Data Strategy

What is data strategy? It is the intentional action & prioritization plan to a) harness and integrate data and b) create and disseminate information/intelligence, which helps to further an organization's mission.

Different elements in strategy formulation (objective setting, environmental and organizational appraisal, strategic alternatives and choice to strategic plan) determines the course that organization adopts itself. Formulation and reformulation is a continuous process.

As part of data strategy, companies should focus on data governance and data management. A formal data governance program and data management best practices are among some highly strategic investments a company could make. The absence of either is why companies are challenged to harvest their existing data resources.

Data governance and data management together demonstrate how a firm understands and uses its data assets as well as how those assets are managed over time. Data governance and data management become more strategic as firms evolve from static, database-centric systems of record that report on historical results toward dynamic, real-time systems of engagement that generate insights faster and inform better decisions on fresher, more accurate data.

A formal data governance program coupled with effective data management represents a better path to improving return on data assets (RDA). Companies with higher RDAs are more competitive. They outperform their peer groups in achieving corporate return on investment (ROI) and risk management objectives. In turn, these factors drive higher market valuations.

Raising RDA is hard, time-consuming and political. It requires a commitment by all stakeholders – especially senior management. Successful execution is nothing short of cultural change. But the payback on becoming a truly data-driven enterprise is compelling because it can yield tangible gains in productivity, end-user satisfaction (both employee and customer) and sustainable competitive advantage.

The purpose of data governance is to ensure that information accessed by users is consistently valid and accurate to improve performance and reduce risk exposure. The more users trust the quality of the data they are working with the more reliable and predictable their models and decision outcomes will be.

There is a direct relationship between data governance and operational performance. As more companies expand the use of associative search and data visualization tools to a wider user community the value they derive from analytics is proportional to the quality of their data. Data quality supports data governance by making sure that data assets are reflected correctly within data stores and throughout business processes.

As analytics and decision-making bifurcate throughout the organization, assessing and managing the risks associated with data lurking within the enterprise – and coming from external sources – becomes more complex. Data governance also provides consistency to data that is strewn across departmental and organization silos. As users' appetite for data sources continues to grow, a framework that emphasizes data quality facilitates integration of existing data sources with external ones, including newer big data formats.

While many companies have made substantial infrastructure investments to speed data delivery, bad data at the speed of light is still bad data. Firms can achieve higher RDA and mitigate decision risks with a long-term data governance strategy that supports deployment of modern analytics technologies.

In financial markets for example, advanced analytics can serve as an early warning system for market operators and participants to prevent disruptions caused by trading errors, improper systems oversight or other compliance violations. These solutions can provide better visibility into operational data and reference past experiences to help predict system-impacting occurrences in advance.

Advanced analytics can also help monitor and prevent abnormal client behavior and to detect risk exposures through internal or external fraudulent activities. Firms can mitigate risk, reduce service outages and better adhere to GRC (governance, regulatory, compliance) reporting requirements.

As part of data governance, companies should create standards by defining a set of best-practices or principles that will ensure the organization creates and maintains good quality data. Strong data quality informs a deeper understanding of the key performance variables (KPVs) that drive decision-making and the business.

The key factor for success of a data governance program is an environment that promotes communication, collaboration and trust among and between business users and IT. A formal data governance program includes safeguards on data handling and usage, with clearly defined rules, roles and responsibilities. Data ownership becomes the provenance of the data governance program with all constituents held responsible and accountable to adherence by a data governance council that oversees the program.

Working together teams can identify the existing information infrastructure, applications and data sources that drive workflows. Understanding business and technical requirements to identify the value data provides is the first step to developing a data governance cycle. It also helps pinpoint bottlenecks and inconsistencies in data elements that inhibit optimal data usage and oversight.

Once data sources have been identified, they must have uniform definitions – such as information pertaining to a customer, product or counterparty. The program establishes policies and procedures for data handling, and ensures that users of that data are clearly identified and authenticated. The role of data stewards includes ongoing monitoring of data sources and data quality to ensure adherence with best practices. Diligent governance helps maximize RDA while limiting risk exposures, including non-compliance.

Metrics that establish adherence to data governance policies map back to data handling rules that are used to create baseline key performance indicators (KPIs). These KPIs can then be used to gauge how effective the data governance program is as reflected in operational performance and risk management objectives.

Without data governance, it is impossible to know whether the information presented is accurate, how and by whom it has been manipulated. And if so, with what method, and whether it can be audited validated or replicated. As departments maintain their own data – often in spreadsheets – and increasingly rely on outside data sources, a verifiable audit trail is compromised, exposing the firm to compliance violations.

Too often, decision makers only have access to pieces of information – or conflicting information - and make decisions based on an incomplete view of what is happening. After data sources have been identified and harmonized, homing in on KPVs represents the next step in data acquisition. Data needs to be integrated to provide connections between datasets in order to perform analytics.

However, integrating data from a wide variety of formats and data structures without considering data quality is not only costly but can also have a catastrophic impact on enterprise systems that rely on that data. From a recent poll, Gartner estimated the average cost of poor data quality to an organization at $8.2 million per year. Moreover, 22% of respondents estimated their annual costs at $20 million or higher.

As a result, firms should adopt centralized data management. With all users accessing the same data stored in a unified platform, or by having users access federated data stores that have been validated, trust in the data rises and results in more reliable models that drive decisions.

A strong data management platform ensures users can access data assets as they need it, share information when required, and have the tools to "see" analytics results without the pre-definitions of restricted data sets inherent in legacy business intelligence platforms. Information remains consistent so that even when users within different business units require individual insights, the underlying data will be monitored to ensure that it is accessed within a governance framework.

Although different business units may define entities differently, it is still important to make sure that all users access the same data. Firms need to manage diversity of terminology and definitions by maintaining strong metadata while providing users with the flexibility to analyze data using modern tools.

Effective data management also eliminates the need for a separate big data strategy. Big data becomes part of the firm's data management strategy. This is especially true as 90% or more of data that drives business processes and decisions are from traditional sources. As more unstructured data is incorporated into workflows, technologies can be introduced to aggregate, analyze and manage these newer data formats in an evolutionary manner.

It simply doesn't make sense for most companies to either rip-and-replace their existing data management infrastructure and analytics tools or to risk creating yet another data silo for the relatively small component of big data that drives their analytics and decision processes. Positive results are more likely with incremental steps to analytics projects and business transformation. Success with smaller user groups and data sets begets confidence from all constituents and makes it easier to get funding for expanding the project to the next phase.