

Transform to the Modern Data Landscape

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



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.

Although it is clear that the transformation to the next-generation data landscapes brings many benefits, this needs to be done carefully with particular attention at the optimization and automation of 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 This means finding the most efficient possible strategies for assessment of existing applications, decommissioning outdated technologies, promote user adoption, perform regression testing, and so on.



An industrialized, highly automated path for your big data journey

Capgemini is a thought leader in helping clients identify optimal 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.

The Leap Data Transformation Framework is certified by Cloudera because it was built during a major big data implementation with Cloudera Enterprise as the underlying data and analytics management platform. Leap Data Transformation Framework is also part of Capgemini's global Ready2Series of IP solutions.

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

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

- Modern modules 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

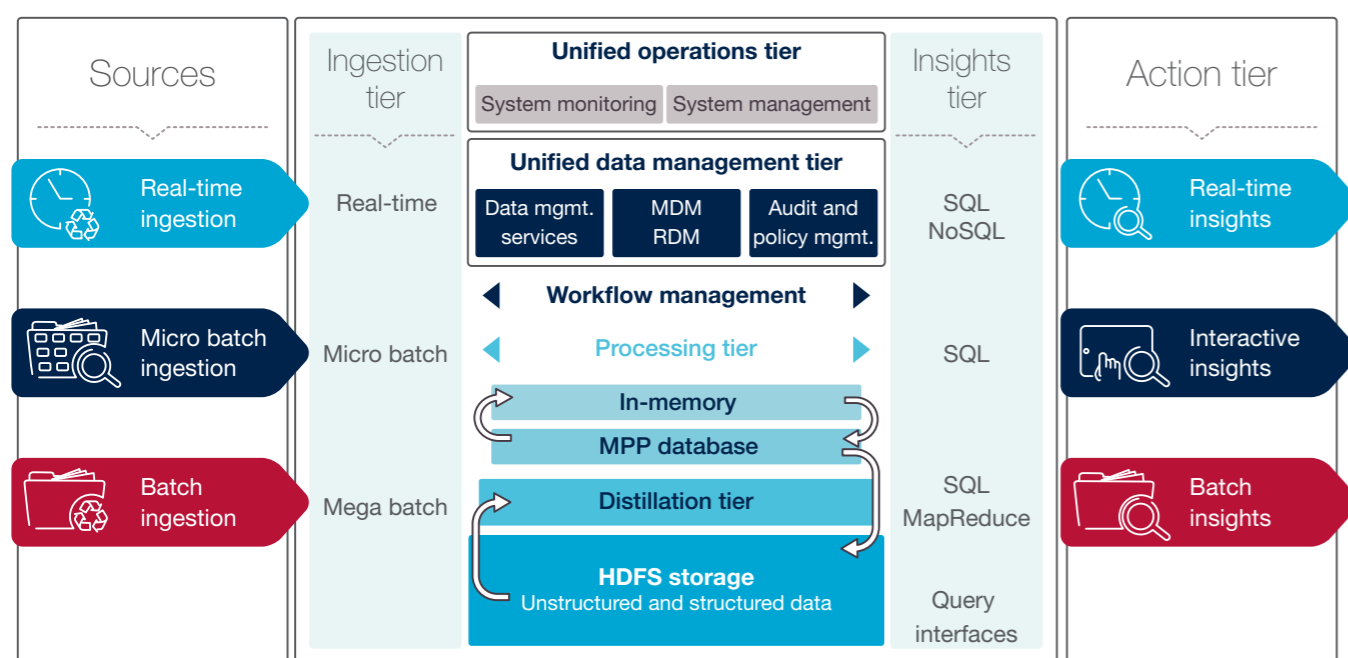
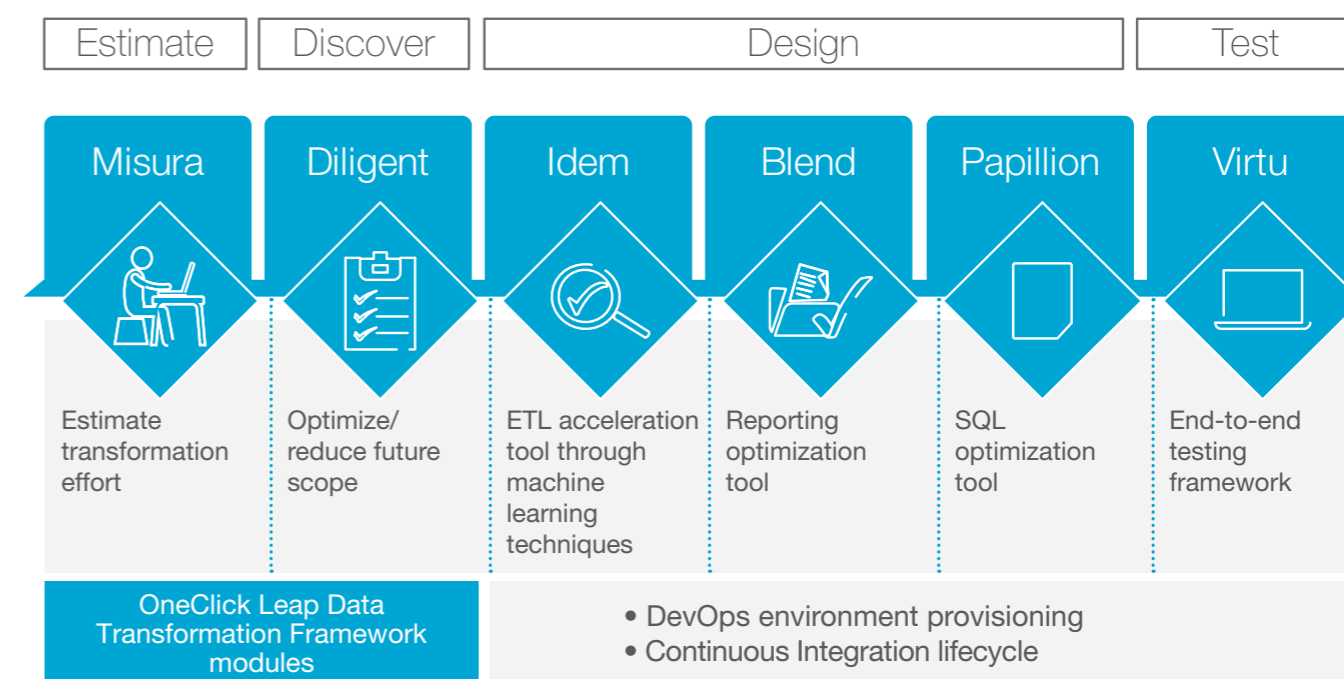


Figure 2: Leap Data Transformation Framework modules that adapt to the full range of big data architecture



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

Leap Data Transformation Framework modules accelerate all the phases of the lifecycle of the transformation to Big Data architectures:

- **Misura:** An overarching estimating module that takes into account the efficiencies provided by other Leap Data Transformation Framework modules
- **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 semantic types of columns (e.g. phone numbers, names, social security numbers, etc.) and similarities between tables, in order to accelerate ETL/ELT processes
- **Blend:** A module that transforms legacy BI environments into modern self-service reporting areas
- **Papillon:** A module that translates BI specific SQL code into SQL ANSI
- **Virtu:** 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 bi-directional connection with a defect resolution tool. It includes a performance tests dashboard
- **OneClick Leap Data Transformation Framework module:** A continuous integration process helps to guarantee easy and scalable 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 **an overall 30% improvement in efficiencies** - 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

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

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

Jonathan Branch
 Senior Engagement Manager
 Insights & Data
 Jonathan.branch@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 follow us on **Twitter @Capgemini**

Contact us at
insights.global@capgemini.com



About Capgemini

With more than 180,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2015 global revenues of EUR 11.9 billion.

Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness.

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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