



# The Intelligent Warehouse™

## Client

JustIQ's first Intelligent Warehouse client is a non-profit student lender. Its mission is to serve the needs of students, families and educational institutions by enhancing access to post-secondary education through affordable loans and interest rate reduction programs. In 2001, the company developed an aggressive business plan to grow its loan portfolio.

The client sought a solution to gather, control and analyze all data across the organization to make better, more informed decisions.

## Roadblocks

Internally, the organization struggled with reporting discrepancies and inconsistency. Data from both internal and external systems was manually compiled, leaving ample room for errors and omissions. With each department managing its own database, maintaining data hygiene was not only time consuming, but became near impossible with multiple, disparate systems. In some cases, the management team was forced to make critical business decisions based on incomplete and unreliable information. Additionally, every analyst used different software and methodologies to analyze the data. This resulted not only in contrasting conclusions, but also disputes over business strategy.

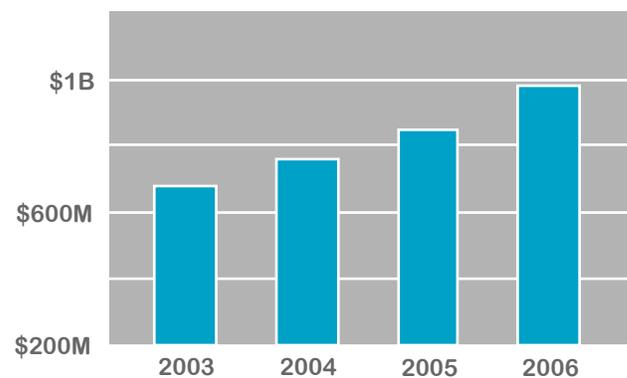
## Empower Your People

The company's loan portfolio grew from just over \$600 million to nearly over \$1 billion in four years without adding staff. How did they do it?

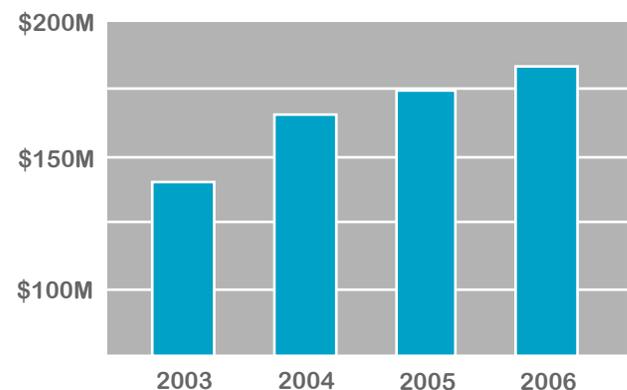
The client realized a need for one central data repository. JustIQ answered by implementing

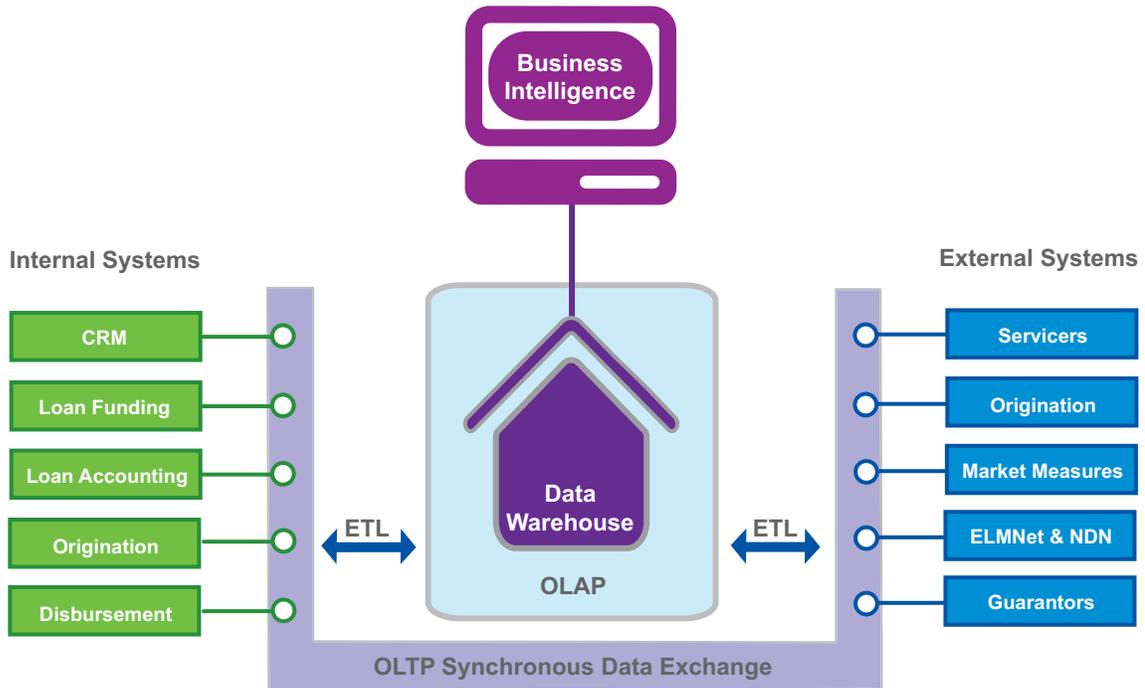
the Intelligent Warehouse. Extraction, transformation and loading (ETL) tools were developed and implemented to standardize and ingest information into one database. This enabled once disparate systems to "talk" to each other and automated

**Portfolio Growth**  
13.06% CAGR



**FFELP Loan Originations**  
9.75% CAGR





the process of manually entering data. A change made in one system propagated to every related system. With this new process, data error and omissions were virtually eliminated.

More importantly, the staff was able to spend the majority of their time conducting real-time data analysis and little to no time maintaining data integrity. Staff members once consumed with inefficient manual processes dedicated their time to deep-analysis of market trends, portfolio reporting and studying borrower behavior. Marketing executives created and analyzed highly-customized and detailed lists of borrowers. This data enabled Marketing to identify new target markets and create new loan products.

Project	Processing Time Reduction
Close Monthly Books	Reduced from five full-time employee working weeks to one working day
Determine Portfolio Performance	Reduced from four full-time employee working weeks to one working day
Regulation AB Compliance	Currently requires less than one hour per indenture
Determine Monthly Consolidations	Requires only one hour per month

Executive management was able to proliferate a single truth across the enterprise and foster inter-departmental communication. Conflicting data was no longer an issue. Business intelligence tools standardized reporting and provided a complete view

of the business. It enabled financial and portfolio analysis of default rates, pre-payment behavior and more. This allowed executives to better understand borrower behavior and base corporate strategy on actual portfolio performance. Using the JustIQ solution, the staff increased the profitability of indentures, boosted investor confidence and developed a better understanding of the market. Most importantly, data security was no longer a looming problem. In the past, the absence of one central data repository made it impossible to fully protect sensitive information. Laptops and other mobile devices storing personal or competitive information are easily lost or stolen. With one door to guard, the client is confident their business critical information and each borrower's personal data are secure.

## Real Results

Implementing the Intelligent Warehouse generated a positive return on investment within the first year of becoming fully functional. How is this possible?

- Monies recovered from errors and omissions from external vendors
- Increased productivity
- No increase in staff to manage a higher volume of loans
- Provide more accurate information
- Develop new and better loan products
- Increase securitization margins for more clearly defined cohorts

Investments in new technology empowered staff to become more efficient and effective. The company can attribute the following strategic advantages to this decision:

- Better and faster innovation of loan products
- Increased effectiveness of marketing and sales efforts
- Increased value of loan portfolios
- Lowered servicing costs
- Reduced operation costs
- Increased productivity
- Improved inter-departmental communication

## A CFO's Life Before & After Intelligent Warehouse

Prior to implementing Intelligent Warehouse the CFO relied upon servicers to provide Portfolio Characteristics Reports (PCRs). These reports were neither flexible nor detailed. Even worse, the CFO had no way to independently verify their accuracy. It was akin to trusting the bank to balance the CFO's checkbook.

After implementing Intelligent Warehouse, the servicer still provided PCRs—but now, the CFO used these reports as only one of many tests to determine if the servicer's information was accurate. The CFO immediately determined the servicer's information was wrong.

Errors included:

- Multiple billings for the same borrower
- Incorrect calculation of SAP payments
- Failure to enforce benefits
- Failure to apply new benefits

Even more importantly, the solution provided the analysts with better, more powerful tools that were faster and easier to use than Excel spreadsheets. They were, for the first time, spending more time analyzing information than manipulating data in and out of spreadsheets.