

Transform to the Modern Data Landscape

Get up to 30% efficiencies in evolving your current BI landscape into a modern architecture using Capgemini's Leap Data Transformation Framework



 INSIGHTS & DATA

People matter, results count.

Finding your way in the big data maze

With more and more companies planning or building a big data infrastructure, the vision of an insights-driven future becomes clearer and closer. While the new capabilities provided by big data and data science can help you use data to innovate in your business, there is also a tremendous opportunity in transforming legacy BI systems – or, as we would say, to transform into next-generation data landscapes.

By consolidating fragmented BI systems into a modern unified data landscape, organizations can get greater business value from their data, as illustrated in Fig 1. They can break up silos, collaborate better on data and analytics projects across business units and lines of business, and optimize their total cost of ownership.

An additional challenge for organizations looking at transforming their information landscapes is the need to optimize and automate the transformation process itself as much as possible. This means finding the most efficient possible strategies for assessment of existing applications, decommissioning outdated technologies, promote user adoption, perform regression testing, and so on. A critical success factor for organizations looking at transforming their information landscapes is the need to industrialize, i.e. optimize and automate the transformation process itself

How much do you think your current data assets are really used?

In the most complex cases, we found out that up to 40% of the existing BI estate hasn't been used once in the last year. Why transform unused assets?

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An industrialized, highly automated path for your big data journey

Capgemini is a thought leader in helping clients identify and implement the most customized and ideal data strategy. Now Capgemini has created a comprehensive Leap Data Transformation Framework, industrializing that thought leadership to help clients make the transformation from traditional BI and reporting capabilities to the Business Data Lake, in a low risk, predictable, repeatable and cost-effective manner. The Leap Data Transformation Framework was built based on experience gained in major big data implementations with Cloudera Enterprise as the underlying data and analytics management platform.

Leap Data Transformation Framework industrializes every aspect of transforming current BI assets and capabilities to use big data. With this unique asset, Capgemini and Cloudera are able to offer clients:

- Proven methodologies to efficiently transform existing data from legacy BI systems.

- Modern tools that adapt to the full range of big data architectures – with the option to use analytics and machine learning to accelerate the transformation phase itself as illustrated in Fig 2.
- Automated approach with greater speed, control, quality, diligent, efficiency and scalability.
- Continuous integration enabling rapid development and a fast transition into production.

The Leap Data Transformation Framework differs from traditional migration frameworks in its modularity, agility and automation. The full understanding of the diversity of client data landscapes is why Capgemini created this framework with modules that can easily adapt to our clients' needs. A Capgemini Insights & Data team works with you to define which modules are relevant to your business, and how they should be used.

The inclusion of agile approaches makes it fast and easy for the team to create a transformation path tailored to a client's specific needs. The Leap Data Transformation Framework also features a transparent estimating model that can calculate the transformation effort with or without this framework. This helps the client decide on the best transformation path.

Figure 1: Business Data Lake - a modern data landscape architecture

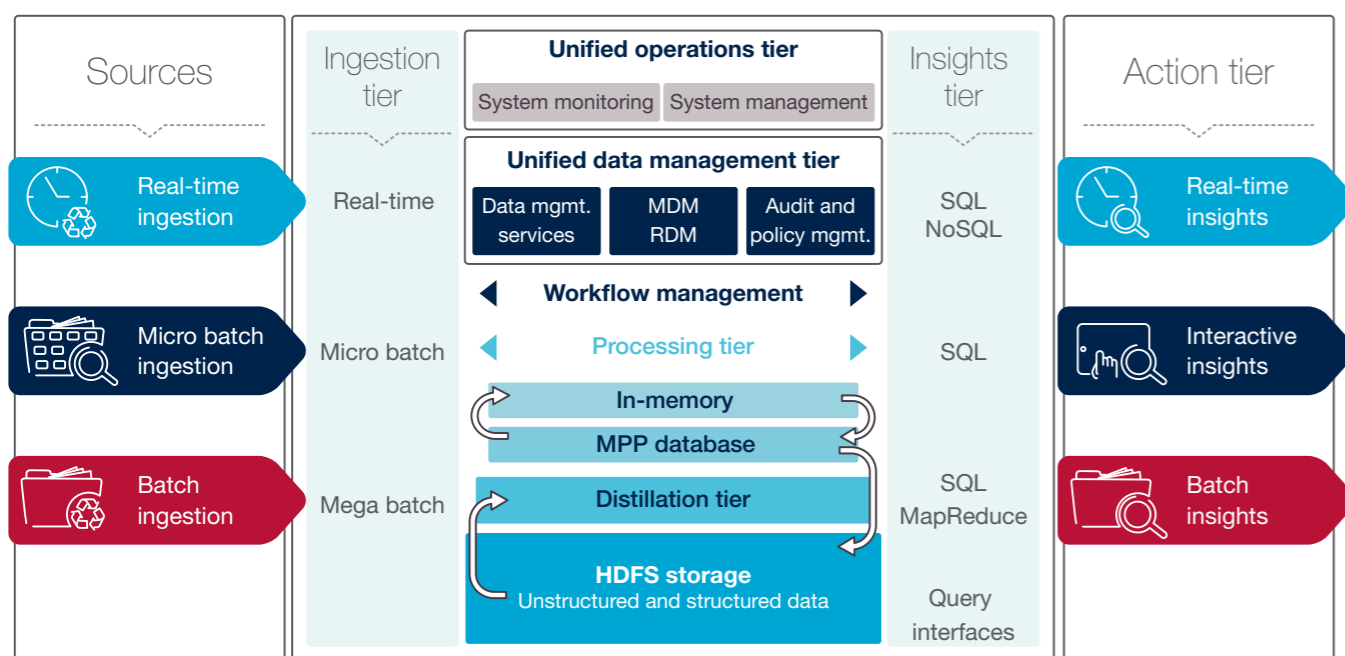
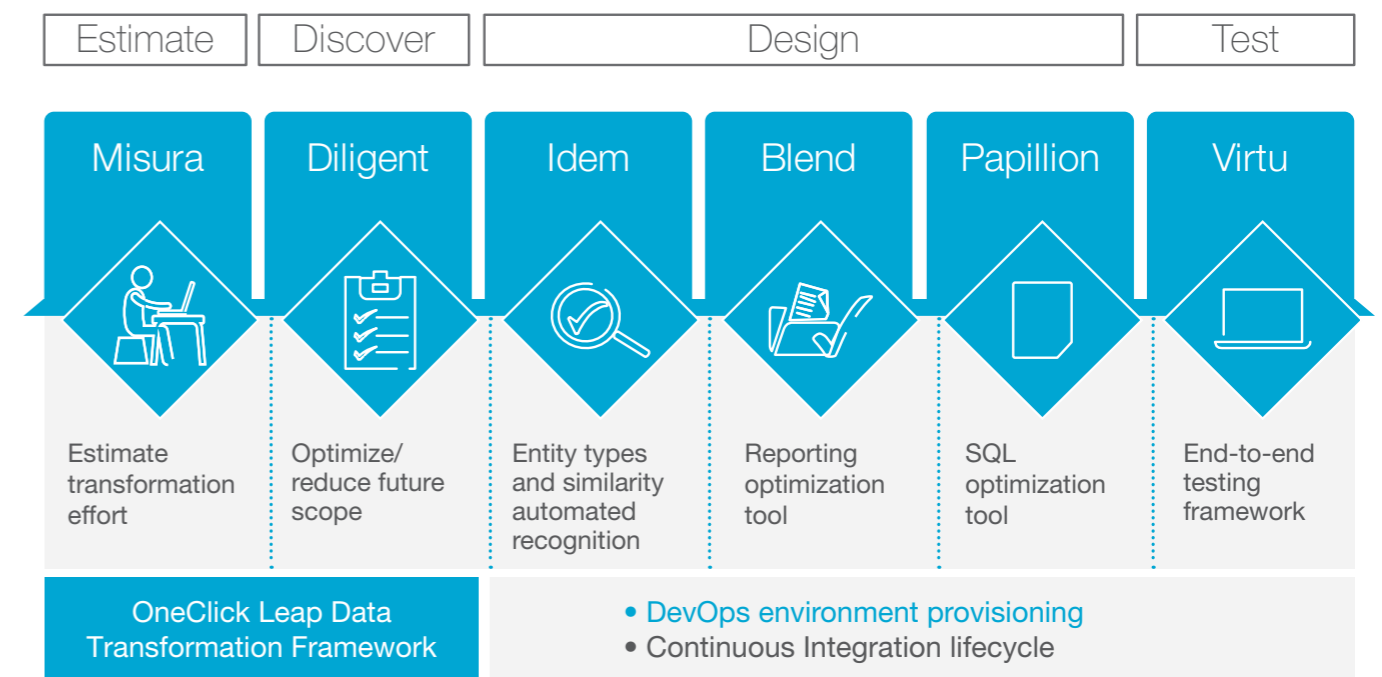


Figure 2: Leap Data Transformation Framework modules that adapt to the full range of big data architecture



Capgemini's Leap Data Transformation Framework modules operate across the transformation lifecycle

Elements of the discovery phase can be automated via an automatic assessment of the real usage of your current BI applications, with:

- Diligent: A **scope reduction module** that identifies data, transformation logic, and reports that are no longer used
- Idem: An **entity similarity analysis module** that combines statistical techniques to identify similarities between tables, columns and data; this is used to identify redundant tables or duplicate columns
- Blend: A **report merger module** that finds similarities between existing reports and suggests the most efficient way to merge them in self-service reporting areas
- Papillon: An **overarching estimating tool** that takes into account the efficiencies provided by these other modules.

A metadata-driven **design** process ensures that all key business functions are enabled on the target architecture through the right level of transformation of the existing business logic.

A metadata-driven **test** automation framework optimizes the initial test effort and subsequent regression testing activities. An end-to-end automated testing tool manages testing and data quality lifecycles, based on a centralized metadata repository and bidirectional connection with a defect resolution tool. It includes a performance tests dashboard.

A continuous **integration** process helps to guarantee high-quality production rollouts.

Typical transformation scenarios

Management of existing BI and transformation to modern data landscapes

When a client has a redundant and expensive BI landscape, and is conscious of the complexity of transformation to the modern data landscape, Capgemini can modernize the current architecture for a reduced cost through its NextGen Business Insights Service Center (BISC) approach. The Leap Data Transformation Framework is a key element in reducing total cost of ownership and ensuring a successful transformation to a new data landscape.

Proven results with Capgemini and Cloudera clients

Within one of Capgemini's largest implementations of Cloudera Enterprise, the use of our Leap Data Transformation Framework led to a saving of **thousands man days** on the projects thanks to the following optimizations:

- **40%+ reduction** in the scope of transformation
- **15%+ efficiency** in the design & build process
- **10% efficiency** in the initial test development process (first pass) and **30% increase** in efficiency in regression testing

Transition to modern data landscapes

For more mature organizations that are already embracing the potential of modern data landscapes, the Leap Data Transformation Framework accelerates the transition from legacy BI systems, ensuring a better and cost effective transformation, thanks to its proven methodology and industrialization tools.

Discovery/scope optimization

For clients wanting to explore the value of modern data landscapes, a subset of the framework modules can assist in designing an optimized target architecture. The Leap Data Transformation Framework identifies redundancies in data and reports and designs an optimal data lake based on the actual information required; this enables a more optimized transformation to a modern data lake.

Testing

The Virtu end-to-end testing helps clients who need to automate their Data Quality processes in their data lakes.

Capgemini delivers industrialized big data transformations: Start the journey today!

The Leap Data Transformation Framework is a game-changing framework for datawarehouse and data mart transformation to big data landscapes.

It industrializes Capgemini's expertise in transforming complex legacy BI and reporting environments. A modular and agile approach can help to ensure rapid adaptation to each client's needs and to future evolutions of the Business Data Lake architecture.

The Leap Data Transformation Framework and modules can be offered "as-a-service", maximizing ease of implementation and management for our clients and helping them gain confidence for their journey to the Business Data Lake.

Find out more: Contact us today to learn more about Capgemini's Leap Data Transformation Framework and how it could help your business industrialize every aspect of transforming existing BI estate and DW capabilities to big data landscapes.

Anne-Laure Thieullent

Director Big Data Europe
Global Big Data Solutions, Insights & Data
annelaure.thieullent@capgemini.com

Andrea Capodicasa

Senior Solution Architect
Big Data, Insights & Data
andrea.capodicasa@capgemini.com

Sarah Driay

Big Data & Analytics Global Alliance Manager
Group Strategic Initiatives & Partnerships
sarah.driay@capgemini.com

Capgemini Insights & Data

In a world of connected people and connected things, organizations need a better view of what's happening on the outside and a faster view of what's happening on the inside. Data must be the foundation of every decision, but more data simply creates more questions. With over 11,000 professionals across 40 countries, Capgemini's Insights & Data global practice can help you find the answers, by combining technology excellence, data science and business expertise. Together we leverage the new data landscape to create deep insights where it matters most - at the point of action.

To find out more visit us online at www.capgemini.com/insights-data and www.linkedin.com/company/bi-big-data-&-analytics or contact us at insights@capgemini.com



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A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

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