

Establishing data controls in the financial services industry for effective governance and compliance

Banking, Financial Services and Insurance



Abstract

To say that data is the new oil is not an understatement. From being a must-have for business excellence to fueling organizations in implementing their ambitious roadmaps and defining their future course, data has become a true asset. Like oil, data in its crude form holds little to no value; especially in a highly regulated industry like financial services, the value of data is determined by its source, method of acquisition, storage, and other handling strategies.

Financial institutions must check if their data is ethically sourced, transparently used, complies with fair usage policies, and most importantly, if their data management systems adhere to compliance mandates. This white paper explores how financial institutions can establish controls on their increasingly complex enterprise data topographies—including onsite and cloud-based data assets – and how technology can help.

A regulated path forward

Every day, financial institutions generate colossal amounts of data. Add to this the increasing consumption of external data, and financial institutions find themselves facing regulatory roadmaps on how to ensure data is ethically used. Regulations such as the California Consumer Protection Act (CCPA), the European Union’s General Data Protection Regulation (GDPR), the NY Department of Financial Services (NYDFS), and the Cyber Security Regulation (NYCRR) seek to ensure the adoption of ethical standards on client data across their enterprise as well as with partner ecosystems.

Compliance with these regulations requires data control mechanisms to be in place, assuring data lineage, data transparency, and even how firms enable usage of third-party data. Furthermore, these regulations come with punitive consequences for adverse outcomes. For example, financial services firms that are unable to eradicate all personal data if requested by their clients can face monetary fines as well as restrictive measures on their business processes, in addition to the ensuing negative publicity.

Enter automation

When properly envisaged and powered using robust automation techniques, a data controls framework can extend enterprise capabilities to address ethical data usage. This not only includes what is currently under the rule of law, but accounts for how customers may react to the firm’s usage of their data by reading into user preferences. Some clients may be open to exposing their data to get more customized outcomes, while others may have higher privacy concerns and may limit their participation in such efforts. With technological capabilities like digital twins, firms can embed artificial intelligence (AI) and machine learning (ML) into their processes to enable outcomes that are better aligned to their customers’ desired preferences.

Digital twins can mirror the responses of their clients and build predictive capabilities as more data is provided to their algorithms. Together, AI, ML, digital twins, and other emerging technologies can help address the data control requirements from a functional perspective. However, before operationalizing it, firms need to ensure that the enterprise culture is grounded in data governance. Accomplishing this

will require firms to strike a balance between using data to achieve economic gains and preventing bias, ensuring inclusivity, and guarding against invasive, detrimental, or misappropriation of data. In the financial services industry, there have been instances where automation produced outcomes that were unintended, such as restricting mortgage lending due to blanket data-driven rejections in certain neighborhoods violating federal regulations on equal housing. In some cases, certain demographic characteristics were applied across customer segments that caused loss of credit accessibility and other negative consequence— people of color were more likely to be denied mortgage loans compared with white people of similar financial profiles.¹ This further corroborates what we already know—the need for establishing more sophisticated data controls to ensure compliance. Consequently, the adoption of automated data controls will only increase in the coming years.

Know the data to control it

With customer-centricity emerging as the pivotal driver of differentiated offerings in the financial services industry, the continued gathering, consumption, and safeguarding of personally identifiable information (PII) becomes both an asset as well as a liability. Most organizations understand the need to hold data, but many struggle with having a holistic reliable inventory mechanism to understand where, in what form, and in what defined methodology data is present across their enterprise systems. Not understanding these core data governance attributes and their dynamic interoperability leaves firms unaware of how and what data to control.

Considering all the emerging data regulations and the costly reputational hazards that can arise from data mishaps, financial institutions must engage in proactively building data controls at all enterprise levels. Onboarding new clients as well as revising consent agreements for existing clients need to be reviewed regularly to ensure positive acceptance is in place. AI and ML solutions can be leveraged to automate governance, audit, and add lines of defense to existing compliance frameworks.

We suggest a few strategic enablers that provide guidance on data controls. Organizations looking to achieve an effective, efficient, resilient, and adaptable enterprise data governance framework should include a well-conceptualized and ubiquitously implemented data controls regime considering the tenets shown in Figure 1.

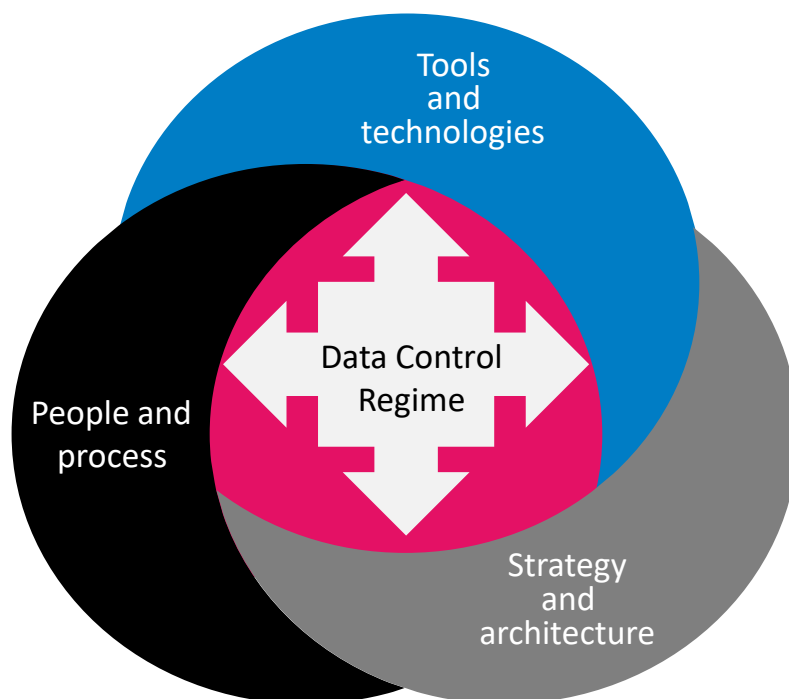


Figure 1: Tenets of data controls

[1] AP News, The secret bias hidden in mortgage-approval algorithms, August 2021, Accessed February 2022, <https://apnews.com/article/lifestyle-technology-business-race-and-ethnicity-mortgages-2d3d40d5751f933a88c1e17063657586>

What are the objectives of a data control regime?

With a robust data controls strategy in place, firms need to ensure that effective operationalization can occur. The strategy must assure integrity in processes, auditable governance mechanisms, timely statistics, single source of truth, aggregate risk management, and build confidence in executive decisions. It must have the ability to reduce fundamental risks, including over-extended credit exposures, inaccurate performance or risk metrics, unreliable models or forecasts, and the potential for unchecked manual interventions that may undermine mission-critical business objectives. Figure 2 mentions some of the benefits of a data controls strategy.

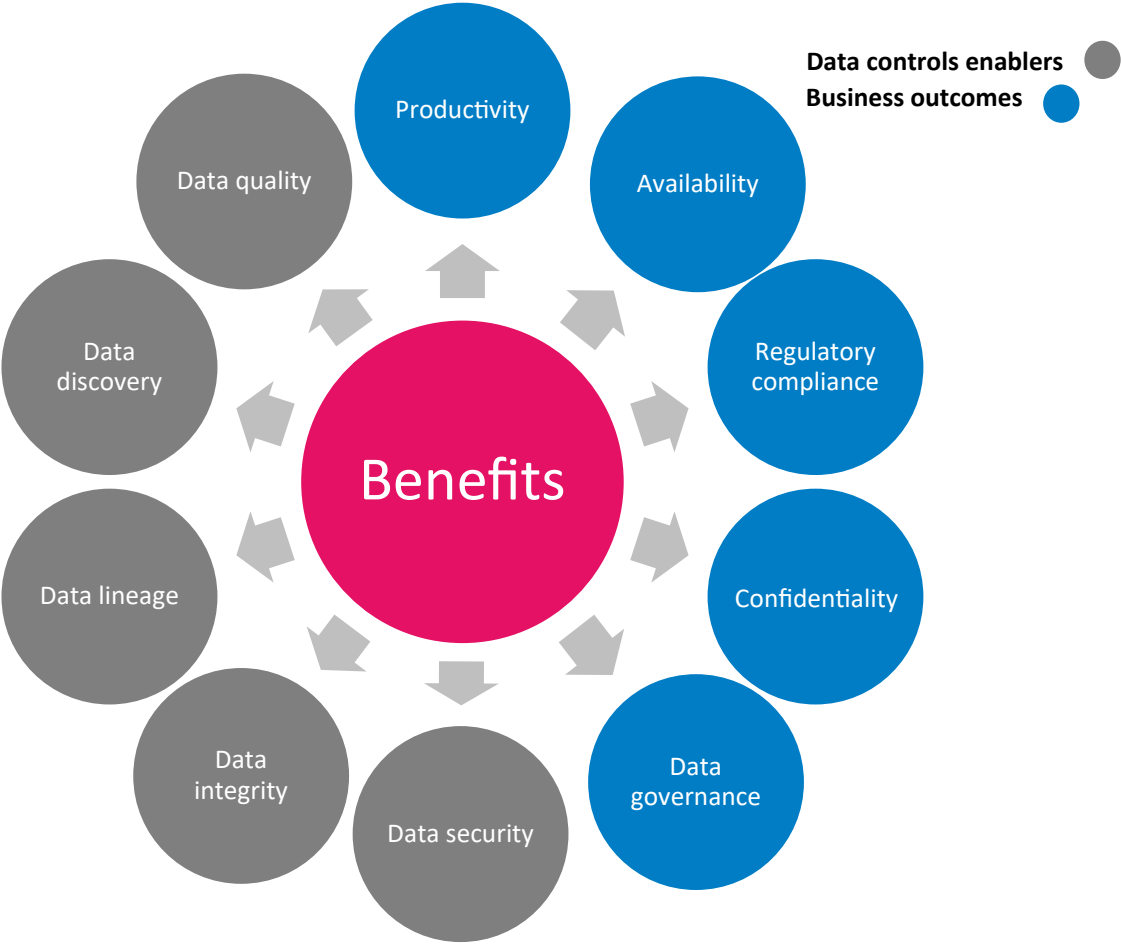


Figure 2: Benefits of a data control strategy

Establishing the data controls framework

There is a baseline need for organizational readiness. To institute the required controls, financial institutions need to ensure enterprise alignment and executive sponsorship to ensure that the foundational aspects of the implementation are in place. These include enabling people, processes, tools, and architecture to support the data expedition – from creation to archiving – and pave the way for an enhanced, agile, and responsive enterprise.

The foundational pillars of a data controls framework include:

1. People

- Setting-up of data office and functional structure
- Defining roles, responsibilities, and skills
- Establishing a governance council and regular communication structure
- Training programs

2. Process

- Business processes
- Data management processes: data ingestion, cleaning, verification and validation, conforming, aggregation, and loading
- Operations (SLA and OLA) monitoring and control
- Metrics collection and reporting
- Regulatory compliance

3. Tools

- Recommendation of software tools for managing CRs and releases, version management, ETL, and analytics
- Data governance tools
- Technology guidelines for usage and feedback mechanism

4. Architecture

- Design standards
- Design guidelines
- Checklists
- Change management

How should financial institutions implement data controls?

Once the strategizing is completed, firms enter the execution stage of establishing data controls, which begins with documentation of the mechanisms required for the implementation. These steps include establishing a tiered data controls implementation hierarchy:

- **Policies:** High-level statements of expectations and the standards enforced will provide a broad framework for how data-related decisions should be made.
- **Standards:** Detailed rules on how to implement policies should be provided.
- **Procedures:** Specific instructions on how to implement standards must be defined.
- **Metrics:** Designed to facilitate decision-making. It shows whether implemented standards meet its objectives.

These mechanisms need to be deliberate and object-centric, which means that they need to be created by firms based on their individual context. Each line of business must provide stewardship within the organization to ensure that each control aspect is in line with business objectives. For successful execution, financial institutions may form internal teams and define processes. However, to scale and effectively accelerate, they must engage with service providers with the requisite experience, expertise, and technology solutions that deliver rapid outcomes based on tried and tested strategies.



Conclusion

In the financial services industry, establishing data controls in the risk and regulatory compliance space is no longer optional but fast emerging as a strategic imperative given its ability to improve governance, security, and compliance as well as enhance customer experience. To this end, financial institutions must move swiftly to establish a foundational data controls framework with robust governance to gain an edge in the market and march ahead of the competition.

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Awards and accolades



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