a security layer within the platform. The Data API provides controlled access to the Salesforce data, giving each Broker the ability to view and change only the data points they are authorized to access.

To accomplish this capability, microservices were built on top of the Data API. These microservices include several Azure functions that leverage the functionality of Data API and also include microservice integrations into different third-party systems which are not married, such as Experian for credit report checks and DocuSign for e-signatures. Now, the client can request or receive credit reports or signed documents without having to go through Salesforce by calling on the microservice to perform the operation. Once the operation is triggered, the data is, in turn, sent to Salesforce automatically. Separate microservices now act as conduits that help deliver the data between each triggered event.

Each microservice was planned and architected individually, since each microservice should function on its own. All microservices were created as Azure serverless functions built in .NET framework using C#. Each microservice powers the separate operations available on the Broker Portal web app, some of which are referred to as micro frontends.

More microservices continue to be created using a phased approach. This is possible due to the independent nature by which microservices are built, having no impact on the rest of the portal as work is being completed. It is also why the application runs so fast.

RESULTS

Disconnected systems previously created barriers that hindered the deal lifecycle. Now, microservices allow all users to input and receive data in a single platform quickly and effectively while maintaining privacy and lowering license costs. With microservices, any application can be built and integrated into the Broker Portal web application. This includes existing systems that brokers may use on their own. Microservices provide flexibility that allows

greater customization that doesn't bind a solution to one specific type of technology. They can also be maintained independently of the main app, allowing maintenance is quicker, lower cost, and less complicated. The scalable solution provides a more fluid process for business users and brokers.

The client's Broker Portal web now includes microservices to support a variety of workflow automation functions, including but not limited to the following APIs:

- Data Access API, for core functions to access Salesforce data
- An e-signature application
- · A consumer credit check tool
- A document completion application
- A payment gateway
- A risk mitigation tool
- Loan terms, parameters, and options determination tool





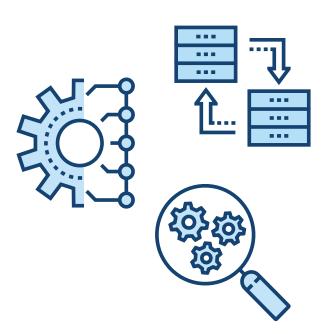
DATA WAREHOUSE LEADS TO BETTER BUSINESS DECISIONS

Data Management Overhaul Provides New Opportunities and Insights

Coretelligent built a refreshed data warehouse solution to improve our client's ability to see, access, and act on their data using Azure Cloud, Azure Data Factory, Azure SQL Server, and Power BI to solve data accessibility and reporting issues.

CHALLENGE

A leasing and financing client serves customers in construction, healthcare, refrigeration, and other industries requiring large equipment. The client's data was not easily accessible. Instead, they relied on multiple enormous spreadsheets, fed monthly from various source systems, to report and submit to banks for month-end reporting and funding requirements. Each spreadsheet took dozens of hours to do, including ETL (extract, transform, load) within the spreadsheet, which was time-consuming, difficult to manage, and hard to enhance. Requests often required a technologist to pull data into spreadsheets to fit the needs of individual business users.



The client needed a flexible solution that provided up-to-date information and covered a wider range of reporting needs.

Thanks to our experience working with the client on other IT endeavors, as well as our competency in data management, the client selected Coretelligent to deliver a solution to generate detailed requirements and data mappings, configure their business intelligence (BI) infrastructure, design and develop data warehouse data structures, perform ETL automation, and support testing and training activities.

SOLUTION

Coretelligent's top priority was to replace the client's existing spreadsheets with a more comprehensive reporting solution.

Our experts created a data warehouse to enable strategic reporting. It incorporates source data from the client's current application management system, legacy application management system, and contract management system, plus ancillary files for further historical reference. Information from a recently acquired company was also incorporated by tying into the applications and contracts used by that entity.

Coretelligent used a conceptual-to-source spreadsheet to capture the critical business terms used by the client and mapped the entities to the source systems. In addition,



DATA WAREHOUSE HELPS CLIENT MAKE BETTER BUSINESS DECISIONS

the team defined each item, tracked current methodology or logic needed to capture data for that term, implemented each term into the new data warehouse, and tracked the testing status of each term, which the client oversaw to ensure each term was properly implemented.

The data model design focuses on the reporting model, not the sources, to reflect the business as a whole. Coretelligent built this solution using a Microsoft stack that included Azure Cloud, Azure Data Factory, Azure SQL server, and Power BI.

After evaluating the breadth of data available and recognizing the value it could provide, the client tasked the Coretelligent team with expanding the number of calculations to support a wider array of reporting needs.

BENEFITS

- · Enhanced data visualizations using Power BI
- More trustworthy, higher quality data for better decision making
- · Faster, automated analytics and reporting

The client can evaluate data internally and present it to associated vendors and partners, such as financial institutions, with greater confidence in the information. Plus, Power BI allows the story of the data to be communicated more effectively using stunning visualizations, such as maps and graphs. Customization of fields also improved, adding exponential value.

Plus, internal staff previously tasked with creating spreadsheets can now focus their time and expertise on writing reports and creating content.

An additional benefit includes how the data warehouse streamlines the acquisition process. As a growing company acquiring other businesses, the legacy system required layering in more spreadsheets with disparate data. With the new data warehouse, the client can integrate new acquisitions into the business with greater care, providing better data insight across the board.

RESULTS

Our client's existing CRM systems were great at collecting, managing, and storing data but could not provide extensive strategic reporting or reporting that incorporated data across sources, resulting in the reliance on massive, time-consuming spreadsheets.

Because of the new data warehouse solution, the client's data can now automatically refresh daily, allowing unified information to be shared across all business teams for more accurate, actionable insights.





WHY CHOOSE CORETELLIGENT FOR DIGITAL TRANSFORMATION SERVICES?

- Coretelligent operates using a consultative and collaborative approach.
- IT strategy engagement is a part of every project, transaction, and relationship.
- We utilize a build and operate model for transformation services to provide expertise and support from project implementation to ongoing monitoring and maintenance.
- Coretelligent's verticalized expertise means that we already have a deep understanding of the challenges and opportunities of your sector.
- We offer 24/7/365 white-glove support.
- Not only do we offer digital transformation services, but we are a full lifecycle IT partner and offer cybersecurity, comprehensive support, backup and disaster recovery, and co-managed and managed solutions to meet your firm's IT needs.



Learn more about Coretelligent's Digital Transformation Solutions by visiting coretelligent.com, calling 855.841.5888, or emailing info@coretelligent.com.

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About Coretelligent

As a leading provider of comprehensive managed IT, cybersecurity, digital transformation, DevOps, IT strategy, and more, Coretelligent enables organizations to seamlessly power and grow their businesses. Founded in 2006 and led by world-class technology experts, Coretelligent's core services are utilized by top-tier organizations in the financial services, life sciences, legal, and technology industries, among others. Coretelligent's headquarters is in Needham, MA, with strategic offices located in New York City, Atlanta, Stamford, Scarborough, and the San Francisco Bay area; with expanded support locations in Dallas, Los Angeles, Philadelphia, Tampa, Washington, DC, and West Palm Beach.