BUSINESS BENEFIT IMPACT STUDY

GLOBAL FINANCIAL SERVICES FIRM
DATA INTEGRATION SOLUTION

CUSTOMER PROFILE
Industry: Financial Services
Employees: > 60,000
Revenue: > $20 Billion
Strategy: Leverage information technology to drive product and service innovation, and to boost the efficiency, productivity and speed of data integration.

FAST FACTS

Challenges:
- Inefficient, disparate set of data integration tools and environments
- Low developer productivity
- Difficulty meeting stringent service level agreements
- High data integration and hardware costs

Solution:
- The company launched a state-of-the-art data integration solution through a centralized, shared-service environment, increasing developer productivity, streamlining business-application development and support, and reducing labor and hardware costs
- Informatica PowerCenter with Data Masking Option
- Informatica Data Explorer
- Informatica B2B Data Transformation

Benefits:
- On track to capture $10.8 million in total benefits over five years
- Expected 27% ROI, 34% IRR by 2011
- Projected $9.5 million in labor savings
- Projected $1.3 million in hardware savings
- Accelerated business application development
- Met consistently higher service levels

GLOBAL FINANCIAL SERVICES FIRM PROJECTS SAVINGS OF $10.8 MILLION WITH INFORMATICA DATA INTEGRATION PLATFORM

EXECUTIVE SUMMARY

The company studied in this assessment is one of the top global financial services companies, serving for decades as a pre-eminent financial advisor to companies, governments and investors from around the world. Known for leveraging information technology to drive product and service innovation, the company recently harnessed IT once again to boost the efficiency, productivity and speed of data integration, a core IT function.

Tasked with processing and reporting on billions of dollars of transactions daily, the company’s data integration needs are immense—but over the years individual IT departments developed separate approaches (e.g., processes/standards, data integration software, hardware and diversely skilled data analyst resources) to meet those needs. Inefficiencies emerged as a result, but management has successfully addressed these concerns by establishing an enterprise-wide IT integration competency center (ICC) based on Informatica’s data integration platform and governance best practices.

Since the inception of the ICC in 2003, IT departments have rapidly adopted the group’s data integration services—which are managed as a set of shared service offerings—and today, nearly 300 application teams (across 10 IT departments) are leveraging its services. Teams charged with managing business applications and IT services for the company’s compliance
and legal group, data mart operations and other business functions saw immediate benefits from moving to the ICC, resulting in millions of dollars in savings, including:

- **$9.5M in labor cost savings**, with teams tapping into an abundant supply of Informatica developers and professionals worldwide to support data integration projects and efficiency gains from the platform’s ease of use and advanced functions such as reusable rules and mappings.

- **$1.3M in hardware/software total costs of ownership**, as teams switched to the more efficient, shared Informatica-based infrastructure that reduced overall soft-ware license fees, support and maintenance costs, and training expenses.

- **Faster, more cost-effective deployments of business applications**, with teams leveraging data visualization, masking and other tools and best practices to speed data integration projects.

- **Greater compliance with service-level agreements**, with teams leveraging Informatica tools to streamline data flows and monitor data integration performance.

- **Greater scalability**, with teams needing less processing capacity to run high-volume data integration routines.

An initial assessment has identified more than $10.8 million in bottom-line benefits from the company’s deployment of the ICC, including $9.5 million in labor productivity savings and $1.3 million in hardware savings. Furthermore, executives said the institution of the ICC and the Informatica data integration platform is helping the company meet one of its core business goals: putting accurate information in front of decision-makers and clients precisely when they need it.

**THE CHALLENGE**

Financial services companies are among the most data-intensive enterprises in the world, challenged daily with managing billions of dollars in financial transactions. At the same time, financial firms must continually develop compelling new products, deliver personalized customer service, and comply with ever increasing industry regulations. All of these activities are heavily dependent on timely, accurate data.

The global financial services firm studied in this assessment has a long history of meeting these challenges, due in no small part to its innovative use of technology to drive product development and market differentiation. But as the company added new systems over the years, the company’s IT and data-management environment grew increasingly complex and “silod,” creating inefficiencies that kept operating costs high and even threatened the company’s competitive edge.1

Critical issues included:

- **Fragmented information architecture and business processes.** With the ownership of data spread across multiple groups, data integration management approaches and solutions varied across the company. This led to increased data migration complexities and data quality issues, and sub-optimized its data analyst resources.

- **Inefficient resource management.** Since data integration tools, software and systems were managed by “local” IT teams in each department, there was not a single, standard approach to data integration. This led to an increased IT total cost of ownership by reducing the overall utilization of the data integration platforms (e.g., hardware capacity, licensing discounts, support savings) and, more importantly, reducing the ability to reuse the knowledge of the existing code base, processes, and outputs across IT departments to increase overall efficiencies of its resources.

- **Poor system performance and scalability.** The lack of a unified data integration infrastructure and strong data visualization capabilities posed a serious challenge to the company’s ability to handle big spikes in business activity (as experienced during the recent financial crisis). It also made it harder to meet tough new data-tracking regulations imposed on bank holding companies.

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1Development tools and languages employed by departments included PERL, SAS and Actimize.
THE APPROACH

In response to these challenges, the company developed plans for building a single, standardized data integration platform for one of its largest divisions, a global organization that serves institutional clients. By adopting a unified data integration platform through Informatica’s leading solutions, the company hoped to accelerate the delivery of consistent, high-quality data to key decision makers and drive new business opportunities in the process. Furthermore, by establishing an Integration Competency Center (ICC) with state-of-the-art data integration processes under the direction of a centralized team of expert resources, the company was ready to support the various needs of the enterprise more effectively and efficiently, ultimately reducing its IT operating costs.

Early on, the company identified Informatica as the best technology for extracting and loading data from source files to its data warehouses. The same technology has been leveraged and expanded to support their vision of a centralized data integration practice. Most importantly, Informatica shared the firm’s vision of creating a centralized team of experts to support the broader organization with best-in-class tools, policies, processes and high-performing infrastructure services.

Informatica’s industry-standard architecture and tools were well suited to the company’s goal of creating a unified platform that allowed the company to draw on a deep pool of expert talent worldwide. The solution’s tools for data visualization, data masking, caching and collaboration would help drive operating efficiencies and productivity as the company established the ICC team under the direction of the corporate IT group.2

THE SOLUTION

After running a successful proof of concept, the ICC team introduced the Informatica platform to IT’s legal and regulatory department. Word of ICC’s success spread, spurring demand from other IT departments, and within six months adoption had accelerated to double the initial plan. After the first year, nearly 50 application development teams had adopted the ICC’s services—five times more than expected. Today, approximately 300 application teams across the company rely on the ICC’s data integration services.

By creating the centralized ICC organization, the company was able to form a specialized team of Informatica experts—a “center of excellence” that delivers data integration and infrastructure hosting services to business-facing IT teams throughout the division. The ICC’s combination of efficient data integration tools, services and best practices have enabled teams to consistently meet demanding service level agreements (SLAs). Moreover, standardizing on Informatica’s industry-leading data integration solutions facilitated its ability to outsource development services and support, helping the company tap an abundant supply of low-cost resources familiar with the Informatica platform.

The basic architecture of the company’s unified Informatica solution is shown in Figure 2, starting with the 100-plus data sources that the company draws from to run its institutional investment division. The core solution—utilizing Informatica PowerCenter, and Informatica Data Explorer—cleanses and integrates the source data before pushing information to internal data marts and repositories, and from there to more than 300 application development teams across the firm.

Benefits: Lowering Data Integration Costs While Raising Performance for the Compliance and Legal Department

One of the early and largest groups to migrate to the ICC’s services, IT’s compliance and legal department, saw immediate benefits from the move. The group needs robust data integration services to help it manage key regulatory compliance activities, including monitoring stock trades to guard against fraud and issuing reports required by regulators and clients. These tasks require complex processes for accessing and integrating data from dozens of databases.

The compliance group maintains strict SLAs with more than 600 institutional clients. The group’s legacy data integration software used to cleanse and integrate its data had trouble meeting the tight reporting deadlines. These include “trade blotter” reports due the day of the transaction, and “T+1” reports due a day later as well as money laundering reports due every 30 days.

By migrating to the ICC’s services, the compliance group saved an estimated $450,000 per year in report-development costs, in part because it can now access low-cost offshore Informatica developers. By contrast, the legacy data integration resources were expensive and hard to come by.

2Competitive benchmarking also found that Informatica required less hardware resources.
The compliance group also saved time—and boosted the team’s confidence in the data—by working with the ICC to set up an Informatica-driven data mart that supplied a single source of reporting data. Previously, the team had to maintain sets of complex stored procedures to access and integrate data from dozens of sources—a system that was also hard to troubleshoot.  

Plans are now underway to use Informatica Data Explorer to perform data integrity and data integration routines even earlier in the reporting process, and to leverage Informatica’s data masking capabilities to let developers use live production data when running simulation models, improving their accuracy.

**Benefits: Scaling to Meet High Volume and Performance Requirements for the Data Mart Group**

The move to the ICC contributed to substantial productivity improvements within the company’s data mart group, which is responsible for building customized information repositories and generating more than 600 reports—including the critical “T+1” compliance reports—for business analysts and managers throughout the company. The average data mart is huge, containing more than billion rows of data and consuming two terabytes of storage; daily transactions will affect 10 to 15 million rows of the database.

Data mart speed and performance is critical to providing business analysts with key reports and business information in a timely fashion. In recent years, as trading volumes skyrocketed and global markets shrank timelines, lengthy data-extraction times were becoming a potential bottleneck for business users. For example, it often took more than four hours to run T+1 reports.

To get a handle on performance issues, the data mart group implemented Informatica PowerCenter for its statistical reporting solution that helped team members visualize data extraction and integration processes and monitor performance against SLAs. The move helped the team optimize/accelerate data flows and significantly boost data mart performance, with T+1 reports now taking less than an hour to run.

Team members said the tool’s efficient drag-and-drop visualization capabilities, standardized data logs, and robust statistical reporting tools saved the equivalent of one full-time employee.

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The compliance group also saved about two hours of pre-processing time when it upgraded to version 8.6 of Informatica, which further automated the data cleansing process by automatically stripping out double delimiters.

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**Figure 2**

**Data Integration Architecture**

[Diagram showing data integration architecture with labels: 100+ Data Sources, Data Integration, Informatica PowerCenter Connect™, 1 Billion Rows (Data Marts), ~300 Applications, 100+ Data Sources, Data Stores, Upstream Processes, PowerCenter Designer, PowerCenter Repository Center, PowerCenter Server, PowerCenter Metadata Repository, PowerCenter Connect™]
Benefits: Doing More with Less Across Business Application Teams

A number of other business groups studied in this assessment reported significant productivity and IT cost savings from switching to the ICC.

For example, one of its IT application team’s performance was hampered by inefficient data integration development processes and a costly hardware environment. The move to Informatica technology lifted staff productivity by providing developers with easy-to-use tools for debugging scripts and visualization capabilities for streamlining data flows. Informatica’s modular plug-and-play development structures and convenient tools for automating documentation and re-using code also contributed to the gain and enabled the group to ramp up new developers quickly.

Overall, the six-person team has achieved a 50% productivity boost on 10% of its total workload, which generated an estimated $18,000 per year in resource-optimization cost savings. Moreover, the move to the shared-services environment team has cut IT costs by $75,000 per year, helping the group avoid expenditures for new servers as well as a data-scheduling tool.

Another IT applications group is tasked with running a data warehouse that gives business analysts easy access to detailed balance-sheet reporting and other financial intelligence. By migrating to the ICC’s services, the group now manages its workload with half as many resources and 10% less developer time (Figure 4), saving an estimated $140,000 per year. The move also optimized hardware utilization, with managers saying that rival data integration solutions would need double the hardware to support the same scale of operations. As a result, the team saved an estimated $350,000 in hardware outlays over three years.

A third applications team, which serves as the company’s main data warehouse architect, was experiencing low productivity because it relied on an outmoded legacy scripting environment. By joining the migration to the ICC’s services, the team now is on track to save $66,000 per year from optimized labor resources (Figure 5), including 10% more efficient script development and 50–60% more efficient data integration support and maintenance activities. Informatica’s data visualization tools help developers spend less time digging into code to track fields and attributes, while the solution helps end users combine data more quickly and flexibly to meet their reporting needs.

Data analysts and developers also said the Informatica platform scaled better, handling spikes in usage without overloading the system. The team credits the performance improvement to Informatica’s enhanced support for parallel workflow runs.

Benefits: Corporate IT

To keep up with demand for its data integration services, the ICC team has set up a global team of Informatica developers and specialists. Informatica’s leading position in the data integration market helps the ICC team find professionals readily and saves on...
development costs. In fact, it’s estimated the group will save the company nearly $1.5M by streamlining data integration efforts and utilizing offshore operational and development support across all of the 300 IT departments it supports. The savings are effectively passed on to internal application-development teams, allowing them to access the ICC’s data integration services at reasonable rates under a usage-based charge-back model.

The popularity of the Informatica solution means the ICC’s services and expertise are in constant demand. To maintain high levels of service, the team is introducing more self-service capabilities through Wikis and promoting best practices through mail forums.

**COST BENEFIT ANALYSIS**

According to Mainstay Partners initial assessment, the company’s investment in the Informatica platform is projected to yield benefits of about $10.8 million over five years, including $9.54 million in labor savings and $1.26 million in hardware savings. Minus investment costs, the company will gain an estimated $2.27 million in net benefits, translating into a 27% return on investment and a 34% internal rate of return by 2011.

![Five-Year Net Present Value Benefit Analysis*](image)

*Present Value Calculations from 2003–2011 using 9% WACC*
Table 1

Financial Benefits Model

Key Global Outputs

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<th>27%</th>
<th>NPV</th>
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<td>IRR</td>
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Initial Investment

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Benefit Estimates

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ABOUT THIS BUSINESS BENEFIT IMPACT STUDY

Research and analysis for this study was conducted by Mainstay Partners LLC, an independent consulting firm that has performed over 300 studies for leading information technology providers including Cisco, Oracle, SAP, Microsoft, Dell, Lexmark, HP, Informatica, BearingPoint, and NetApp. This case study was based on interviews with company management, IT data experts and IT architects, as well as a review of existing project planning documents. ROI calculations use industry standard assumptions regarding the time value of money. Information contained in the publication has been obtained from sources is considered reliable, but is not warranted by Mainstay Partners LLC.