FLIGHT CENTRE TRAVEL GROUP**



From code to low-code: How Flight Centre accelerated customer solutions with CloverDX



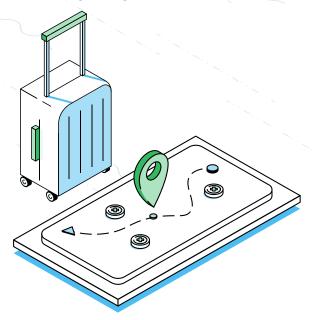
Grant Currey,
Corporate CTO ANZ at Flight Centre Travel Group

7 SUCCESSFUL USE CASES

The challenges

As Flight Centre's Corporate business has grown, customer data processes, which were traditionally written in code, needed to scale quickly and more efficiently to match this growth. The company needed to be able to develop new solutions and features for customers faster, but they needed to overcome challenges such as:

- ▲ Ingesting and consolidating data from multiple sources: Onboarding data from 1000s of corporate customer systems posed a unique and complex problem especially as the business has scaled. It was time-consuming, and running on legacy code that was wasting valuable resources to update and maintain.
- ▲ Time-consuming manual processes: Managing data processes with traditional coding practices and Microsoft Excel was slowing them down and prevented engineers from working on higher-value business problems.
- ▲ Increased need for richer visibility: Scale brings unique challenges, and managing the 1000s of customer specific data jobs was becoming a complex task.
- ▲ Leveraging a wider pool of resources, not just software engineers: Enabling non-technical users to manage or provide valuable input into processes was difficult and required extra effort from the engineering team to build interfaces.



The solutions

CloverDX has enabled teams right across Flight Centre Corporate to transform their thinking and approach to data processes, automating and simplifying the process of receiving, processing and transforming disparate data.

Streamlining customer data onboarding and integration

Customer data onboarding has traditionally been a complex bespoke coded solution to manage CSV and Excel documents, requiring a high investment in people which was time-consuming and becoming harder to maintain

The process of ingesting, consolidating, and transforming data from multiple customer systems is now being rebuilt in CloverDX, which has not only eliminated the need to build and manage complex code, but has also allowed the team to:

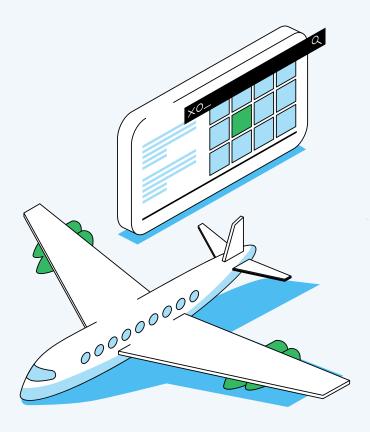
- ▲ Rapidly automate jobs visually and execute with enterprise scheduling.
- ▲ Integrate directly with customer systems by calling APIs to ingest and transform data and send information wherever it needs to be without manual effort.
- ▲ Eliminate legacy code, replacing complex processes with a low-code approach that was more reliable, easier to manage and provided increased visibility.
- Allowed the corporate business to rapidly scale, freeing up valuable resources to focus on solving bigger customer problems.

Accessing and converting data for system migrations

CloverDX has also enabled and streamlined system migrations - starting with a project to migrate over a decade of data from a vendor-based travel platform to Flight Centre Corporate's own in-house product.

The vendor's closed system made the data difficult to access, but with CloverDX the team were able to connect to the underlying database, transform millions of lines of





data to make it fit Flight Centre's model and enrich it via API calls.

Grant Currey, Chief Technology Officer, Corporate ANZ at Flight Centre, explains that "CloverDX enabled us to convert millions of lines of data from what it was to what we needed it to be confidently at scale. It's hard to imagine how we would have done that project without CloverDX. The migration was so successful, CloverDX is now our first option when doing a system migration"

Eliminating manual processes and code, speeding up time to market

Currey was looking to reduce the effort the engineering team spent on coding data jobs – something that was time-consuming and frustrating, especially when it came to repetitive, routine tasks. He explains: "Using a highly skilled engineer to write low level code to process data from an SFTP server, is not a good use of time, it adds little value, and is hard to maintain"

Replacing that complex coding with a low code/no code approach in CloverDX has saved huge amounts of time, enabled teams across the business to move faster, and freed up our highly skilled engineers to focus on higher-value business and customer problems.

It's also increased reliability by allowing the company to decommission legacy code that was, in Currey's words, "...written years ago, following different engineering principles and standards, and was becoming extremely hard to maintain, keep pace and scale."

As Currey describes, "Everyone is starting to realize that the human investment into writing code to massage CSV, Excel documents and anything in between can quickly be replaced with a low code/no code approach that will just integrate straight back into our systems via the APIs."

Freeing up technical resource by bringing business users into the process

Solutions based on code meant that they could only be managed by engineers, even though there were nontechnical business users who were more familiar with the data and the customers.

With CloverDX, Flight Centre Corporate has been able to introduce a more collaborative approach to generating and sending customer statements. Technical users build core data pipelines and pull data into Excel templates. But as Currey explains, they could then:

"... actually invite a different set of users to manage the templates – users that are non-technical, but they know how to use Excel. So, they now own those templates, and can control and make changes to them as needed."

FLIGHT CENTRE TRAVEL GROUP

About Flight Centre

Flight Centre Travel Group (FCTG) is one of the world's largest travel companies, based in Brisbane, Australia, with over 15,000 employees globally and leisure and corporate travel businesses in over 25 countries.

https://www.fctgl.com/



The results

"CloverDX has completely changed our approach and how we look at things."

CloverDX has helped the Flight Centre Corporate business work faster and smarter to transform their data processes, and deliver real impact to not just systems, but also culture.

Key benefits have included:

- ▲ Faster time to market: Solutions that once took weeks or months to develop in code can now be pulled together in a low code/no code way, driving a culture of working smarter.
- ▲ Reduced manual work: Engineers are no longer burdened with repetitive complex coding tasks like SFTP connections or Excel formatting.

"We got rid of the need to heavily invest in boilerplate work. It's a game changer to the time we would have spent writing code and pouring engineering effort into these things."

▲ Cost and resource optimization: CloverDX has enabled Flight Centre to achieve more without needing significant additional resources – whether by leveraging different groups of people that don't traditionally code, or by working with CloverDX's Professional Services team to augment in-house teams and provide another pathway to deliver

outcomes, without the overhead of hiring more people.

▲ Improved data quality and reliability: CloverDX has become the backbone of customer data integration operations, enabling Flight Centre to confidently move, transform, and validate data across key processes – importantly, improving customer experience.

"Regardless of if you are travelling for leisure or business, travel is a very personal experience, full of friction points. For the business traveller, the focus shouldn't be why is my frequent flyer number missing, it must be ensuring that we remove as many of these technology friction points to allow the corporate traveller space to de-stress and prepare for that next meeting – CloverDX is helping us achieve this"

"CloverDX is now firmly at the heart of everything we do in terms of customer data movement"

CloverDX is now starting to help teams right across Flight Centre Corporate global business streamline processes and deliver results faster. The low code/no code approach has been a game changer in removing barriers to being quicker to market. As Currey summarizes: "If these tools can help you solve complex business problems faster, you should be using them. That's how you work smarter."

About CloverDX

CloverDX helps IT and business teams move fast when tackling data management challenges. With CloverDX you're getting a mature product, the CloverDX Data Integration Platform, and access to experts that have been at the coalface of difficult data management projects for decades. You might never need our help, but for a simple support question, or longer engagement with our solutions team, we're always ready to help you succeed. CloverDX serves customers world-wide through offices in UK, USA and Czech Republic. Originally started as an open-source project, the company was incorporated in 2007 and has since developed a global footprint.

CloverDX represents a dependable enterprise solution covering all aspects of data integration, orchestration of data workloads at scale, data migration, ETL and warehousing, ingest of data and data for BI & analytics.



www.cloverdx.com/flightcentre

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Onboarding customer data to build travel profiles

Hundreds of thousands of customer travel profiles are brought into Flight Centre systems every year, with data coming in from multiple different sources that needed to be consolidated and transformed.

<u>Before:</u> Code-based processes to manage Excel documents, with legacy technology that required constant maintenance, and with no visibility over data workflows.

After: With CloverDX as the core platform for data onboarding, there's now a reliable, maintainable process for ingesting, consolidating and standardizing data from disparate sources.

Collating internal data for financial and regulatory reporting

Reports need to be regularly sent to regulatory bodies and credit card companies, each one requiring a different format, and requiring pulling data from multiple internal sources. **Before:** Repetitive manual coding to create reports for each recipient, with time wasted on routine tasks such as creating SFTP connections.

After: CloverDX automatically takes data from operational data stores, transforms into the required format, and sends to, e.g. an STFP. This eliminated all the 'boilerplate work' that took engineering effort, and enabled large volumes of legacy code to be retired.

Generating customer statements

Tens of thousands of statements need to be generated for customers every night. Data needs to be pulled from internal sources; specific requirements (such as credit terms and any specific formatting requests) need to be applied for each customer; and the statement sent via email.

Before: Managing the process in code was time-consuming and frustrating, with 'simple' jobs such as formatting and sending emails taking a lot of effort.

After: CloverDX runs jobs on a schedule, calls Flight Centre APIs to generate the statements, and automatically applies customer-specific formatting. CloverDX also takes care of the email component automatically, removing engineering effort. The process now also allows non-technical users to manage statement templates without needing technical help.



Data migrations from closed, vendor-specific systems

Migrating data from platforms such as Tramada to the in-house Lumina platform was previously impossible, with data difficult to access.

Before: Data was held in a vendor system, with no easy way to export it. There was a huge amount (15 years' worth) of data that needed to be migrated, and it needed significant transformations in order to fit Flight Centre's model.

After: Using CloverDX it was possible to connect to the underlying Tramada database to access data, call APIs to enrich the data using other sources, and transform it to the right model. The team used CloverDX to generate scripts to produce 100 million SQL statements which were then executed into the target database. Not only was this migration made possible, but CloverDX is now underpinning every system migration across Flight Centre's business.

Migrating HR platforms to Workday

Flight Centre currently operates with multiple different HR platforms across global locations, serving 20,000 employees. The current project is to consolidate all those platforms into Workday.

Before: A data migration on this scale would have been incredibly difficult to manage, with conversions from different platforms into one unified format requiring huge amounts of time and effort.

After: Using CloverDX to orchestrate all that data into Workday has helped streamline the migration process at a global scale.

Expense and ERP platform integration

Integrating platforms to streamline processes and customer experience.

<u>Before:</u> Building code to connect APIs and handle data mapping is time-consuming for engineers, and prevents them working on higher-value problems.

After: Using CloverDX to manage the application integration means API connection and data mapping is more automated, freeing up engineering time. The team also used the CloverDX Professional Services team to augment internal resource, enabling results to be delivered quickly, without needing more headcount and without diverting work from existing projects.

Building a data transformation layer for vendor integration

Working with multiple mining companies to manage thousands of crew movements to disparate locations is challenging. Each company uses many different vendors, and to integrate with them all is incredibly complex.

<u>Before:</u> Integrating with each vendor system individually requires building new connections and integrations for each platform, which is inefficient and not scalable.

After: CloverDX is being used to build a data transformation layer, so any vendor system can be plugged into the Flight Centre solution. This scalable approach streamlines complex crew logistics without requiring custom integrations for every vendor.



About CloverDX

CloverDX unifies data from anywhere, automates complex workflows, uses AI to accelerate prep and mapping, replaces legacy code with transparent visual pipelines, and includes built-in MDM, data stewardship, and a builder for simple control apps.

https://www.cloverdx.com/flightcentre

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