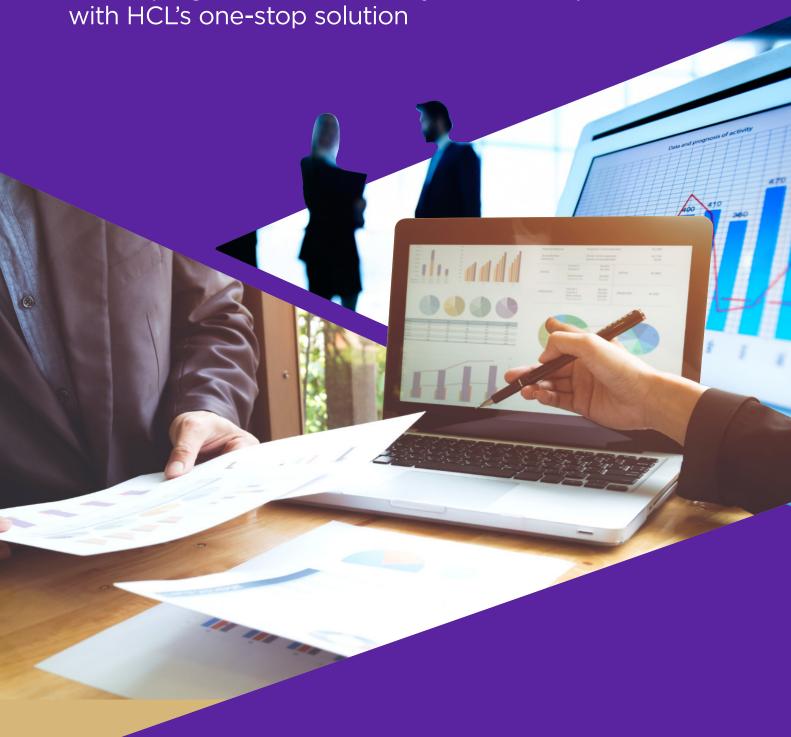
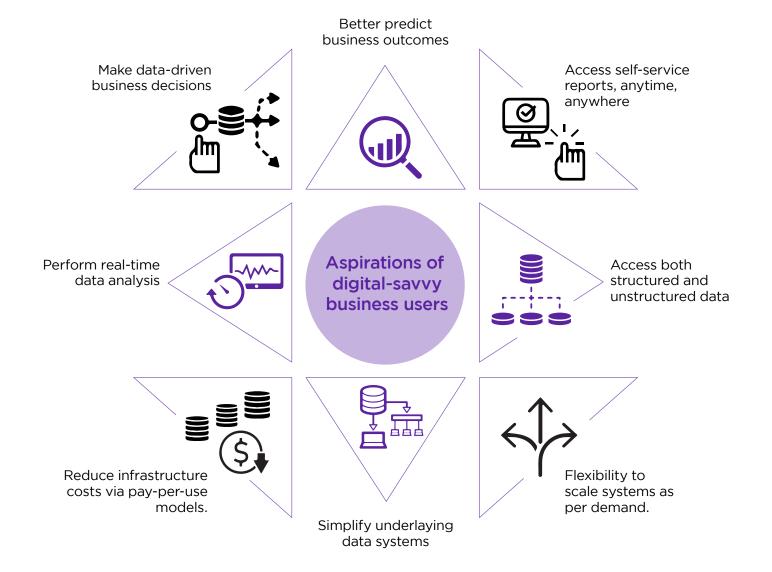


Data Modernization and Migration

Revamping the data and analytics landscape with HCL's one-stop solution







To overcome challenges of an increasingly complex data landscape.

The key challenges that businesses are attempting to address through data modernization are:



Data gravity:

In the previous decade, the data sources were mostly confined to structured data from within the enterprise applications. As source applications have evolved, data complexity has increased multi-fold, calling for migration from traditional and expensive data storage platforms to a modern, real-time Cloud-based data analysis platform that can handle data from legacy applications as well as newer data like IoT Data, Logs, streaming data and other complexities.

ETL/ELT and custom SQL scripts:

Over the last several years, organizations have employed myriad ETL/ELT tools and custom scripts for traditional on-premise data processing that cannot cater to varied data formats, increased data velocity and scalability needed to become a truly digital organization.



BI reporting and dashboards:

The reporting tools in the past were predominantly used for sharing and publishing data. As organizations procured multiple BI tools resulting in scattered & non-contextual analytics, there's a pressing need of new tools with improved visualization capabilities, story-telling, and self-service functionalities.

Key challenges driving large scale migration

Data management

- Data sharing with internal and external entities
- Data governance Self service Vs data lineage
- On- Prem to Cloud Networks

Security

- On-Prem to Cloud security
- Security guardrails for data consumption
- Granular monitoring of lineage



Legacy technology conversion

- Migration and conversion of legacy estate
- Outdated niche technologies conversion Eg: Hadoop



Complex data migration

- · Critical real time data platforms - EAP
- Regulator dependent data
- Varied data technology for single entity - Cases where a single application uses: Oracle, DB2. COBOL ETL, Informatica **ETLs**

Culture shift

- Reluctance in adapting changed persona experience
- Adoption federated data culture
- Self-service consumption and publishing models adoption Ownership of data quality

HCL has tools and frameworks to accelerate the journey to Cloud

One of the key challenges in migration is to discover, analyze, and plan the execution. Our framework automates this process using a Migration Analyzer and Planner (MAP) framework

MAP Framework



program/project schedule for the approved recommendations. Again, it will go for approvals and/or corrections



This is where the system recommends the treatment and send out for approval. The approval process can approve the recommendation or change it. The system will learn from this human interaction & adjust itself for future recommendations



This is for the automation of the discovery process. Looking into metadata, logs, consumption etc. to create the knowledgebase



dissimilarity, categorization in the data collected in the Crawl step. The system supports human intervention to fine tune the categorization/ distribution

Introducing ADvantage Migrate

HCL's ADvantage Migrate is a one-stop solution that helps enterprises modernize their entire data and analytics landscape. The solution assists in unified analytics and governance, amplified human output, and faster business outcomes by leveraging the following key components:

1

Our experience and expertise in data engineering, and cloud along with our proprietary methodologies and architecture principles to embed standardization in the modernization process.

2

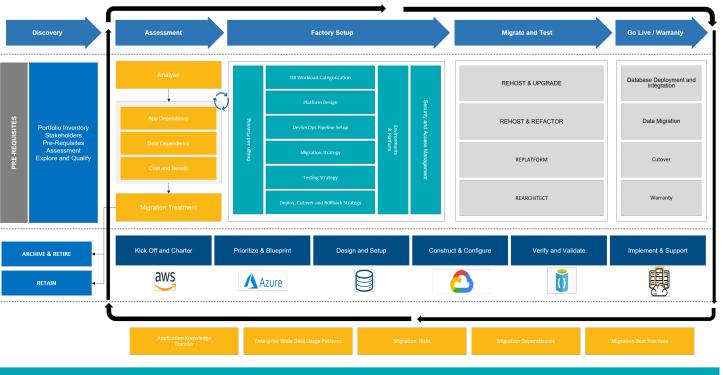
Our three-step automation process with pre-engineered products, which includes:

Gateway Suite: Transforming the way we implement data and analytics Modernization programs by embedding automation in the conversion/migration process. It can auto-discover, analyze and convert legacy ETL/ELT, BI and DB objects to modern platforms

Sketch: Modernize the data pipelines and migrate data using platform-agnostic configuration driven data processing

Gatekeeper: Achieve zero-touch automated data reconciliation and continuous testing post-migration

ADvantage Migrate for Data - The Migration Factory for Cloudification/Modernization



PROGRAM MANAGEMENT AND GOVERNANCE

Key use cases

The ADvantage Migrate solution accounts for the following use cases in modernizing the data and analytics landscape:



Data platform modernization: Modernize or change data platform technology with no

change in application.



Cloudification: Minimize cost and reduce complexity by migrating to a consumable and steady system.



ETL/ELT Modernization: Modernize Data Processing (ETL/ELT) Tools & Technologies.



Reporting and Analytics Modernization: Modernize BI Reporting & Dashboards Tools & Technologies.



Migration to commercial industry products: Make data available from a modern system to provide both speed and value..

Business benefits

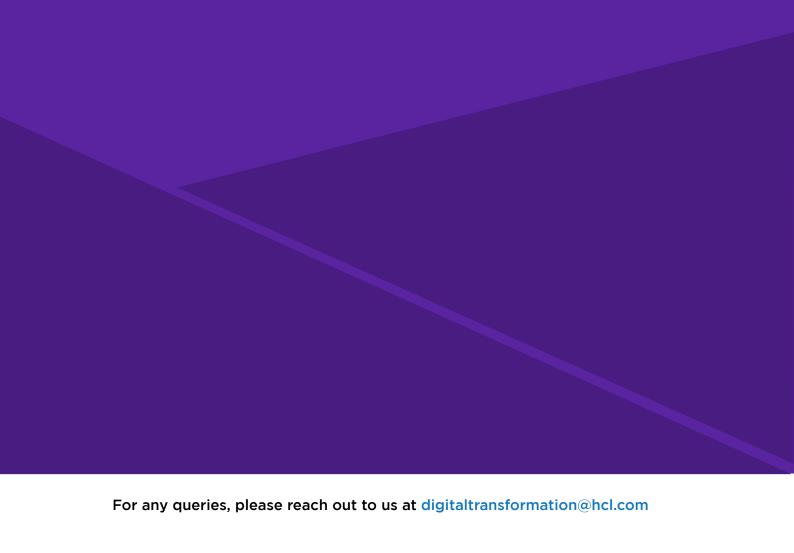
HCL's Data Modernization solution helps businesses leverage a range of benefits:

- Reduce overall migration effort from legacy platforms to Cloud Data Services up to 40%
- Improve time-to-market for data lake and data warehouse platform migration to Snowflake by 60%
- Avail our configurable and reusable components library
- Optimize the IT infrastructure to increase utilization and efficiency by moving from CAPEX to OPEX

- Leverage Unified Analytics and Governance, and amplified human output for a 30-70% increase in business ops
- Migrate to Cloud platform to ensure agility, flexibility, and scalability along with reduced IT support associated costs.IT support associated costs.
- Address a variety of analytical or advanced analytical use cases by leveraging heterogeneous computing systems and storage platforms









HCL Technologies (HCL) empowers global enterprises with technology for the next decade today. HCL's Mode 1-2-3 strategy, through its deep-domain industry expertise, customer-centricity and entrepreneurial culture of ideapreneurship $^{\!\scriptscriptstyle\mathsf{TM}}$ enables businesses to transform into next-gen enterprises.

HCL offers its services and products through three lines of business - IT and Business Services (ITBS), Engineering and R&D Services (ERS), and Products & Platforms (P&P). ITBS enables global enterprises to transform their businesses through offerings in areas of Applications, Infrastructure, Digital Process

Operations, and next generation digital transformation solutions. ERS offers engineering services and solutions in all aspects of product development and platform engineering while under P&P. HCL provides modernized software products to global clients for their technology and industry specific requirements. Through its cutting-edge co-innovation labs, global delivery capabilities, and broad global network, HCL delivers holistic services in various industry verticals, categorized under Financial Services, Manufacturing, Technology & Services, Telecom & Media, Retail & CPG, Life Sciences, and Healthcare and Public Services.



As a leading global technology company, HCL takes pride in its diversity, social responsibility, sustainability, and education initiatives. As of 12 months ending on December 31, 2021, HCL has a consolidated revenue of US \$ 11.48 billion and its 208,000 ideapreneurs operate out of 52 countries. For more information, visit

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