CloverDX

# Identifying Revenue Leaks

**A global logistics company processing hundreds of thousands of shipments every day managed to uncover accounting inefficiencies and revenue leaks by building a unified view on their dispersed operational data.**

The project started realistically small, with the specific needs of a billing business unit to get their grasp on how air parcels were dispatched, and whether all appropriate charges had been applied correctly. As a pilot project, the CloverDX team delivered these insights backed by a small scalable data warehouse with a drill-down option that allowed the client to get both the big picture and also see individual problem shipments.

From this initial success, it was clear the co-operative approach taken by the combined in-house and CloverDX teams seemed to be working. They put this down to having a well architected solution, taking a phased approach with manageable step-by-step milestones, and the dedication from the CloverDX team to move past obstacles quickly. By continuing in this way, and resisting the temptation to overstretch available resource—an easy mistake in such a large business—the team continue to succeed. The project now handles billing data from more than ten different systems, which has **grown into the company's largest and most comprehensive database.**

Comparing it to a flight traffic control tower, the business can now **track all billing information about a single package in one place for the first time in history.** As a global business with multiple subsidiaries, they have to operate with many geographically dispersed systems. This is necessary to

support each region's operational needs, however this also meant it was virtually impossible to have visibility into the global operations and financial details from a centralised point. There was no overarching single view of all these systems, and previous attempts to do so had failed or struggled, by stating too ambitious goals without delivering usable outputs in reasonable time. The net result in those instances was failed projects that lost momentum and support from key stakeholders.

Working with the team from CloverDX, the company quickly realized they could start with a more limited but tangible capability first, and gradually ask additional questions. By tweaking what they already had they could see additional results within days, without being forced into lengthy development cycles typical of corporate IT. **This lean process allowed time to focus on what the data was showing**, and a swift feedback loop helped produce useful "living reports". Today, a few dozen business users actively look at those reports every day.

"Our 'control tower' allows us to **see things we could never see before** because we couldn't see the data within the context of all the systems at once," says the Head Billing Manager, describing the learning experience they have gone through, while building the data warehouse. "We can filter

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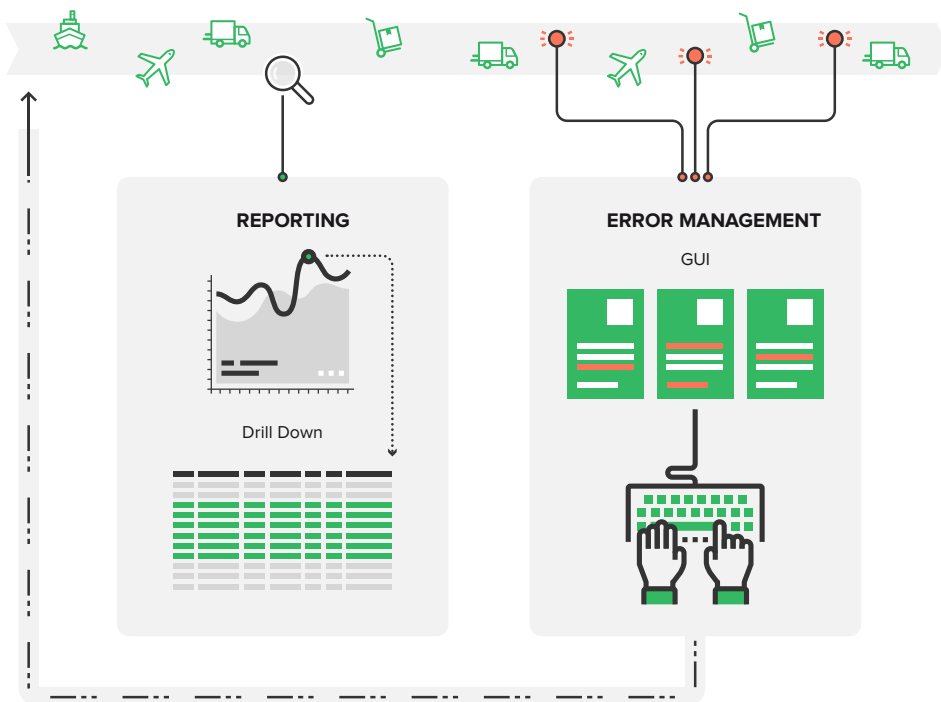
## Results

- Eliminated major revenue leaks (incorrectly billed items)
- Substantial savings on global scale
- Increased overall quality of data, controlled review and correction process

## Delivery

- Data warehouse (Oracle) + reporting platform that brings a complete view on shipment billing details
- Data errors management solution (user interface for correcting data errors + reprocessing pipeline)
- Oracle database, Reporting built on Jasper

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the data just for outliers and quickly assess what's going on. Merely identifying patterns of incorrectly billed shipments, and focusing our efforts on fixing the relevant processes, brought us enough **savings to pay for this entire project within the first three months**," he adds to emphasize the tangible value derived from the initiative.

Today, the solution provides hourly updates, letting the teams oversee time-sensitive data, like seasonal surges in shipments, almost in real time. Before, they would have to manually generate a dozen independent reports from all the disparate systems and then compare them by hand using Excel, a lengthy, tedious and error prone process.

The project also had a significant, albeit unplanned, positive side effect. While consolidating data sources, CloverDX helped them find weak points and long forgotten "skeletons in the closet" in the operations—systems producing duplicate data records or even worse, applications producing truly incorrect data. The problems could only be seen once the single view of the data was available, making it possible to spot inconsistencies by overlaying the corresponding data from different source systems.

Being aware of the data issues and seeing them clearly in the data warehouse, the client realized they needed an additional solution and processes for handling data errors in their operations department. The adjacent **centralized error**

**management** lets them identify problematic data records and set up rules for fixing them. The need for data processes to be robust enough to support pathways for rejecting bad data, sending it to the right teams and bringing fixed data back is often neglected. Yet, given the millions of records processed daily, even sub-percent error rates mean thousands of records that need to be quickly pushed off the line, fixed in the source or on-the-fly, and reprocessed within hours.

The CloverDX team are always excited to work with clients prepared to look at their data in the big picture. This view provides a closed loop of business reporting, that can be proactively used to spot inefficiencies in the organization's processes, as well as being the sanity check for data quality coming in. "**We could see there were $100,000's in invoices sitting delayed in the systems, just because of data issues. With the reporting and data error management in place, we now have a complete solution for quickly finding, fixing and getting our invoices out on time**," concludes the Head Billing Manager.

For the very first time, the organization has a unified global view of the delivery lifecycle for all packages and their related information in one place. The data warehouse pairs records between systems, which allows the organization to see, forecast and make predictions on key metrics they could never view before, while the error management keeps the data flowing without delays and surprises.

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