



A STEP-BY-STEP GUIDE

Best Practices in Data Management for the Financial Services Data Professional



We're in the Middle of a Blowout

As the world population booms (as of 2020, we inch our way to 8 billion people) and data grows (175 zettabytes by 2025, according to IDC), banks and other financial institutions – like many service industries – are left scrambling to access and make sense of the overwhelming amount of data they are faced with every day.

“Data is the new oil,” mathematician Clive Humby said, way back in 2006. Yes, we agree – it’s a real gusher. Once upon a time, gushers were lauded as reason for celebration – but as we know today – gushers are really blowouts – and that’s bad news on most fronts.





Valuable Data is Untouched and Unleveraged

While financial services organizations have been wise enough to invest in big data for years (they've got a 'gusher' of customer information at their fingertips), they've also been fighting an uphill battle to effectively manage and utilize their data. It's a battle against ever-expanding data lakes, data warehouses and data silos, among others.

According to analysts McKinsey Digital, although 90% of global data was created post 2014, only one percent of this data has actually been analyzed. So, much like the turn-of-the-century oilman losing millions of barrels on a blowout – or even the current oil market flooded with supply – today's financial services organizations are leaving valuable data untouched, unexamined and unleveraged.

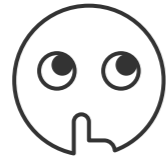
**We've
Got the
Data, But
We Aren't
Using It**

The Problem

Analysts and other data professionals spend a disproportionate amount of time trying to navigate, filter, prepare and aggregate siloed data. Already spread thin on manpower and resources, this leaves little time or inclination for the implementation of effective data analytics. Added to this is the fact that the analytics carried out by financial institutions have traditionally been focused on transaction reporting, sales, risk management and customer service.

Customers' online activities and other data which can shed valuable insight into their

behavior are not addressed, missing out on an opportunity to get an organic view of the customer, while positively influencing the future relationship. Between the challenges of siloed data, the shortage of analytics talent, issues of cost and resources, constraints on time, a lack of prioritization, and the technology issues inherent in legacy systems, financial services organizations are in the middle of a blowout of the biggest kind – and they are losing out on billions of barrels of data every day.



How can you put a cap on the blowout and utilize your data to the fullest?

**Follow the Five Fundamentals
for Financial Services
Organizations.**



1.

Set the Stage for Data Ingestion

As the layer on which everything is built, your data ingestion practices set the stage for all that follows.

Before we even get to data analysis, we are faced with the challenge of ingesting big data in differing formats that comes from a variety of sources with disparate technologies. Ingesting this data while still ensuring efficient and speedy processes is the goal.

3 things financial services data professionals can do to set the stage for better data ingestion:



Decide whether streaming data processing is critical to your business. If it is not, **batch processing** is typically less resource intensive at a fraction of the cost.



Automate to handle greater data volume while achieving better performance via centralized management, simplified processes, real-time error response and greater security.



Use **Machine Learning and Artificial Intelligence** to take the human element out of the equation. Reduce errors, speed up the process and get better quality data.

2.

Zero-in on the Right Data

We're all standing under a blowout. It makes little difference if it's a blowout of data overload or blowout of noisy data – the results are the same: you can't see the trees for the oil. By creating and working with a coherent data strategy, you utilize your data most effectively.

4 points to keep in mind when creating your data strategy:



Consider your organization's **business strategy** and use it to set goals and drive your data decisions.



Identify the right data by asking yourself what data you need in order to answer your questions.



Determine where you **find** this data inside or outside the organization, then go get it.



Share relevant data between departments to ensure your strategy is built with the full picture in mind.

3.

Double Down on Data Integrity

Making business decisions based on compromised data is akin to running an engine on dirty oil. There are so many factors that affect data integrity – from human error and faulty hardware, to cyberattacks and transfer errors. Obviously, data integrity is a critical cornerstone in any financial services organization's data analytics plan. Fortunately, there are some easy steps you can take to lower your data integrity risk.

4 easy steps you can take to lower your data integrity risk:



Ensure data is accessible and retrievable to those who need it, while limiting the access of those without permissions.



Audit and control data throughout its lifecycle. Log changes so that additions, deletions and other modifications can be traced.



Make backup and recovery procedures par for the course, to protect against losses.



Get management on-board with a written commitment outlining data integrity governance and culture within the organization.

4.

Make Compliance Your Friend

The Deepwater Horizon, the Exxon Valdez – headline oil spills, they were caused in large part due to lax oversight and failure to follow safety regulations in the oil industry, which were later increased. Meanwhile, financial services, along with many other industries – have been facing an onslaught of new compliance measures, growing the onus on institutions to secure their customer data.

5 things organizations should do to avoid becoming the next 'Exxon Valdez:'



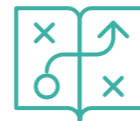
Clean and store data according to regulations for each data type.



Implement systems that provide structure in the way data is ingested, stored, accessed and monitored.



Utilize analytics tools to check for compliance against the various regulatory limits.



Have a plan and stick to it. Measure against standards and optimize as needed.



Audit, audit, audit – examine your processes and operations with a fine-tooth comb, to ensure they all meet standards.

Take Control of Your Data Management

The blowout preventor (BOP) was introduced in 1922, giving oilmen a tool for managing the uncontrolled release of oil. Yet even with preventors, blowouts still occur, and engineers today are expected to know the calculations and procedures necessary to maintain well control. Similarly, as data management has evolved, financial services data professionals have found themselves carrying increasingly far-reaching responsibilities.

Procedures that have a direct effect on the organization's business viability fall directly under the data team's purview. This includes ensuring data compliance, upholding data integrity and accessibility, managing risk, and most importantly, transitioning data through the analytics pipeline into viable customer intelligence.



With So Much at Stake, Where Do You Begin?

Take Control of Your Data Management

1.



Make data governance part of everything you do. Define and share your goals, create a plan of action, and select and measure your KPIs.

2.



Promote empowered data stewardship within the organization. Get everyone on board and speaking the same language. This significantly contributes to effective data management.

3.



Put data security at the forefront. Protect your sensitive data and customer information. Backup your database. Limit access based on need. Check for anomalies. Secure your assets.

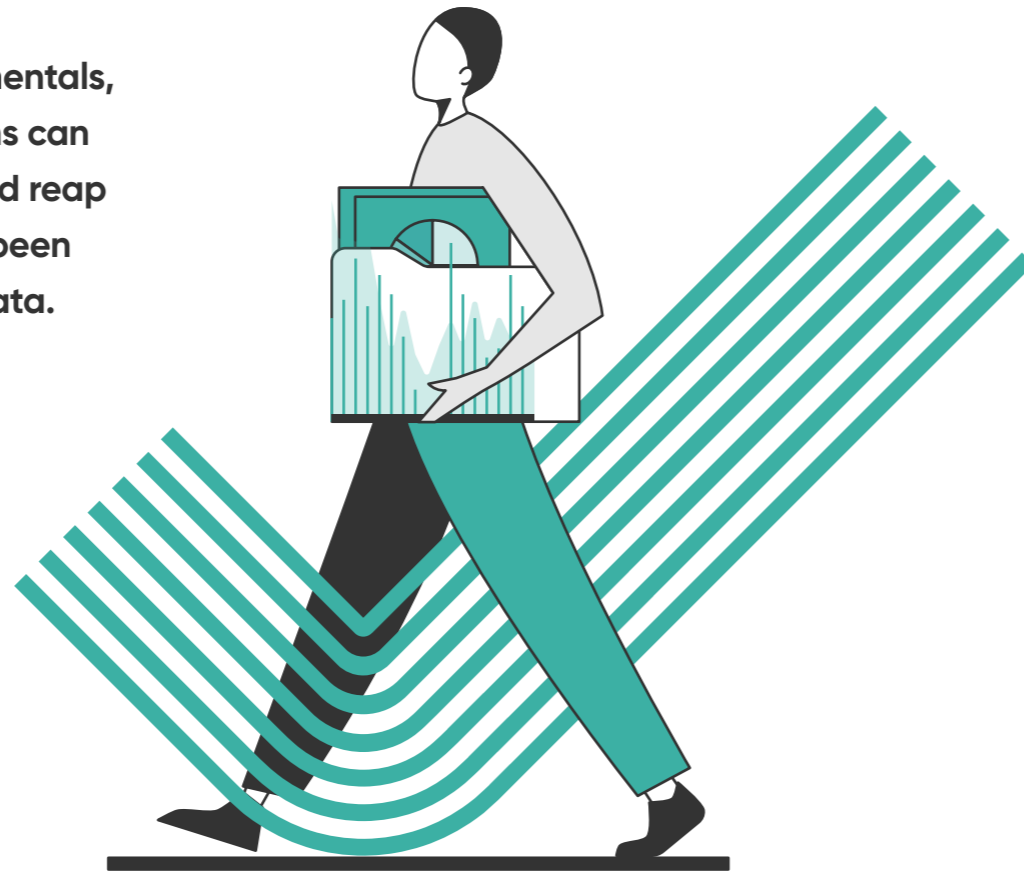
4.



Monitor, audit and manage. Data is dynamic, know your moving pieces.

Take Control of the Blowout and Reap the Data

By following these five fundamentals, financial services organizations can take control of the blowout and reap the insights they'd previously been missing from their barrels of data.



About SQream

We Deliver Insights

SQream is an analytics acceleration platform helping organizations analyze more of their massive data stores to achieve previously unavailable insights for better decision making.

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