Amplifi

Making the case for Data Virtualization

3 things to consider when looking at solving your Data Integration challenges with Data Virtualization

Data Virtualization presents a modern approach to Data Integration.

Rather than moving data from its source, Data Virtualization allows data to be accessed directly in near-real time, as and when it is needed. This enables results to be achieved in a fraction of the time and cost of traditional Data Integration.

For many years, Data Integration has focused on techniques where data is extracted from one place, transformed, and loaded into another... sometimes multiple times on its journey.

Multiple data copies give rise to challenges like ensuring data consistency, maintaining security and access privileges as well as the cost and time associated with moving large data volumes. But there is another way...

Data Virtualization can provide a single logical layer through which all of your organisation's data can be accessed, combined and analysed, as if it resided in a single database.

Not only does this hide the complexity of the underlying architectural landscape from data consumers, but it can also help enforce consistent access and privilege rights whilst delivering exceptional performance.

Whether you're considering a customer or product 360 initiative, building a logical Data Warehouse or Data Fabric, or just looking to simplify the delivery of data to consumers, Data Virtualization could be the answer.

Emily Heath
Data Integration Practice Lead, Amplifi

Consider scalability and optimisation

Remember that Data Virtualization isn't just the ability to connect to multiple disparate data sources.

Some modern business intelligence and data storage platforms offer the capability to connect directly to multiple data sources. This is fantastic for prototyping, but won't necessarily scale to enterprise use cases.

Advanced Data Virtualization platforms apply techniques such as query optimisation, caching and aggregation push-down to ensure performance at scale.

To achieve Data Virtualization at scale, select a platform which has been optimised to ensure high performance of queries, regardless of the data sources involved.

Don't go straight in at the deep end

Start small, select targeted use cases to prove the business value, and then scale up.

Data Virtualization can help solve a number of different, sometimes disparate data challenges, from constructing a logical Data Fabric or a self-service platform for Data Mesh, to migrating data to the cloud or delivering a 360° view of customer.

With such a powerful capability in your hands, it can be tempting to tackle too many use cases at once.

Taking a proof of value approach helps build confidence in Data Virtualization and helps encourage adoption across the organisation without placing too big a strain on already-stretched resources.

There is no one size fits all solution

Recognise that Data Virtualization may not always be the answer.

Some integration patterns, such as complex orchestration of data or high volume ETL can't be achieved (or shouldn't be attempted) using Data Virtualization, but are often important and necessary parts of an organisation's Data Integration landscape.
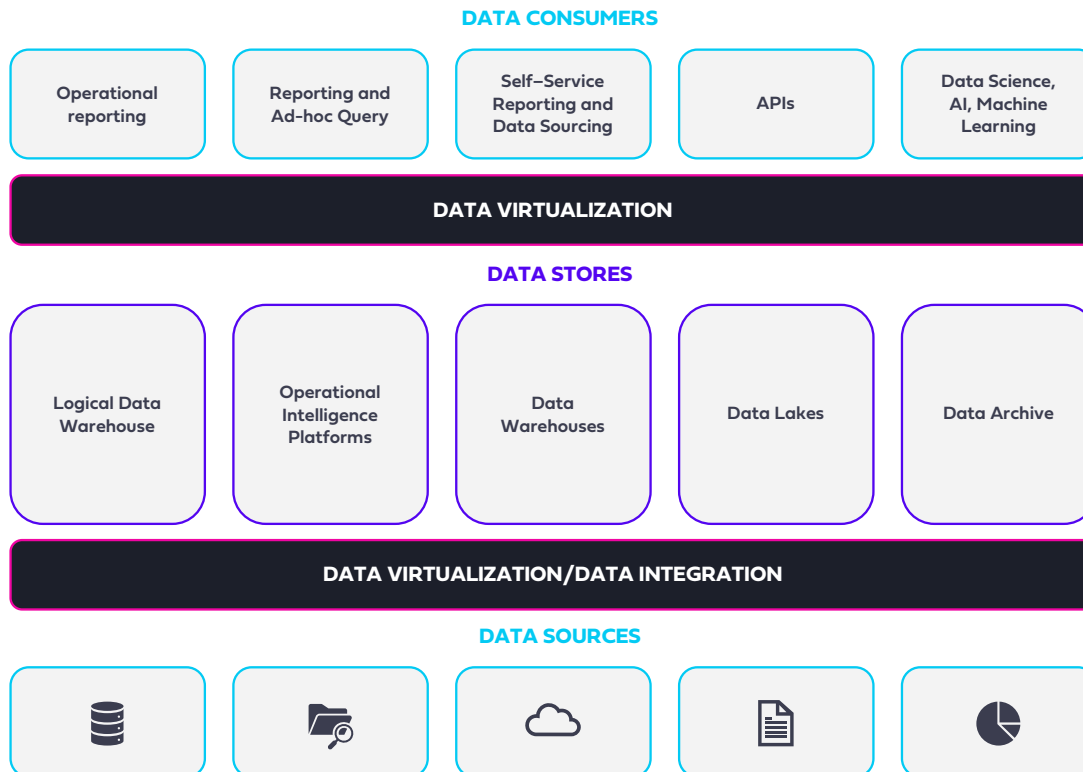
Technologies can play a crucial role in building a modern data ecosystem that can cope with an ever-changing data landscape... but rarely is one solution or approach the right fit for every Data Integration challenge.

Always use the right tool for the job, even if that means utilising the capabilities of multiple platforms to deliver Data Integration.

Data Virtualization in a modern data ecosystem

Data Virtualization can be a core component of a modern data ecosystem and an enabler for approaches such as Data Fabric and Data Mesh. Data Virtualization enables teams to integrate all enterprise data that is siloed across disparate systems, manage the unified data centrally, and deliver it to the business users that need it.

DATA CONSUMERS

| Operational reporting | Reporting and Ad-hoc Query | Self–Service Reporting and Data Sourcing | APIs | Data Science, AI, Machine Learning |

DATA VIRTUALIZATION

DATA STORES

| Logical Data Warehouse | Operational Intelligence Platforms | Data Warehouses | Data Lakes | Data Archive |

DATA VIRTUALIZATION/DATA INTEGRATION

DATA SOURCES

How can Amplifi help?

Amplifi is the go-to consultancy for Enterprise organisations that want their success to be driven by data.

We empower our customers to innovate, grow and succeed by establishing and delivering strategies across all elements of the data value chain.

From the governance and management of data through to analytics and automation, our integrated approach to modern data ecosystems delivers measurable results through a combination of expert consultancy and best-in-breed technology.

Our services include Data Strategy, Data Mesh, Data Fabric, Data Governance, Data Quality, Data Migration, Data Integration, Metadata Management, Master Data Management (MDM), and Product Information Management (PIM).

Gartner

For five years running, Amplifi has featured in Gartner's annual Market Report for MDM External Service Providers and is one of only 20 vendors to be included globally

Amplifi have worked with many organisations to ensure their data management is world class

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Have you got Data Virtualization challenges that mean you can't get the most out of your data? To find out how Amplifi can help, please contact us:

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