Data Platform

Idea In Short

A data platform is an integrated set of technologies that collectively meets an organization's end-to-end data needs. It enables the acquisition, storage, preparation, delivery, and governance of your data, as well as a security layer for users and applications. A data platform is key to unlocking the value of your data.

A data Platform is a complete and well-integrated solution for ingesting, processing, analyzing and visualizing (a.k.a. presentation / consumption) data generated that systems, business processes and interfaces of the modern digital organization. While there are many point solutions and purpose-built applications that effectively manage one or more aspects of the data puzzle, a true data platform provides end-to-end data management. Data platform is an integrated set of technologies that collectively meets a company's end-to-end data needs.

The problem

Today, businesses IT infrastructure comprises of thousands of applications, portals and services to meet specific needs. However, these individual solutions are often fragmented; these solutions cannot effectively integrate and communicate with each other to deliver end-to-end business process outcomes. As a result, the applications are built, operated and maintained in silos. Consequently, stakeholders within (e.g. employees) and outside (e.g. customers, suppliers, etc.) of businesses cannot share data assets with other teams and for other purposes. That frustrates the stakeholders from leveraging data to address business challenges and exploit opportunities.

Data platform

Data Platform is a technology that allows data to be collected, transformed, unified, and be delivered to users, applications or is used for other business intelligence purposes. It

enables data access, governance, delivery, and security. Data Platform [DP] is a result of data inconsistencies and redundancies within an organization. It solves this and allows us to orchestrate, transform and serve data to users.

Consider an organization that has multiple applications with separate databases. Chances are, the same data resides across these separate databases. This not only adds avoidable redundancies, but when data is transformed during use, tracing the original source of version of data is a nightmare.

According to DBTA magazine:

> to deliver value, a data platform must understand data at a very deep and granular level

A Data Platform provides centralized access to an organization's data assets by avoiding redundancy and increasing transparency, thereby making data both, fit for purpose and use. Across organizations, Data Platforms are either on-premise, in the cloud or hybrid. Usually, these platforms consist of data sources (e.g. databases, data warehouses, data lakes, etc.) as well as standard tools and processes that support end-to-end data operations from data sourcing to consumption across business processes.

Business value

Most organizations' strategic drivers revolve around customer experience, operational excellence, process efficiency, data accessibility and growth. A modern Data Platform serves as a single source of truth, enabling data users to discover, use and consume data to deliver customer excellence, achieve operational excellence, improve security and regulatory compliance, to name a few benefits.

A governed data platform reduces manual activities, increases employee productivity & efficiency, reduces inefficiencies & associated costs, improves data quality, ownership, and users' trust in data. Data platform also enables building compelling products and services, portfolio diversification, customer 360°, customer journey analytics, churn reduction, increase Customer Lifetime Value and Net Promoter Scores, etc. Data platform also enables helps businesses explore marketplace business models and data monetisation strategies,

thereby also helping them derive value from their current data assets.

IT value

Data platform simplifies IT operations by enabling seamless access to the data platforms through standard interfaces (e.g. APIs). A data platform, especially one that can easily enhance legacy technology, significantly reduces product development lead time, improve application performance and simplify the technology landscape. A good data platform can handle a variety of functions through a single platform, instead of having to perform each of these functions in different applications and services.

Through a comprehensive data platform strategy, IT can standardize and / or consolidate its technology footprint, eliminate Shadow IT redundant tools, thereby simultaneously achieving cost savings.

By deploying standard platform technologies, IT can achieve cost savings and reduce the technical debt. Consequently, a data platform reduces maintenance overhead by serving as the golden source for all data requirements across a company.

The various components and technologies within the data platform are seamlessly integrated with enterprise applications and services to provide a consistent user experience and view into the available data assets. This facilitates enhaced data access, reduces business process disruptions, promotes users' trust in data, improves data adoption and consumption. As a result, business users view the IT department as a strategic partner within their organization that helps them achieve impactful outcomes.

Summary

A data platform is a central repository and processing house for all of an organization's data. A data platform handles the collection, cleansing, transformation, and application of data to generate business insights. Data-first companies have embraced data platforms as an effective way to aggregate, operationalize, and democratize data at scale across the organization.