



Global IDs



Case Study

Three Lessons Learned from Real-World Metadata Management in Financial Services

CONTACT US

+1 (609) 683-1066



www.globalids.com



182 Nassau St., Suite 202, Princeton, NJ 08542



Overview

This case study describes three important lessons that Global IDs has learned from implementing its solutions in Financial Services firms over the last five years. Financial Services is a broad sector, encompassing retail banking, insurance (life/property and casualty), investment banking, asset management, the securities subsector and more.

Despite the differences in these niches, three lessons have been seen repeatedly across the sector — and to such an extent that they influenced Global IDs' product development, as we believe we had to address them to effectively meet the needs of the Financial Services sector.

Lesson 1: *Complexity and scale are much greater than expected*

Every implementation that Global IDs has undertaken in Financial Services has ended up revealing that the client has a data ecosystem that is far bigger and more complex than initially estimated. This can be unsettling for some clients. Yet the reality is that no one person or group knows the full extent of the data landscape to begin with — nor is there any one forum in which all groups that understand part of the data landscape come together to create a whole picture, however high-level.

What is it about Financial Services that result in these data ecosystems getting so large and complex in the first place?

The most probable cause is that Financial Services are all about data rather than physical products, and there is nothing physical that corresponds to the data to provide a reality check of how big things might be. Also, many Financial Services firms have existed for many years growing organically all the time.



"We always try to get an approximate idea of the size of a client's data environment. We found that we were always underestimating the scale and complexity of the data ecosystem. At first, we thought that there was something wrong with our technical presales process, but later we found that it is just impossible to get a reliable number until you actually start discovery."

– Richard Fiorella, SVP of Business Development, Global IDs



"Our initial surprise at the scale and complexity of data ecosystems in Financial Services actually justified our philosophy that only automation that functions at scale can make sense of this reality."

– Dr. Arka Mukherjee, CEO, Global IDs



Mergers and acquisitions (M&A) activity also grows complexity over time.





Lesson 2: *Different Financial Services Organizations Are Focusing on The Same Critical Drivers*

Like every industry, there are players of every size in Financial Services. While we often think the largest companies have special requirements, they have more in common with smaller firms when it comes to the drivers for metadata management.

On the risk management side, Global IDs has seen for many years that regulatory concerns are the biggest driver. It is true that specific global regulations, such as BCBS 239, only apply to the Global Systemically Important Banks (GSIBs), but there are other regulations, like FinCEN, DFAST, CCAR and CECL, that apply to smaller organizations.

All of these regulations drive the need to understand and manage data lineage, data quality, data classification and so

on. Newer regulations for data privacy, likewise, apply broadly and irrespective of size. For Global IDs, this is confirmation that the metadata management capabilities we have been building for many years truly address the risk management needs of the vast majority of Financial Services companies.



"We work with some of the largest banks in the world because our software is designed to work at scale. But even much smaller banks come to use with the exact same metadata needs because of the regulations they have to deal with."

– Sutapa Dutta, Global Head of Data Management Solutions, Global IDs



"The current economic environment is challenging for banks, so they are becoming more creative about growing revenue. Analytics is seen as the key, especially now that the tools are available. The major barrier to effective analytics are all the data concerns, which is what Global IDs provides an integrated solution for."

– Lisa DiGiorgio, SVP, Client & Channel Engagement, Global IDs



The revenue drivers are a bit different. In the past, the emphasis was on reusing approaches primarily intended to mitigate risk to increase efficiencies of processes. For instance, knowing data lineages could help re-engineer data supply chains. Today, however, analytics have become an essential component for growing revenue. While there are many tasks around developing and deploying analytic models, the most significant concerns are with the data needed for them.

Interestingly, this phenomenon is once again something that spans Financial Services companies, irrespective of size. It seems that all firms have access to some form of analytics technology and the talent needed to make it work. Shortening data discovery, source data analysis, semantic classification, data quality assessments and similar tasks are priority needs in the race to implement more analytics. Again, Global IDs provides the capabilities to address these needs irrespective of enterprise size.





Lesson 3: *Semantics cannot be inferred from metadata alone*

This lesson is one which Global IDs learned early on from working with Financial Services clients and it is one that hasn't penetrated much of the metadata technologies market or Financial Services. It is simply impossible to gain the required understanding of data ecosystems from metadata alone without analyzing the data values themselves. Unfortunately, there seems to be a prejudice today that we simply need to "catalog" data structures and the environments they exist in to provide all the information Financial Services companies need to understand and manage their data ecosystems.

For example, it is easy to collect the names of database columns, capture their data types and identify the database tables they are found in. The problem is that the names of the columns can be unintelligible to business users, who are not confident if they have to guess what the data means. Even if a column name is clearly understood, the data contained in the column may be quite different from what the column name implies. For instance, some columns are overloaded, containing two or more different types of data depending on the context of each individual record. This problem is sometimes known as "semantic overloading".



"There are many reasons why metadata inconsistency is prevalent in Financial Services firms. We think that relatively high levels of M&A are part of it, resulting in mixtures of different naming conventions. Also, organic growth over decades has, at times, lacked naming conventions and at other times used naming conventions inconsistent with later ones. Rather than relying on metadata alone, we try to use data values to infer semantics."

– Dr. Arka Mukherjee, CEO, Global IDs



Global IDs has learned that to infer semantics, it is necessary to analyze actual data content — the data values in columns. The metadata of the names, data types, referential integrity rules, etc., can and should be used in this analysis, but in conjunction with what can reasonably be understood from the data content itself.

While the automation Global IDs provides does go a long way, there may still be a need for human intervention at some point to confirm whether the semantics are correct or not. The key here is the ease of use for data stewards and subject matter experts, which is what Global IDs has made significant investments in over the past few years.

Where Do We Go from Here?

If you are a company in the Financial Services industry and are interested in learning more about Global IDs, please contact us via globalids.com.

These three lessons learned by Global IDs have made us particularly sensitive to the high rate of innovation and change in the Financial Services industry. We understand how important it is to keep up with these dynamics. At the same time, we realize that many requirements span most if not all players in the industry, irrespective of size, all of which are grappling with common metadata management needs.

