# CITO Research
Advancing the craft of technology leadership

**Xignite & GoodData**

# Actionable Analytics about the Use of Financial Data

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# Introduction

In the age of big data, every bit of information has value and the potential to drive change. There is an intuitive sense that the greater the volume of information we can display on a spreadsheet or present in a chart, the closer we get to achieving increased sales, effective monetization, engaged audiences, enhanced efficiency, and other noble ends.

No doubt there is enormous value locked away in masses of data about individual behavior, the movement of markets, the flow of goods, and changes in the weather. The question CITO Research seeks to answer is whether the act of capturing and delivering data alone is enough to put organizations on the path to actionable revelations.

To begin to formulate an answer to that question, CITO Research examined a company with a successful data product. Xignite provides financial market data through application program interfaces (APIs).

## Scale

- More than 15 billion requests per month; 500 million per day
- More than 1000 APIs driving data to mobile financial applications, websites, and front-, middle- and back-office functions
- More than 1000 clients worldwide

Xignite needs to understand how its customers interact with its data products. This information is vital to steer development, manage costs, discover sales opportunities, refine its subscription model, and effectively engage its customers.

In this case study, CITO Research explores the unique perspective on data encapsulated in the Xignite business model, which suggests that analyzing information about the data you deliver is as or more important than the data itself. We will see how a timely partnership with business intelligence platform provider GoodData impacted Xignite's understanding of itself and its customers.

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## Redefining the Data Challenge

The need for large amounts of data is nothing new, especially in finance. Huge companies like Thompson Reuters and Bloomberg have long provided highly specialized data supply systems to the data centers of banks and other institutions. It is a 150-year old industry; as long as there have been markets, there has been information available about those markets.

The problem is that financial data has never been easy to consume.

Xignite started out as a software company building a wealth management solution. As they attempted to use financial data to build their product, they were dismayed by how difficult it was. Stalwart financial service data providers offered arcane and expensive ways to access their data, accompanied by thick reams of documentation. Xignite saw an opportunity in taking this data and making it easy to use. They built their APIs by starting small and incrementally adding functionality based on user requests.

Xignite designed the product they wished they could have had, focusing on shaping the data in a way that makes it ready to use by the customer. Their design approach is described as "business-first." Unlike other APIs and proprietary terminals that have been the mainstay of financial data services, Xignite APIs are self-explanatory and need no documentation.

The challenge for Xignite was to get at information about their data consumers to grasp their behavior, their needs, and gaps in understanding.

## Using Data to Manage the Data Business

Simply amassing data about how their APIs are being used was not a problem for a company like Xignite. Every API call was logged, showing who made the call, what they requested, how fast it returned, and whether the call was successful. Analyzing all those massive logs and making it usable: now that is a challenge. Xignite is a perfect example of a company with plenty of data about its business. The difficulty was finding the means to understand and interpret all that information.

Like many technically minded organizations, Xignite first looked inside for answers. They developed systems that could provide snapshots of certain aspects of their business, but were frustrated that the results existed in narrow silos, each distinct to a specific process (such as how well the API was running) and with little or no correlation with other available information sets. The data couldn't serve as a resource for sales and account managers looking to sell additional services and help customers find the full value of their subscriptions.

*Xignite is a perfect example of a company with plenty of data about its business*

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Xignite needed a way to analyze all the data about its data flows and to visualize and drill into that data.

Faced with this challenge, Xignite looked for a solution that would enable them to turn all the data they collected into highly effective visualizations. Xignite needed:

- A solution that would scale. The data Xignite sought to analyze was enormous and would grow exponentially

- A solution that did not require moving the data. Xignite is cloud-based and did not want to move data of that scale to analyze it

- A solution that would support meaningful visualization and drilldown analytics. High level, aggregated snapshots were a good start, but to drive action they would need to drill down to individual services, specific APIs and individual user patterns, which would then enable Xignite employees to quickly assemble multi-dimensional analysis to identify opportunities and vulnerabilities

## Adding Business Intelligence to the Data Business

To better understand the data they were amassing, Xignite began to work with GoodData, a company that specializes in business intelligence aggregation and visualization. GoodData was not going to help Xignite analyze financial data—Xignite APIs were already making that easy for client developers. GoodData was going to help Xignite manage and gain visibility into the business of providing financial data to more than 1000 clients.
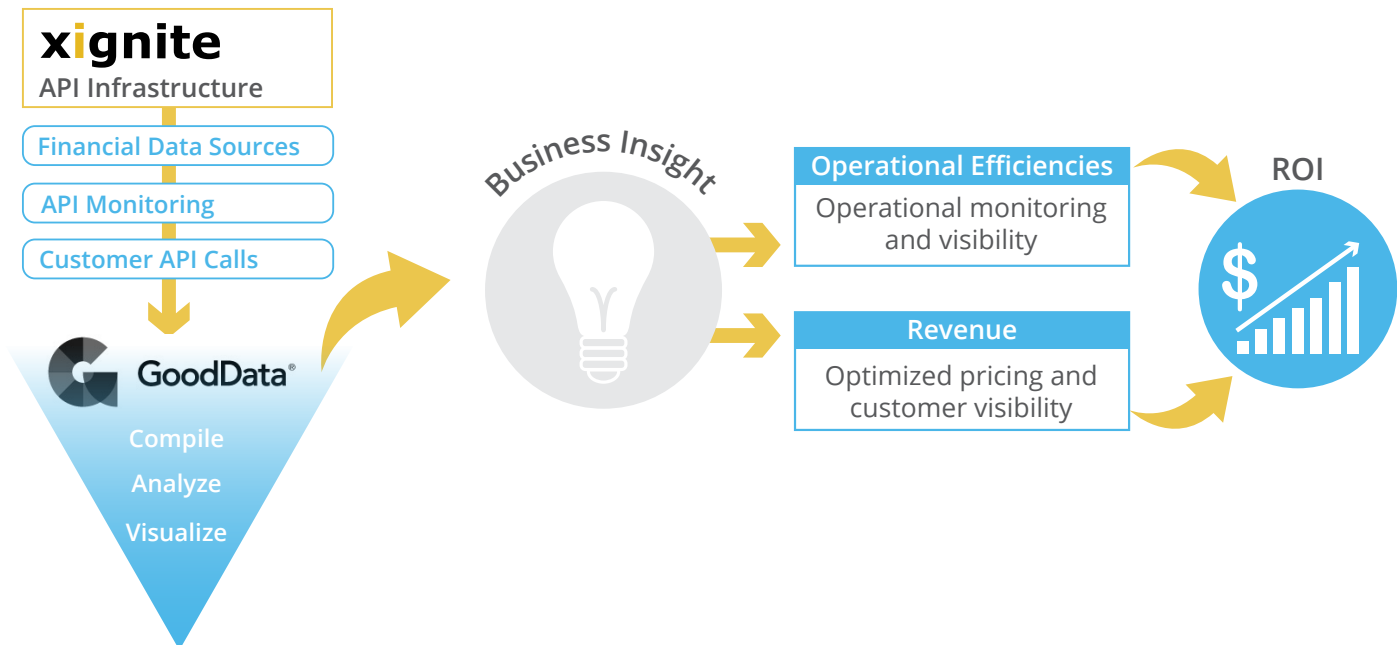
## Xignite Gains Visibility into Its Own Usage

Deployment of GoodData began as a solution directed to look inside Xignite. GoodData enabled Xignite to turn its billions of data points into easily digestible analysis. GoodData provided Xignite employees with dashboard visualizations of key data. Multidimensional analysis enables them to connect the dots between data points that previously were separated by barriers of complexity, time and near invisibility.

With data sets of this size, scalability is a concern. Xignite was an early adopter of cloud-based services and uses Amazon Web Services (AWS) to meet its ever-growing demand for capacity. Likewise, GoodData built its services on AWS, which made it easy to integrate the two companies' solutions and eliminated the challenge of transferring logs of 500 million requests per day for nightly analysis. Such flexibility would be impossible using legacy data infrastructure.

Xignite uses GoodData internally for many types of analysis:

- To **monitor** the health of its APIs. How are requests being fulfilled? Are there any problems? Where are they? How can the way data is delivered to customers be improved?

- To **understand** usage across customers as well as business partners providing data offered through Xignite APIs

- To **see** what services are being used so unused services can be pruned

Using GoodData, for the first time, Xignite could reliably track usage across all its customers to understand who its biggest data consumers are, which APIs see the most use, and what services were underutilized. That is valuable information when it is time to allocate development and maintenance resources. Now Xignite is able to regularly clean house, trimming under-utilized functionality and enhancing functionality customers find most valuable. Xignite can also visualize operational issues such as patterns around server performance to see if the behavior is changing over time.

The business impact of analytics about its data is transformative. Xignite can:

- **Identify sales opportunities**. If customers are maxing out their subscriptions, sales can target them for upselling

- **Identify potential churn**. If customers who are paying for service don't use it or attenuate their use, there's a problem. Support and account management teams intervene to help customers maximize their use of the data

- **Perform profitability analysis**. Xignite pricing must hit a sweet spot. It must be attractively priced for data consumers but also support Xignite's massive data flows. This delicate balance requires detailed analytics.

Better able to manage usage of its resources, Xignite's efficiency is high. With just 35 employees, Xignite serves 15 billion requests a month for high-value financial services data to more than 1000 customers.

## Xignite Helps Its Customers While Helping Itself

Being smart about its own business wasn't enough. With the experience of GoodData dashboards to inform their decisions, Xignite began exposing usage information to their customers by embedding GoodData dashboards in customers' online account tools. Dipping into data similar to that which Xignite uses internally, Xignite customers evaluate their own usage of individual data services to understand the types of information users are requesting and what is being underutilized.

This degree of transparency is not without risk. Customers might discover that they are paying for services that they don't use. Companies renew their contracts with Xignite on an annual basis, so the GoodData-powered client-facing dashboards provide an opportunity for evaluation that can impact renewals. Xignite is betting that its ability to use its GoodData analytics to be proactive about guiding its customers makes serious issues less likely. In fact, being open and transparent has always been a guiding principle for Xignite. This degree of openness feels right and generates good will with customers.

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## Conclusion

CITO Research believes that the example of Xignite suggests that there is an opportunity and perhaps a requirement for data providers to re-imagine their role. Xignite paints an interesting portrait of today's big data environment. While Xignite is clearly a data service company, they represent a departure from legacy models where the data alone was the product. Their fundamental belief is that effectively shaping how their customers receive data and making that data easy to use influences not only development, but how they evaluate and grow their own business.

With massive amounts of data available on tap, issues of understanding how that data is being provided and consumed rise to the foreground. Using analytical tools from GoodData gives Xignite deep visibility into how customers consume data. Offering transparency and visibility to customers is a differentiator. The same visualization tools enable Xignite to see its own business in a new light, to run more efficiently, make smart development decisions, and create opportunities to better serve their customers.

CITO Research anticipates that analytical tools like those from GoodData represent an important evolution in the rise of big data. Few in-house development teams possess the knowledge or resources to build, maintain and evolve analytical engines. Leveraging the flexibility of the cloud to integrate with the customer's environment regardless of location, infrastructure, or scale, a company like GoodData provides an important intermediary between the tidal wave of data and those who seek to analyze its use in actionable ways that support business results.

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CITO Research is a source of news, analysis, research and knowledge for CIOs, CTOs and other IT and business professionals. CITO Research engages in a dialogue with its audience to capture technology trends that are harvested, analyzed and communicated in a sophisticated way to help practitioners solve difficult business problems.

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