Are you using your data to create true and tangible value?

The better the question. The better the answer. The better the world works.



Data as an Asset

Data is widely regarded as one of the most valuable assets that an organisation can have, and it lies at the heart of today's rapidly changing business environment. Under the right circumstances, data can be transformed into meaningful information and actionable insights, enabling business leaders to make the appropriate decisions. Timely, relevant, and correct data can help organisations improve operations, optimise business processes, increase and extend revenue streams, mitigate and reduce risks, solidify their market position, and achieve a competitive advantage.

Data produced or consumed by organisations is growing at an exponential rate, especially as organisations continue to modernise and digitise their business processes and systems. Organisations are increasingly recognising this relationship between digital transformation and data, and a recent study by Gartner found that almost three quarters of data and analytics leaders are heavily involved in or even leading digital transformation initiatives (Gartner Data and Analytics Summit 2021¹).

¹ The Gartner Survey finds 72% of data & analytics leaders are leading or heavily involved in digital transformation initiatives.



Data Strategy and Governance

In today's world, becoming data-driven is more than just making decisions based on facts. Data is no longer simply a decision-making enabler, but it is the core of business models and revenue streams, fueling competitive advantage and moving the business forward.

Organisations should therefore seek to have a clear data strategy, which sets the overall direction and guidance for the organisation to become data-driven.

A data strategy offers a vision that outlines how data, information and technology will be used to achieve business goals, and how data should be used and communicated across the organisation.

Despite the important role of data, business leaders often struggle to ensure that data is consistent across business units, especially if this is derived from an array of systems and siloed operations. Integration across platforms and applications is often lacking, resulting in significant inefficiencies and errors, as substantial time and effort is required to manually transfer and reconcile data sets.

Given this situation, organisations might not have a clear picture of where their data comes from, and how this can be managed to maximise its potential. Complex data protection requirements and regulations further complicate the situation, since personally identifiable information is difficult to track and protect

unless suitable data management and data governance practices are implemented. Non-compliance with legislation such as the EU General Data Protection Regulation (GDPR) can result in hefty fines of 4% of the company's annual turnover.

Data governance is about how well an organisation knows and manages its data. Unfortunately, all too often neglected. This covers three main areas:

- Organisational structure: There are different data governance operating models, ranging from decentralised ones to fully centralised models. Organisations must select the model that matches their reality and ambition, clearly defining roles, ownership and responsibilities for all data governance activities.
- Policies, standards, and processes: These indicate the general rules about data that everyone within the organisation must follow, and they should be aligned with the current business objectives and realities. The policies should then be translated into standards, on which processes and procedures can be based.
- Technology: Technology enables the organisation to efficiently comply with data policies, standards, and processes. Technology can support aspects such as data and metadata definition, data lineage, impact analysis and data quality.

Figure: Data Governance Framework



Data Platforms

The management of large datasets becomes more complex for organisations, when they originate from multiple sources, which can be either internal to the organisation or pertaining to external systems and parties. Such data is often stored in diverse locations, and comes in different formats that might include structured data such as spreadsheets or databases, or unstructured data such as documents and images.

Modern data platforms can help address some of these data challenges. A data platform is an integrated solution that offers complete, end-to-end processing of data. These platforms collect information from the organisation's entire ecosystem, capturing data in a wide variety of formats and structures, and which originates from various data sources. The information is validated, cleaned, optimised, standardised, transformed and aggregated, making it ready to be consumed in a secure and controlled manner.

Data consumption from the platform can be done by end users for business purposes, or else by other applications. In the latter case, the platform acts as point of integration between the various systems. This goes beyond the traditional Data Warehouse architectures that relied on lengthy ETL activities and limited the ability to leverage the data from an

operational perspective - positioning them more suitable for aggregated reporting.

Data platformsoffer a consolidated data view across the organisation, enabling better-informed, data-driven decisions to be taken. They also help ensure that authorised personnel always have access to the right, most updated data at any point in time, whilst also facilitating access to historic data.

Moreover, data platforms facilitate reporting and analytics, providing users with visibility at both a granular and high level through powerful reporting and visualisation capabilities. This can be further complemented with self-service reporting functionality, empowering authorised users to extract the necessary insights from the organisation's data through a single source of truth. Such insights can be further expanded by enhancing the platform with machine learning, artificial intelligence and intelligent automation functionality. In the 2021 EY Global Corporate Reporting Survey, it was noted that in terms of technology investments predicted for the next three years, having an advanced data analytics capability is one of the main priorities for CFOs, since it helps structure, synthesise, interpret, and derive insights from the large volumes of data.

Figure: 2021 EY Global Corporate Reporting Survey (ey-2021-corporate-reporting-survey.pdf)

Over the next three years, which of the following technology areas will y be prioritizing for investment?

Advanced analytics or predictive analytics Cloud-based enterprise planning and forecasting tool AI Most up-to-date release of enterprise resource planning tools Robotic process automation Blockchain-based tools





Data Platforms

Security considerations are a top priority for any data platform. Consolidating the organisation's data in a single location allows for centralised access control mechanisms to be implemented, restricting who has access, to which data, and under what circumstances.

This needs to be underpinned by a comprehensive data governance practice, covering aspects such as data definition, ownership, security, classification, management, provisioning, usage and retention.

This critical aspect also helps organisations achieve compliance with policies and legislation (such as GDPR), by providing structure and control around the data's entire lifecycle.

Modern data platforms are typically built using a bottom-up approach, where the focus is on ingesting the data in its original format, with any information gaps being addressed on a use-case basis, through an agile and iterative approach. They offer a future-proof architecture, based upon data warehousing capabilities, data lakes, business intelligence, data analytics and data science, also providing a good basis for the application of machine learning and artificial intelligence.

Nowadays, data platforms are increasingly moving towards the cloud, with architectures built on public or hybrid cloud technologies. These cloud-based solutions offer a consumption based cost model provaiding a scalable and elastic environment with storage and processing required to handle large workloads, achieving an implementation that can easily scale up to accommodate larger data sets when necessary, whilst offering high platform availability levels. Data Sources



Figure: Typical Data Platform Architecture



Data Governance & Data Catalogue

Data Security & Data Privacy



How EY Can Help

EY is strategically positioned to help organisations derive value from data, irrespective of where in the data journey they currently are. EY has the knowledge, expertise and alliances to assist organisations to manage and structure their data, control its use, minimise risks involved, and maximise its potential. Key offerings include:

- Data Maturity Assessments, which involve a detailed analysis of organisation's IT system landscape, data input, integration processes, data architecture and data governance controls. The aim is to provide a comprehensive set of recommendations, actions points and initiatives required to improve the quality and integration of data across the organisation, and to maximise the potential of the data held.
- Data Strategy, setting a comprehensive vision that outlines how data, information and technology is used to achieve business goals. A data strategy provides an actionable foundation to move forward and transform.
- Data Governance, which covers availability, usability, integrity, and security of the data, based on internal standards and policies.
- Data Architecture, consisting of models, policies and standards that govern which data is collected and how it is stored, arranged, integrated, and put to use within the organisation.

- Data Integration and Automation, providing a comprehensive and robust mechanism to automate and centralise the integration processes, thereby increasing reliability and efficiency, whilst reducing risk.
- Data Quality Review and Remediation, using a flexible methodology based on Data Quality Dimensions and KPIs across business functions and systems.
- <u>Master Data Management</u>, driving the deduplication and consolidation of the core data needed to run the organisation. It forms the backbone of all types of operational and analytical data usage, and drives simple and efficient processes.
- Enterprise Data Platforms Implementation, which help organisations make better, more informed, datadriven decisions, whilst accelerating the decisionmaking processes with on-demand analytics and increased data availability.



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