Data is expected to grow to 40 zettabytes and machine-generated data is projected to increase 15 times by 2020 as quoted by a premier global market intelligence firm.

Advances in automation and technology have been generating huge volumes of data. This will continue to grow exponentially in the future. Big Data comprises nontraditional and digital data, as well as traditional data generated from sources such as customer relationship management (CRM), enterprise resource planning (ERP), transactional systems, etc. To ensure business success, enterprises must harness big data to gain meaningful business insights and make accurate decisions in real time. However, companies struggle to address some key big data challenges such as:

- How do we store TB / PB of data efficiently?
- How can we process these large data sets for actionable insights?
- How do we visualize and consume insights quickly to stay competitive?

While appliances such as Teradata and Netteza offer scalability and high computational power compared to traditional relational database management systems (RDBMS), the ratio of cost to performance remains high. Today, large enterprises are looking to big data platforms to address these challenges, reduce operational costs, and improve the efficiency of their data warehouses.

**Infosys solution and offerings**

Infosys has a comprehensive Data Warehouse Optimization Solution that leverages popular architecture and methodologies to meet client-specific needs:

- **ETL / MDM offloading**
  Offloads data processing workloads onto Hadoop to improve performance and reduce data processing cycle times

- **Augmented data warehouses**
  Offloads high volume storage and processing to Hadoop and delivers ready-to-consume results to a traditional data store

- **Big data warehouses**
  These are built on Hadoop and enable data consumption

- **Data archival**
  Data is archived on Hadoop to reduce storage cost and meet the compliances around online data access

Our implementations leverage a combination of the above methods. This has yielded benefits, such as improving processing speed by ten times and enabling 50%–70% cost reduction.

The Infosys solution is supported by end-to-end service offerings that ensure continuous support and a successful migration.

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<th>Service Offering</th>
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<td>Consulting services</td>
<td>Current state assessment, architecture and roadmap definition, tool evaluation, and business case preparation</td>
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<td>Migration services</td>
<td>Migration from traditional data warehouses to Hadoop</td>
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<td>Implementation services</td>
<td>Design, develop, and validate the implementation of big data solutions</td>
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Infosys DW Optimization solution has delivered significant benefits to a variety of clients:

- **Shortened load time from two hours to ten minutes and reduced storage costs by 83%** for a consumer electronics giant by implementing big data augmented warehouse.
- **Reduced storage costs by US$6.6 million and improved performance by ten times** for a leading financial major.
- **Processed information residing in 1.3 billion device-related and over 1 billion quotes-related records within four hours** (the expected time as per the service level agreement was within six hours) by leveraging Hadoop for a US-based network giant.

**Related reading:** Infosys Big Data Migration Workbench: infy.com/migration-workbench

For more information, contact askus@infosys.com