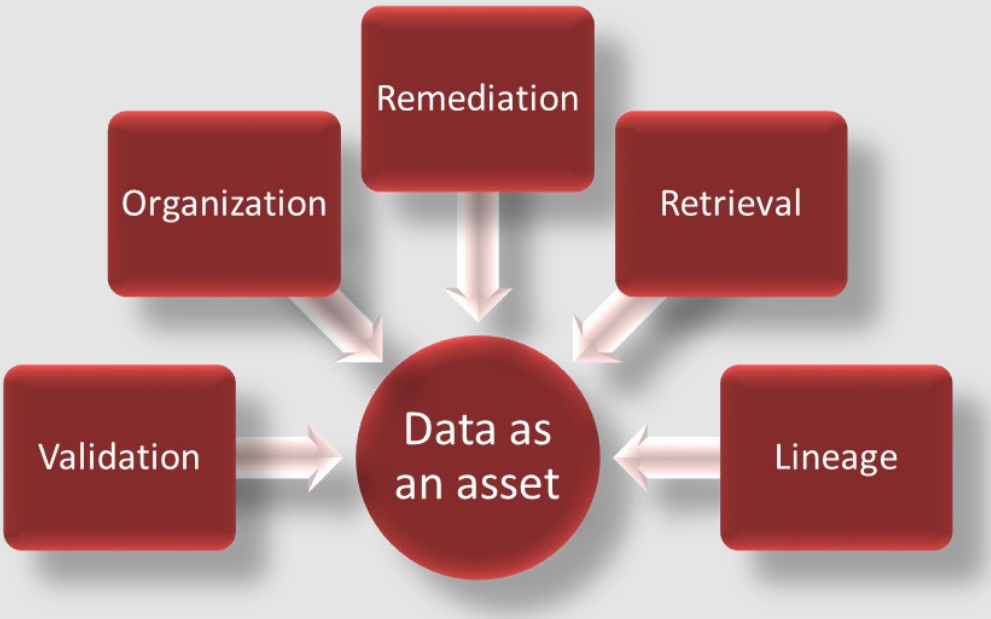
Data Management

Transforming Data From Liability to Asset

"Big data is the future," is a common catch phrase in the Financial Services industry. Our smartphones, apps, and online activities generate tremendous amounts of personal and transactional data. Data used in Financial Services, with the prevalence of online banking and increasingly sophisticated wealth management strategies, is no exception; the vast quantities of data created, collected, and collated by financial institutions contain opportunities. Savvy analysis provides the potential to unlock business insights and revolutionize how we interact with clients and stakeholders. Before a firm can harness the power of its data, however, a firm must develop a strategy and the capacity to manage its data. Properly planned and implemented data management transforms data from a liability into an asset.

A comprehensive data management plan follows data from the point of creation to final analysis, then through to archival. Broadly speaking and in rough chronological order, data management consists of the following high-level processes: Validation, organization, storage, and retrieval. A proper accounting of these steps constitutes data lineage. The process of retroactively applying one or more of these steps results in data remediation. Any competent data management strategy will incorporate all of these steps. Let us consider a hypothetical case study to see how each of these steps of data management plays out in practice.

Consider a firm overhauling its client onboarding process to wed onboarding and know-your-client ("KYC") data. The firm has a legacy account creation interface and a legacy KYC application. Data for both systems was developed independently, and the data is stored separately. There is no sure-fire way to link clients or details between systems. All retrieval requests for data resting across systems requires considerable effort. Each inquiry requires separate, dedicated efforts due to changes in the data formats and data entered depending on the time at which the data was entered into the system.



DATA MANAGEMENT OVERVIEW

VALIDATE

Define what data must be captured and implement controls to ensure data is captured to meet definitions.

ORGANIZE

Organize the physical and virtual data environments, ensure security measures are implemented, and map data.

REMEDIATE DATA

Transform legacy data to meet the validation and organizations as required. Automate transformation processes. Build QA processes.

MANAGE RETRIEVAL

Define retrieval processes, institute permissions on data access, and ensure the right stakeholders can access the right data.

DEFINE LINEAGE

Define the data lifecycle and identify process and procedure owners and data stewards.

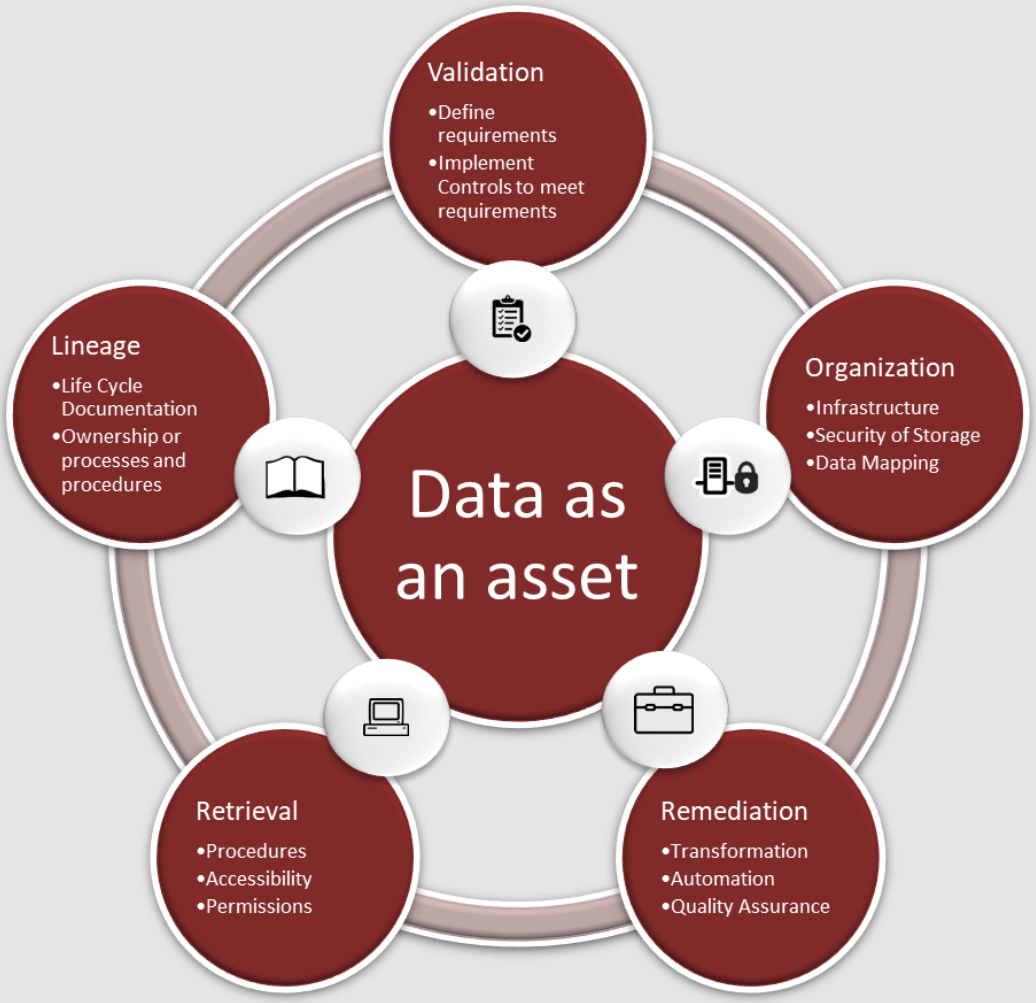
In this current state, the data warehouse more closely resembles a data swamp. This scenario shows data as a liability; meaningful analysis is difficult or impossible. From a regulatory standpoint, the data is a ticking time bomb, waiting for a trigger to set off considerable effort and the firm potentially facing fines or censure. Fixing the scenario requires an over-arching data management strategy.

First, the two systems are compared at the point of data creation. Review of the business requirements and regulatory environment allows the firm to define what data must be captured and the formats needed to ensure data from each system is comparable to data in the other system. At this point both legacy systems are updated to ensure that controls are in place at data entry to ensure formats are consistent and required data are always captured. This is the completion of a data validation process: all data are checked for quality and accuracy at the point of entry and each subsequent step through which the data passes.

Next, the firm investigates the way data is stored. Back-end database infrastructure and design is evaluated and updated to ensure that the validated data is secured and stored in a manner that guarantees the data is safe and reliably available to front-end users and back-end processes. Database mapping is recorded and published so that the data structure is available to stakeholders. Documentation of the data storage process also provides reference for unanticipated data use-cases. This is the completion of the data storage process.

After ensuring validation and storage processes are in place, the firm looks back at the historical data already collected in the two legacy systems. An inventory of the data formats and required data elements over time provides another data mapping reference; this reference, along with the data validation mapping documentation, is then used to determine standards for transformation of old data. Finally, legacy data is converted to the new, standard formats. The standardization process often involves automated validation and quality control testing steps, and will require integration with storage processes. These processes comprise the process of data remediation, ensuring all data is brought up to the current standards.

Now the firm has validated, organized, and remediated the data from the onboarding and KYC systems. At this point the firm can consider how best to make available standardized legacy data and any new data generated under the new operating model. This is the process of defining data retrieval procedures, making the totality of firm data available for use in applications such as data mining and analytics, to improve safeguards, identify and prevent fraud, and to drive new business opportunities.



One final step remains to implement the comprehensive data management plan. The firm has defined processes, policies, and procedures for data validation, organization, storage, remediation, and retrieval. The record of these processes is used to define the path each data point goes through from creation to final use-case. The business units, job functions, and individuals responsible for each step of the data management process are clearly indicated. This documentation of processes and ownerships constitutes the process of data lineage.

The scenario above shows how a firm can use the pillars of data management to transform data from a liability into an asset. Previously the firm maintained disparate databases with varying formats that made data retrieval difficult and inefficient. In the best case under the old strategy, the firm would be able to continue functioning, with significant resources needed to address scenarios requiring data from the two legacy systems. In the worst case, the firm would be unable to answer questions posed by stakeholders or regulators, and the firm may face fines or punitive measures from regulators.

By engaging a sound data management strategy, the firm removes these potential hazards. The cost of meeting regulatory reporting requirements is reduced. Furthermore, data can be monitored and modeled to provide proactive fraud and anomaly detection. Organized and accessible data provides a platform for measuring and improving performance of personnel and products. Lack of client knowledge is transformed into controlled and defined data which can be mined for insights to build revenue opportunities and enhance customer satisfaction. Big data opens the door to improve all aspects of engagement with stakeholders and clients. The principles and practice of sound data management are the keys to open that door.

About GMG

Gartland & Mellina Group was formed by a team of professionals with an average of 25+ years' experience within the Financial Services Industry. Our goals and operating objectives are:

- To partner with our clients as their "Trusted Advisor." We support every engagement by leveraging our business knowledge with our operational and technological experiences to drive cost-effective and revenue-enhancing solutions.
- To be fully accountable to our clients. Every Partner within our organization is assigned to an account and is an integral part of the delivery team and an active participant on every engagement for that client.
- To collaborate with leading-edge technology companies. We work towards transforming their offerings into viable, profitable and operationally efficient solutions for our clients.

Headquartered in New York. Clients around the globe.

The financial world is truly global, and GMG is well-positioned to meet your company's global needs through our management consulting practice and its network of worldwide alliance partners.

Our Mission

Our mission is to apply our industry knowledge and wide range of experience to deliver viable, measurable, and lasting client solutions. At GMG, we inspire commitment, innovation and teamwork while providing efficient and effective strategies, which enhance our clients' opportunities for success.

Our Approach

We are a Management Consulting Organization that provides a variety of services through a "Practice Structure". Each practice is staffed by professionals who have extensive industry knowledge, diverse experiences and backgrounds, and program management capabilities, which lead to innovative solutions and viewpoints from different angles.

Our Responsibility

The work we perform and how we accomplish the work have lasting impacts to not only our clients, but also to the broader communities and various markets in which we operate. In addition to providing sustainable solutions for our clients to help them better serve their clients and communities, we invest in our own local communities through philanthropic initiatives and volunteering activities.

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