6 CAPABILITIES YOU NEED FOR A MODERN CLOUD ANALYTICS PLATFORM

The following are six critical capabilities that must be considered when choosing the right modern cloud analytics platform for your business.

Built for a Hybrid Multi-Cloud World

Cloud options today are dynamic and ever changing. In today's hybrid multi-cloud world, you need a platform that delivers the flexibility and portability to deploy anywhere, including public clouds (AWS, Azure, GCP) and on-premises, while avoiding lock-in to any single cloud or architectural choice. Cloud transformation has accelerated across the enterprise, rapidly driving further cloud migration. Your platform needs coordinated analytic solutions across a mix of hybrid, multi-cloud architecture.





Google Cloud

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Separation of Compute and Storage with Elastic Scaling

You need an architecture that separates compute from storage while still allowing for seamless communication and compatibility. This modern capability cost-effectively supports the demands of both data and users without having excess, unused capacity, while enabling self-service scale/up/down/in/out and start/stop without IT intervention.

Integration with First Party Cloud Services

Cloud providers offer services that can be used independently or in combination to enable a data-related, analytical ecosystem. You need the ability to natively integrate with these services to accelerate your solution deployment. A modern platform integrates with services across Amazon Web Services, Microsoft Azure, and/or Google Cloud Platform. Examples include: Amazon EBS, Glue, Lambda, SageMaker, S3; and Azure Blob Storage, Databricks, Data Factory, ML Studio, and Power Bl.

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Ingestion of Modern Data Sources

A modern platform must not only process or query structured (i.e., traditional) data, but also needs native support for newer semi-structured and unstructured data types (e.g., JSON, Avro, Parquet and XML). Data types and data sources are multiplying clickstreams, social media feeds, digital twins, and IoT-based sensor data. Harnessing all this information for a complete picture of the business is now table stakes. Supporting multiple data types in a single system will help you eliminate redundancy and support delivering advanced analytics, while opening up new opportunities for analyzing sensor and sentiment data.



Integrated Data Management and Scalable Analytics

A modern platform needs to unify analytics and data management, enabling data exploration, modeling, and scoring at scale in a single, easy-to-use environment. You need automated data management functions—eliminating the need to perform detailed space management, reorg databases, repartition data, rebuild indexes, or tune queries. Scalable analytics must include machine learning, artificial intelligence, clustering and segmentation, text extraction, sentiment parsing, graph, geospatial and time series. Flexibility to implement complex algorithms with languages you already use (e.g., SQL, R, Python, and SAS, using popular tools like Jupyter Notebooks and RStudio) is also included.

Dynamic Resource Allocation and Workload Management

Modern capabilities include the ability to manage resources and user workloads dynamically. Demand on resources is dynamic and changes happen at the speed of thought. A modern platform must optimize those resources and workloads aligned to business priorities with set-it-and-forget-it controls. You must be able to enable user and resource service level agreements to a broad set of different users. These users will drive mixed workloads including tactical and strategic workloads. Resources also need to dynamically balance between large strategic queries, root cause analysis, data loads, exploration, modeling and scoring.



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R Studio

Teradata Vantage[™] is built for a Hybrid Multi-Cloud World. The Vantage modern architecture delivers separation of compute and storage, integration with first party cloud services, integrated data management, scalable analytics and the ability to combine traditional data with new modern data sources. Vantage does all of this while delivering dynamic resource allocation, so your users and workloads needs are always met. Wherever you are on your journey towards modernization and cloud, Teradata delivers the modern cloud analytics platform that meets the needs of your business.

