



Having a comprehensive data warehouse solution gives a unified view of the business by making data available across the organization. This enables faster and better decision-making from all concerned departments, eliminating silos and delays. Modernizing your data warehouse improves accessibility, transparency and functionality of your data ecosystem.



# Data Warehouse Modernization

# Why modernize Data Warehouses?

As businesses depend more and more on data, from new product development to targeted marketing, securing, storing and making that data available at the right time is of crucial importance.

The challenges that come with storing and leveraging data efficiently include investing in physical infrastructure, and human resources to manage and maintain it.

# APPROACHES TO DATA WAREHOUSE MODERNIZATION:



#### **CLOUD MIGRATION**

Moving from on-premises data warehouses to cloud-based solutions like Amazon Redshift, Google BigQuery, or Snowflake offers scalability, flexibility, and cost efficiency.



## DATA LAKE INTEGRATION

Combining data warehouses with data lakes to create a modern data architecture that can handle structured and unstructured data. This approach often involves technologies like Apache Hadoop and Apache Spark.



Implementing data virtualization solutions that allow users to access and analyze data from various sources without physically moving or replicating it.



## DATA WAREHOUSE AUTOMATION

Leveraging automation tools to streamline the design, deployment, and management of data warehouses, reducing development time and costs.



### MODERN DATA WAREHOUSE DESIGN

Re-designing data warehouses to accommodate changing business needs, adopting data modeling best practices, and optimizing data schemas for query performance.



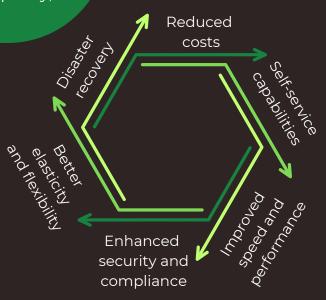
## DATA GOVERNANCE AND SECURITY

Implementing robust data governance and security measures to ensure data quality, compliance, and protection.

However, a successful migration requires careful planning, data transformation, and security considerations to ensure a smooth transition and maximize the advantages of cloud-based data warehousing. It's a pivotal step in modernizing an organization's data management and analytics capabilities.

# Data Warehousing in the Cloud

Cloud data warehouse migration involves moving an organization's data warehousing infrastructure and data from on-premises or legacy systems to Cloud-based platforms like Amazon Redshift, Google BigQuery, or Snowflake. Apart from scalability, flexibility, and cost savings, moving your data warehouse to the Cloud allows ease of storage and analysis of vast amounts of data to suit changing business needs.



# CLOUDLEAF'S CLOUD-BASED DATA WAREHOUSING SOLUTIONS:

#### **Assessment and Strategy Development**

Assessing the organization's current data warehousing environment, identifying pain points, and developing a modernization strategy aligned with business objectives.

#### **Cloud Migration Services**

Planning and executing the migration of data warehouses to cloud platforms, ensuring minimal disruption and cost-effective resource allocation.

#### **Data Architecture and Design**

Designing modern data architectures, including data lakes, data warehouses, and data pipelines, optimized for performance and scalability.

#### **Data Integration and ETL**

Integrating data from diverse sources into the modern data warehouse, including Extract, Transform, Load (ETL) processes

#### **Cost Optimization**

Advising on cost management strategies in cloudbased data warehousing environments to ensure cost-effectiveness.

#### **Data Modeling and Optimization**

Designing efficient data models and optimizing data schema to improve query performance.

#### **Analytics and Business Intelligence**

Implementing or enhancing analytics and BI solutions to extract valuable insights from the modernized data warehouse.

#### **Monitoring and Maintenance**

On-going support, monitoring, and performance tuning services to ensure the modern data warehouse operates efficiently and securely.

#### **Change Management**

Assisting with change management processes to ensure a smooth transition to the modernized data warehousing environment.

# How to select the right Cloud data warehousing solution:

- Ease of administration/management Type of provisioning, Serverless options?
- Analytics ecosystem Analytics platforms supported
- **Scalability** Whether storage and compute abilities are automatically and independently scalable?
- Integrations ecosystem Platforms available for data integration
- Backup and recovery Yes/No
- Columnar architecture Yes/No
- MPP (Massively Parallel Processing Yes/No
- Data ingestion capabilities Availability of built-in capabilities
- **Pricing** On-demand pricing or flat rate?

To modernize your data warehouse and get the best out of your data, contact us:



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#### WHY CLOUDLEAF

- CloudLeaf is an AWS, Google, Oracle and, Azure partner
- We offer end-to-end comprehensive support at every stage of the migration
- Our support includes monitoring and management
- We enable multi-cloud and hybrid Cloud solutions to gain maximum benefits
- We assure complete transparency and a seamless customer on-boarding support
- We have hands on, enlightened leadership, program, and project management
- We follow ITSM Industry Standard Processes
- We offer flexible pricing and custom support models as per clients' requirements
- We have trained and certified consultants

