

Regulatory Compliance is a Data Management Game

How financial services firms can ensure regulatory compliance by managing their data



People matter, results count.

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1. Introduction

The 2008 financial crisis was a game changer for many industries. Regulatory bodies fought back from all corners of the globe and in all industries by developing more and stricter regulations. Arguably, few industries fought back with more vengeance than the financial services industry, which has become the most regulated sector worldwide.

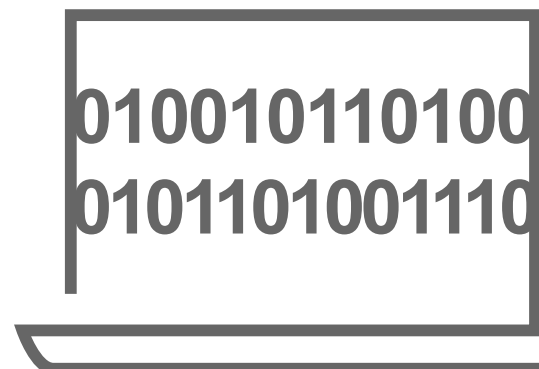
By their very nature, regulatory bylaws must be inherently thorough. Each law can typically contain hundreds of pages of information with myriad and varying sub-sections. Like all industries subject to regulatory enactments, the financial services industry is required to comply with each and every new regulation—as well as all the sub- and sub-sub sections that continually arise.

As financial services firms acquire more and more data to address these regulations, regulatory bodies are becoming particularly strict about ensuring that the data be managed and maintained. Today, nearly all regulations require financial services firms to store their data—no matter how large.

This poses a conundrum for financial services firms. Because regulations require that various types of data be reported, many financial services firms end up storing an unwieldy amount of data. In turn, this storage issue poses a multitude of problems, not the least of which are:

- data overload
- high cost of maintaining large amounts of data
- difficulty extracting information from the data

This paper explores how financial services firms can benefit from properly managing the data required for regulatory compliance, to ensure all relevant data is available and reported in the manner prescribed by lawmakers.



2. A Summary of Key Regulations

Most often, financial services firms bear the brunt of excessive regulations. Particularly after the 2008 financial crisis, financial services institutions have come under extremely tight scrutiny by local and global regulators. Today, most firms must comply with hundreds of regulations—a compliance effort that puts tremendous pressure on the company's data management infrastructure.

Below are a few examples of regulations that global financial firms must address.

Under the **Dodd-Frank Act**, the authority of the Commodities and Futures Trading Commission markets has been enhanced. It is now unlawful to enter into swaps or security-based swaps without submitting them for clearing. Foreign futures exchanges will be required to provide the Commodities and Futures Trading Commission with full market information on swap trades executed through their platforms.

As such, financial services firms will need to enhance their reporting infrastructure to ensure real-time reporting of swap price/volume data. Also, the IT tools used for managing and monitoring risk, including stress-testing tools and margin calculators may need to be updated to take into consideration the updated risk profile.

The **Foreign Account Tax Compliance Act (FATCA)** changed aspects pertaining to withholding taxes which require additional reporting and withholding obligations. To meet these enhanced due diligence and reporting requirements, financial services institutions need to restructure organizational data flow to parcel out records that clearly classify which clients must be charged the 30% withholding tax. These include: U.S. customers refusing disclosure and non-U.S. customers without proper FATCA documentation. Additionally, foreign financial institutions must file information pertaining to how much investment income is earned by their U.S. clients with the U.S. Internal Revenue Service.

Over the year, the **Know Your Client (KYC)** norms have also been undergoing consistent changes. After the financial crisis, bank regulators began to undertake reforms in an effort to consolidate KYC policies and implement them more efficiently. This endeavor resulted in even more scrutiny. Financial firms must incur the costs involved in not only collecting and maintaining client data, but in reporting client-related data to regulators in the event of irregular financial transactions. As KYC norms continue to evolve, banks and other financial institutions will be subjected to further scrutiny and compliance.

Additional regulations, such as Australia's **Future of Financial Advice**, **Basel III**, and **Solvency II** norms put even more pressure on financial services firms, as they are already stretched thin in their attempt to manage current data in a more organized and compliant manner.

3. Regulatory Challenges

Keeping up with an inherently dynamic regulatory environment, while always challenging, has become even more so since the financial crisis of 2008. As the regulatory environment continues to tighten and new regulations are introduced, financial services firms are taking regulatory compliance ever more seriously.

“There is a conflict between Basel III rules for lenders and Solvency II regulation for insurers due to which banks may struggle to raise funds from insurers.”

Tidjane Thiam,
CEO, Prudential¹

3.1. Increasing Regulations

Since the financial crisis of 2008, financial services firms across the globe are seeing a plethora of new regulations introduced:

The **Hong Kong Monetary Authority** passed a banking ordinance in 2013, under which Hong Kong banks must maintain certain liquidity and capital levels and submit periodic return information. The purpose is to offer a supervisory system that aligns Hong Kong banks with international banking standards and adds more stability.

Australia’s government announced **Future of Financial Advice** reforms in 2010 which commenced July 2012 and became mandatory in July 2013. The purpose is to improve the quality of financial advice for Australian consumers by incorporating clauses related to protecting client interests and properly disclosing opt in and other fees.

3.2. Changing Regulations

Existing regulations with which financial services firms must comply are also being tightened and made more stringent, adding even more pressure.

Basel III was introduced after the vulnerabilities of banks across the globe were exposed by the 2008 financial crisis. To that end, there is a push for financial services firms to refocus from Basel II to Basel III, creating more pressure on banks’ liquidity and capital.

In the insurance space, European companies would be required to align themselves with the **Solvency II** regime, an upgrade to Solvency I, which comprises the three pillars of capital requirements, governance, and disclosure. The focus is to deepen European market integration and increase international competitiveness.

3.3. Cross-border Regulations

Because a global financial service firm does business internationally, they must comply with the regulations of every country in which they operate. According to a DST Global Solutions study, “Maximizing Investment Data in Asian Wealth Management,” roughly 34% of Asian wealth managers surveyed signaled out cross-border regulations as a key area of concern, followed by different regulatory regimes.²

¹ Source: “Bank Funding Threatened by Basel III and Solvency II, Thiam Says”, Kevin Crowley, Jan 23, 2013, Bloomberg.com

² “Maximizing Investment Data in Asian Wealth Management,” DST Global Solutions, 2013, <http://www.dstglobalsolutions.com/en-GB/Knowledge/Publications/Reports1/Maximise-Investment-Data-in-Asian-Wealth-Management/>

3.4. Data Overload

By way of their very nature, financial firms generate vast amounts of data. In an effort to meet compliance requirements financial services firms must maintain this massive amount of data. This has resulted in data overload. Both the amount and type of information regulators currently require from financial services firms have mushroomed over the past few years—particularly with respect to regulatory inquiries.

Because financial services firms have so much required data stored, with more coming in continually, they've had little choice but to simply allow it to pile up in their data warehouses, without properly structuring it in any meaningful way. According to a 2011 report by McKinsey Global Institute, the financial services industry has more digitally stored data than any other industry. Thus, the problem is not only of data piling up within a company's data warehouse, but also of storing and extracting the specific information from this exponentially growing mountain of data.

3.5. Inadequate Data Management Systems

While most financial services firms have the required data warehoused, they lack proper data management systems to easily extract it when needed. According to a DST Global Solutions study, "Maximizing Investment Data in Asian Wealth Management," current data management systems among Asia's wealth managers are not yet capable of meeting the needs imposed by upcoming regulations. Without proper data management systems, company databases are encumbered by increasing data duplication and introducing data inconsistencies.

3.6. Increasing Customer Demand for Information

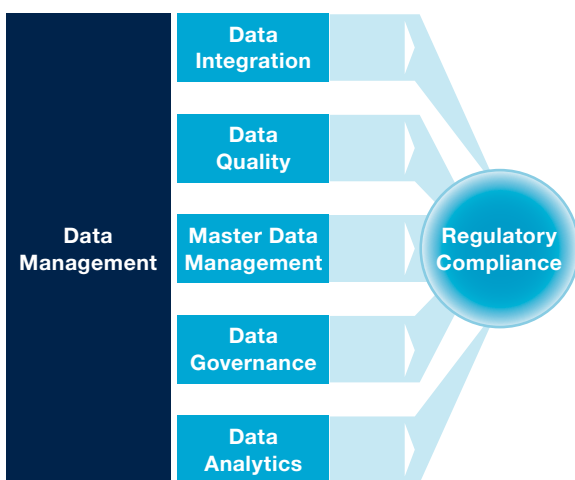
Adding a new dimension to the already complicated process of regulatory data management, it is not uncommon for today's savvy customers to inquire about their financial firms' compliance level and compliance protocol. These customer requests should be taken very seriously, and incorporated into any regulatory data management framework.

4. The Role of Data Management in Regulatory Compliance

4.1. Winning the Data Management Game

With increasing compliance burdens that stem from the ever-growing number of regulations, it becomes essential that financial services firms develop a strategy for their data management game plan, which should include: data integration, data quality, master data management, data governance, and data analytics.

Exhibit 1: Role of Data Management in Regulatory Compliance



- **Data integration** allows both internal and external information in various systems to be consolidated in one place.
- **Data quality** solutions not only help eliminate discrepancies that may exist among various information points, but can also prevent such discrepancies from entering the database to begin with.
- **Master data management** collates the correct information in one single repository.
- **Data governance** controls data acquisition and data flow to ensure its protection and to derive its full value.
- **Data analytics** creates the framework through which data can be properly used for compliance and reporting purposes, and it can generate customer insights.

4.2. Addressing Regulatory Compliance

Each of these processes enables financial services firms to comply with regulatory objectives, including information access, processing and storage mechanisms designed according to regulations governing their respective data types, and semantics.

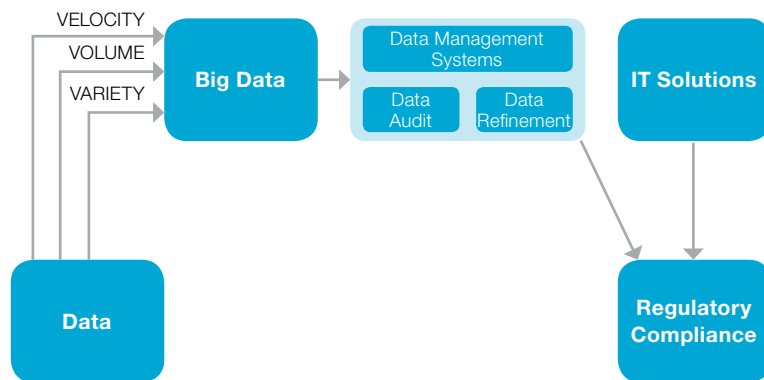
Source: Capgemini Analysis, 2014

Proper data management, in collaboration with a systematic IT backdrop, enables compliance with the myriad regulations financial services firms must meet. Ideally a proper data management flow should include:

- **Data warehousing:** Data warehouses that can organize existing data and remove inconsistencies will enable extraction of relevant core data for various domains. Such warehouses will serve as the foundation to readily provide data for compliance checks.
- **Data quality and analysis:** Data obtained from the warehouse can be run through powerful and flexible calculation engines and analytics systems to check for compliance. For example, banks can calculate their capital and leverage ratios by obtaining relevant data points from the warehouse, and check them against minimum regulatory limits.
- **Scenario generation:** Companies can go the extra mile by adding macros to their systems. These macros can help predict likely scenarios resulting from external regulations, or even their own internal regulatory compliance efforts.

5. Regulatory Compliance through Data Management

Exhibit 2: Data Management Methods for Regulatory Compliance



Source: Capgemini Analysis, 2014

To address regulatory compliance needs, financial firms can employ various data management methods.

5.1. Big Data

The tools associated with big data can help financial services firms critically analyze the excessive amount of data they generate on a daily basis. Apart from assisting in regulatory compliance, the powerful combination of big data and analytics can help financial firms gain real-time insights into their customers and their potential investment opportunities.

5.2. Data Management Systems

Increasing regulatory pressure continues to unravel already-fragmented compliance support. This pressure affords the impetus financial services firms need to implement systems that will ensure consistency and efficiency in the

way data is collected, refined, segmented, stored, monitored, and displayed. It is, therefore, important that financial services firms deploy data management systems that provide a unified data processing and reporting platform for varying compliance requirements.

5.3. Data Refinement

As financial services firms record nearly each and every activity and transaction, they continue to amass enormous amounts of data. Some of this overabundance of data is irrelevant. But when certain data points of information need to be extracted, it can be a challenge to parcel out the relevant from the non-relevant, simply because there's just so much data to scan. Financial services firms, therefore, need proper data refinement mechanisms through which irrelevant data can be filtered out, while relevant data is accurately categorized and maintained. Through accurate data refinement, financial services firms will, not only be able to maintain accurate data, but also be able to extract accurate information from it.

5.4. Data Audit

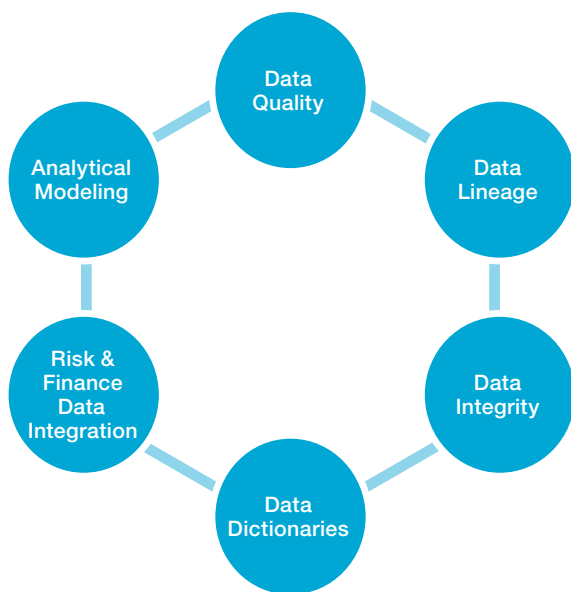
Over the past few years, the banking industry has gone through tremendous turmoil with persistent regulatory changes, increased legislation, and additional regulatory scrutiny. Now, more than ever, financial services firms must examine their processes and operating models more closely to ensure their compliance protocol is bullet-proof. A well-established data audit function will help evaluate risk and control framework. There are companies that specialize in maintaining a company-wide focus on the banking industry, its regulatory environment, and emerging issues, and provide specialized data audit and risk management services to banks.

5.5. IT Solutions

Another possibility is to opt for customized IT solutions. Many companies offer tailor-made solutions to help financial services firms comply with various regulations. For example, Capgemini has partnered with DLA Piper and Pegasystems on a solution for FATCA compliance.

6. A Look at Data Management Best Practices

Exhibit 3: Data Management Best Practices for Regulatory Compliance



Source: Capgemini Analysis, 2014

To successfully comply with this unwieldy plethora of regulations, it is important that financial services firms follow data management best practices and concentrate on getting the data right.

6.1. Data Quality

Data quality has emerged as a top priority. Data should be kept optimal through periodic data review and cleansing. All standard dimensions of data quality—completeness, conformity, consistency, accuracy, duplication and integrity—must be demonstrated.

6.2. Data Structure

Financial services firms must decide whether their data structure should be layered or warehoused. Most prefer to warehouse data.

6.3. Data Governance

It is of utmost importance that financial services firms implement a data governance system that includes a data governance office that can own the data and monitor data sources and usage.

6.4. Data Lineage

To manage and secure data appropriately as it moves throughout the corporate network, it needs to be tracked to determine where it is and how it flows.

6.5. Data Integrity

Data must be maintained to assure accuracy and consistency over the entire lifecycle, and rules and procedures should be imposed within a database at the design stage.

6.6. Analytical Modeling

An analytical model is required to parcel out and derive relevant information for compliance.

7. Conclusion



Regulations aren't going away any time soon. Instead, they are proliferating. Compliance is not optional so financial services firms must have a foolproof game plan in place to manage data. Without a plan, it's virtually impossible to comply with today's regulatory authorities.

Adopting data management techniques and best practices is a first step toward compliance—particularly with regard to maintaining accurate data structures and quality. Financial firms that are built on a foundation of well-managed data will be able to address changing regulations and provide accurate reporting while firms that are not will struggle to meet new regulations and remain competitive in a changing global market. By tracking and storing accurate data and analyzing it according to compliance-related parameters, financial services firms can win the data management game and achieve regulatory success.

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