ISG Provider Lens™

Analytics Services

A research report comparing provider strengths, challenges and competitive differentiators

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Engineering Business Outcomes

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Analytics investments in data and cloud are the cornerstones for deploying and scaling Generative AI.

The year 2022 left a marked impact on the global and U.S. analytics market with Generative AI (GenAI) and large language models (LLMs) getting unprecedented attention and playing a substantial role in driving growth. In 2023, enterprises and providers were making investments and taking initiatives to convert the GenAI hype into reality by generating the necessary momentum. This momentum, with the backdrop of enterprises increasingly relying on data-driven decision-making, further propelled the growth of the analytics market in the U.S. Ongoing economic uncertainty combined with reduced consumer activity has pushed enterprises to seek new ways of generating revenue, based on strong data-led business decisions.

According to ISG Research, 85 percent of enterprises believe that investment in GenAI in the next 24 months is important or critical. ISG's State of Applied Generative AI Market Report details that GenAI will witness a four-phased maturation process — current adoption is still within the first two phases. In 2023, adoption has begun with knowledge management and functional process optimization, leading to product and offerings transformation (development of true AI-first products) and complete business transformation (reinvented operational models entirely built around AI).

Such developments also indicate that analytics is becoming the foundation for the successful development and implementation of GenAI use cases. Some of the use cases in which data and analytics are gaining traction include:

- Data extraction
- Contextual searches and indexes
- Virtual assistant solutions
- Predictive analytics
- Performance analytics
- Recommendation engine
- Synthetic data generation

Analytics initiatives are focused on building a **strong data culture** and **data literacy.**

Moreover, there is a renewed focus on data from a GenAI perspective, where it is becoming increasingly critical for business transformation and reinvention. In the past, data availability and accessibility was viewed from an analytics perspective but with GenAI, the focus has shifted to data being viewed under the lens of business value. Cybersecurity, privacy and the responsible use of data are becoming the key concerns for enterprises, driven by customer need to protect personal data.

Some of the key challenges enterprises face with analytics initiatives and projects include:

1. Recession impacting budget — no investments on new solutions or technologies

2. Deriving more value from existing analytics investments

3. Adopting the right strategies to become data-centric and evolving from being data-aware to becoming data-reliant

4. Ability to scale analytics and AI investments across an enterprise

5. Lack of a data-centric culture serves as a barrier in data democratization and monetization

The ISG Provider Lens™ Analytics Services study reveals that enterprises across the large and midmarket have different concerns and invest in varied analytics solutions in alignment with their digital and data maturity. It is imperative that enterprises engage with suitable service providers that exhibit a thorough understanding of enterprise-specific challenges and have the ability to prioritize and handle them effectively.

These challenges highlight the varied requirements of implementing AI and analytics solutions in diverse business environments, with due diligence ranging from technical aspects to organizational dynamics. Some of the key challenges identified for both large businesses and the midmarket with the analysis undertaken for the study include:

Data quality and integration

- Large Businesses: Struggling to handle extensive and diverse datasets while maintaining data quality and integrating information from various sources to ensure consistency and reliability.

- Midmarket: Limited data resources leading to data silos and the criticality of data accuracy for effective insights using analytics.

Costs and RoI

- Large Businesses: Upfront costs of acquiring and implementing advanced analytics solutions, integration expenses and the challenge of demonstrating a substantial RoI.

- Midmarket: Balancing limited budgets and cost-effective analytics solutions and demonstrating tangible value to justify the investment.

Talent and skills gap

- Large Businesses: Attracting and retaining skilled data scientists, data engineers and analysts, and building a robust analytics team with diverse expertise.

- Midmarket: Hiring specialized talent due to budget constraints and relying on existing staff to handle analytics tasks.

Data security and privacy

- Large Businesses: Navigating complex data security and compliance requirements, protecting sensitive information from breaches and ensuring adherence to regulatory standards.

- Midmarket: Addressing cybersecurity concerns with limited resources and ensuring compliance with relevant data privacy regulations.

Integration with existing systems

- Large Businesses: Ensuring seamless integration with complex existing IT infrastructures and legacy systems and avoiding disruptions in ongoing operations.

- Midmarket: Overcoming potential compatibility issues with existing software and technology to ensure a smooth integration process.

Executive Summary

Scalability

- Large Businesses: Ensuring that AI and analytics solutions can scale to accommodate growing data volumes, expanding business needs and increasing user demands.
- Midmarket: Balancing the need for scalable solutions with current business size and future growth projections and avoiding overinvestment or underinvestment.

Change management

- Large Businesses: Managing resistance to change and ensuring effective adoption of analytics tools by employees at various levels.
- Midmarket: Adapting to new analytics processes and tools with a small workforce and ensuring a smooth transition through effective change management.

Understanding business needs

- Large Businesses: Aligning AI and analytics solutions with diverse business units and varied operational requirements, ensuring relevance and usability across an organization.
- Midmarket: Defining and understanding specific business needs to avoid overinvestment in or underutilization of analytics tools and ensuring targeted benefits.

Real-time analytics

- Large Businesses: Implementing real-time AI and analytics solutions for timely decision-making in a complex organizational structure, which involves managing data streams efficiently.
- Midmarket: Navigating the challenge of using real-time analytics with limited resources and infrastructure and dealing with the need for timely insights.

Vendor selection

- Large Businesses: Evaluating and selecting from myriad complex and feature-rich AI and analytics solutions by considering factors such as scalability, integration capabilities and available vendor support.
- Midmarket: Choosing solutions that are cost-effective, user-friendly and aligned with a business's scale and needs and making informed decisions with limited resources.

The 2023 study has also identified specific challenges that enterprises face in implementing data science, data engineering and data management services. Some of the key aspects are highlighted below.

Challenges related to data science services:

- **Interpretation:** Data science models, especially the ones based on complex algorithms such as deep learning may make interpretation a challenge. Enterprises continue to face difficulties in understanding and justifying the decisions made by these models — a concern in regulated industries where transparency is critical.

- **Governance and Ethical Considerations:** Enterprises struggle to address governance and ethical considerations related to data science. This includes compliance with data protection regulations, ethical use of data and mitigation of biases or discrimination in algorithms — concerns factors that require proper governance frameworks.

Enterprises investing in data modernization and data engineering services are faced with the following challenges:

- **Data Integration and ETL Processes:** Enterprises continue to grapple with the challenge of integrating diverse data sources and undertaking extract, transform and load (ETL) processes. With the increasing volume and variety of data, organizations need to ensure seamless data ingestion, transformation and consolidation. This includes addressing issues related to data quality, schema mapping, data compatibility and handling real-time or streaming data.

- **Scalability and Performance:** In 2023, enterprises face the challenge of scaling their data engineering infrastructure to

handle the growing volume of data. With continued data explosion, organizations must ensure that their systems have the ability to handle the increased workload efficiently. This involves designing scalable architectures, optimizing data processing pipelines, leveraging distributed computing frameworks and utilizing cloud-based technologies for elastic scalability.

- **Real-time Data Processing:** The demand for real-time analytics and insights continues to rise in 2023. Enterprises face challenges in processing and analyzing streaming data in real-time for timely decision-making and action. Building efficient real-time data pipelines, leveraging technologies such as Apache Kafka or Apache Flink, and implementing event-driven architectures are important considerations for data engineering in the era of real-time analytics.

- **Automation and Orchestration:** Automating data engineering processes and orchestrating workflows are vital to improve efficiency and reduce manual efforts. In 2023, enterprises have to deal with the challenge of streamlining data

engineering tasks such as scheduling data pipelines, managing dependencies and automating data quality checks. Adopting workflow management tools, leveraging data orchestration frameworks and implementing DevOps practices are relevant in addressing this challenge.

- **Cloud Migration and Hybrid Environments:** As an increasing number of organizations adopt cloud technologies, enterprises face the challenge of migrating their data infrastructure to the cloud while managing hybrid environments. They must address issues related to data integration, data movement across on-premises and cloud systems, optimizing costs and leveraging the benefits of cloud services for data engineering workloads.

Challenges related to data management and data governance services:

- **Data Quality and Master Data Management:** Ensuring data quality and managing master data effectively are ongoing challenges for enterprises. In 2023, organizations must address issues

related to data consistency, accuracy, completeness and timeliness. Establishing data quality frameworks, implementing data profiling and cleansing processes, and employing master data management strategies are crucial for reliable data engineering practices.

- **Data Lineage and Metadata Management:** Understanding the origin and lineage of data, as well as managing metadata, is essential in 2023. Enterprises face challenges in documenting and tracking the flow of data across various systems and processes. Implementing data lineage tracking mechanisms, capturing metadata information and maintaining data catalogs or metadata repositories are key considerations for effective data engineering practices.

- **Data Collaboration and DataOps:** Collaboration among different teams working with data such as data scientists, analysts and business users is crucial for success. In 2023, organizations must address the challenge of fostering collaboration, enabling self-service data

access and implementing DataOps practices. This includes creating data catalogs, providing data discovery platforms and facilitating seamless collaboration and knowledge sharing.

The absence of specific federal legal frameworks on AI in the U.S. has led to legislative and agency efforts at both federal and state levels to regulate the use of AI. These are detailed below:

- **American Data Privacy and Protection Act (ADPPA):**
  The ADPPA is one of the proposed laws addressing AI regulation. While it primarily focuses on data privacy and protection, it includes provisions on the use of algorithms.

  The bill requires impact assessments for algorithms used in decision-making that represent an elevated risk to individuals. The act reflects a growing concern about the potential negative impacts of AI-based systems on individuals and the need for accountability.

- **Algorithmic Accountability Act of 2022 (AAA):**

  The AAA is another proposed law that specifically addresses algorithmic accountability. It emphasizes the need for assessing their impact, particularly the ones used in decision-making processes that can significantly affect individuals.

  This legislative effort underscores the recognition that algorithms, including the ones powered by AI, can have profound consequences and their deployment should be subject to scrutiny and accountability.

- **State-level Consumer Privacy Laws:**

  In the absence of comprehensive federal legislation, individual states have taken steps to enact consumer privacy laws that regulate the collection, use and disclosure of personal data.

  These state laws often include provisions related to automated decision-making, explicitly addressing AI systems in contexts such as housing, credit, employment and criminal justice. They focus on ensuring

fairness and transparency in the use of algorithms for critical decisions that impact individuals.

Both the ADPPA and AAA emphasize the need for impact assessments, signaling a shift toward proactive measures to evaluate and mitigate the potential risks associated with AI-based systems. The focus on impact assessments aligns with broader global discussions on responsible AI deployment, transparency and ethical considerations surrounding algorithmic decision-making.

While the U.S does not yet have a comprehensive federal legal framework specific to AI regulation, the legislative efforts at federal and state levels indicate a growing recognition of the importance of addressing the challenges and risks associated with, particularly related to decision-making.

Notes on quadrant positioning: In this study, several data analytics service providers that offer similar portfolio attractiveness in most quadrants have been assessed. This reflects the relative maturity of the market, providers and offerings. It is a given that not all are equal

in circumstances. The vertical axis positioning in each quadrant reflects ISG's analysis of how well the offerings align with the full scope of enterprise needs. The market has also been segmented into Large, Mid-market and Specialists to showcase the varying analytics requirements of enterprises based on their size, scale and industry dynamics. It also reflects providers' strategy to align their portfolio and offerings to suit market demands and enterprise needs.

Service providers rely on data-centric principles to provide unified, industrialized, cost-efficient and innovative data platforms for better decision-making. This includes using a domain-driven architecture, treating data as a product, creating data marketplaces and ensuring flexibility in to adapting to market changes — in short, fostering an environment that values data and uses it strategically.

Provider Positioning

	Data Science Services - Large	Data Science Services - Midsize	Data Science Services - Specialist	Data Engineering Services - Large	Data Engineering Services - Midsize	Data Engineering Services - Specialist	Data Management Services - Large	Data Management Services - Midsize
Accenture	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
Analytics8	Not In	Not In	Contender	Not In	Not In	Product Challenger	Not In	Not In
Apexon	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Leader
Atos	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In
Birlasoft	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger
Brillio	Not In	Leader	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger
Capgemini	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
CGI	Product Challenger	Not In	Not In	Contender	Not In	Not In	Contender	Not In
Cigniti	Not In	Product Challenger	Not In	Not In	Contender	Not In	Not In	Product Challenger

Provider Positioning

	Data Science Services - Large	Data Science Services - Midsize	Data Science Services - Specialist	Data Engineering Services - Large	Data Engineering Services - Midsize	Data Engineering Services - Specialist	Data Management Services - Large	Data Management Services - Midsize
Cognizant	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
Deloitte	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
DXC Technology	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In
Encora	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Product Challenger
EPAM Systems	Contender	Not In	Not In	Contender	Not In	Not In	Contender	Not In
EXL	Contender	Not In	Not In	Contender	Not In	Not In	Contender	Not In
EY	Market Challenger	Not In	Not In	Market Challenger	Not In	Not In	Market Challenger	Not In
Factspan	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In
Fractal	Not In	Not In	Leader	Not In	Not In	Leader	Not In	Not In

Provider Positioning

	Data Science Services - Large	Data Science Services - Midsize	Data Science Services - Specialist	Data Engineering Services - Large	Data Engineering Services - Midsize	Data Engineering Services - Specialist	Data Management Services - Large	Data Management Services - Midsize
Genpact	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
Grazitti Interactive	Not In	Contender	Not In	Not In	Contender	Not In	Not In	Contender
HARMAN DTS	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Leader
HCLTech	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
Hexaware	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Leader
Hitachi Digital Services	Contender	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In
HTC Global Services	Not In	Product Challenger	Not In	Not In	Leader	Not In	Not In	Leader
IBM	Market Challenger	Not In	Not In	Market Challenger	Not In	Not In	Market Challenger	Not In
Impetus Technologies	Not In	Not In	Product Challenger	Not In	Not In	Leader	Not In	Not In

Provider Positioning

	Data Science Services - Large	Data Science Services - Midsize	Data Science Services - Specialist	Data Engineering Services - Large	Data Engineering Services - Midsize	Data Engineering Services - Specialist	Data Management Services - Large	Data Management Services - Midsize
InData Labs	Not In	Not In	Contender	Not In	Not In	Contender	Not In	Not In
Indium Software	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Contender
Infogain	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Leader
Infosys	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
ITC Infotech	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Contender
KPMG	Market Challenger	Not In	Not In	Market Challenger	Not In	Not In	Market Challenger	Not In
Kyndryl	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In
LatentView Analytics	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In
LTIMindtree	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In

Provider Positioning

	Data Science Services - Large	Data Science Services - Midsize	Data Science Services - Specialist	Data Engineering Services - Large	Data Engineering Services - Midsize	Data Engineering Services - Specialist	Data Management Services - Large	Data Management Services - Midsize
Marlabs	Not In	Contender	Not In	Not In	Contender	Not In	Not In	Contender
MathCo	Not In	Not In	Leader	Not In	Not In	Leader	Not In	Not In
Mphasis	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Leader
Mu Sigma	Not In	Not In	Market Challenger	Not In	Not In	Market Challenger	Not In	Not In
N-iX	Not In	Not In	Contender	Not In	Not In	Contender	Not In	Not In
NTT DATA	Rising Star ★	Not In	Not In	Rising Star ★	Not In	Not In	Rising Star ★	Not In
Persistent Systems	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Leader
PwC	Market Challenger	Not In	Not In	Market Challenger	Not In	Not In	Market Challenger	Not In
Quantiphi	Not In	Not In	Leader	Not In	Not In	Leader	Not In	Not In

Provider Positioning

	Data Science Services - Large	Data Science Services - Midsize	Data Science Services - Specialist	Data Engineering Services - Large	Data Engineering Services - Midsize	Data Engineering Services - Specialist	Data Management Services - Large	Data Management Services - Midsize
Rackspace Technology	Not In	Contender	Not In	Not In	Contender	Not In	Not In	Contender
SG Analytics	Not In	Not In	Contender	Not In	Not In	Contender	Not In	Not In
Sigmoid	Not In	Not In	Rising Star ★	Not In	Not In	Rising Star ★	Not In	Not In
SLK Group	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger
TCS	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
Tech Mahindra	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
ThirdEye Data	Not In	Not In	Contender	Not In	Not In	Contender	Not In	Not In
Tiger Analytics	Not In	Not In	Leader	Not In	Not In	Leader	Not In	Not In
Tredence	Not In	Not In	Leader	Not In	Not In	Leader	Not In	Not In

Provider Positioning

	Data Science Services - Large	Data Science Services - Midsize	Data Science Services - Specialist	Data Engineering Services - Large	Data Engineering Services - Midsize	Data Engineering Services - Specialist	Data Management Services - Large	Data Management Services - Midsize
Trianz	Not In	Rising Star ★	Not In	Not In	Rising Star ★	Not In	Not In	Rising Star ★
UST	Contender	Leader	Not In	Contender	Leader	Not In	Contender	Leader
Virtusa	Not In	Leader	Not In	Not In	Leader	Not In	Not In	Leader
Visionet	Not In	Contender	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger
Wipro	Leader	Not In	Not In	Leader	Not In	Not In	Leader	Not In
WNS	Not In	Market Challenger	Not In	Not In	Market Challenger	Not In	Not In	Market Challenger
Zensar Technologies	Not In	Product Challenger	Not In	Not In	Product Challenger	Not In	Not In	Product Challenger
ZS	Not In	Not In	Leader	Not In	Not In	Product Challenger	Not In	Not In

The report provides insights into the **evolving market trends** and **competitive dynamics** among providers of Analytics Services in 2023.

Simplified Illustration Source: 2023
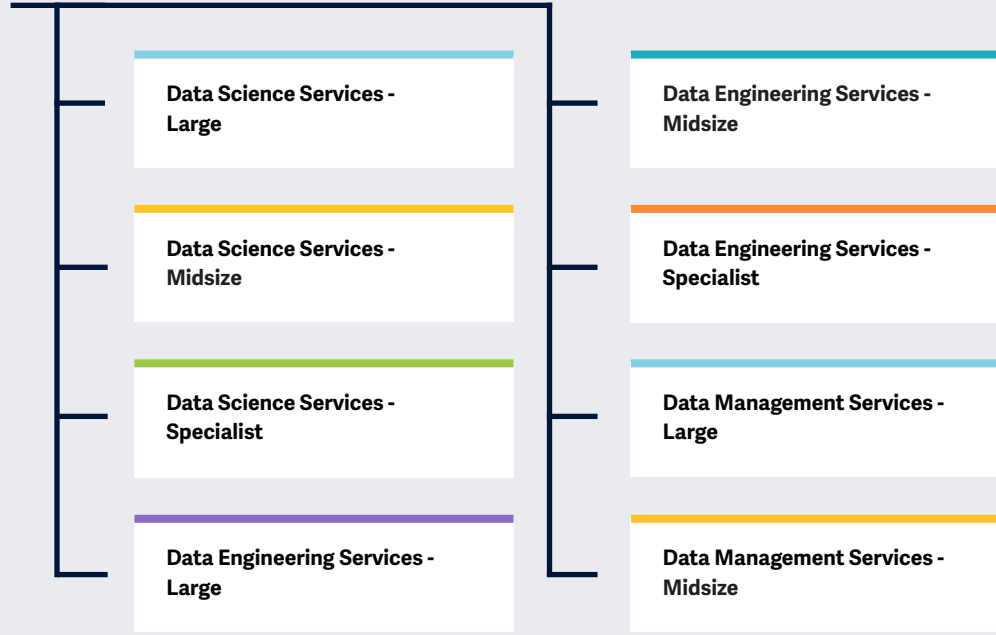
Data Science Services - Large

Data Science Services - Midsize

Data Science Services - Specialist

Data Engineering Services - Large

Data Engineering Services - Midsize

Data Engineering Services - Specialist

Data Management Services - Large

Data Management Services - Midsize

Definition

The year 2023 continues to witness economic headwinds with increased inflation, while the global economy exhibits signs of resilience, with enterprises becoming cautious about IT transformation expenditure. This scenario is further complicated by increased hyper competition among enterprises and tech-savvy startups and consumers' hyperpersonalization needs. With enterprise budgets strapped, business leaders show more value for their existing investments in digital technologies and focus on enhancing CX, cost optimization and cybersecurity to ensure business and operational resilience. ISG analysis reveals that this is an opportune time for enterprises to revisit their analytics strategies and increase spending on analytics services and solutions to enhance data-driven approaches and solve business challenges. Data science services are gaining significant traction, aligning business objectives with underlying data and helping enterprises derive decision intelligence and evaluate business impact. Enterprises expect providers to identify relevant business use cases, offer AI and ML modeling platforms

and engineering capabilities, and deploy these models to production. Data engineering services are in demand owing to several cloud migrations and data modernization investments. The focus will be on achieving high cost and process efficiency optimization levels with traction for FinOps, DataOps and DevSecOps. Data management services are making a significant comeback, with data governance capabilities in demand. Enterprises compete for providers with capabilities in data catalog, data observability, data lineage and business glossary, among other areas that ensure data trustworthiness and availability.

Scope of the Report

This ISG Provider Lens™ quadrant report covers the following eight (spell out the number of quadrants, do not use a digit) quadrants for services/solutions: Data Science Services – Large, Data Science Services – Midsize, Data Science Services – Specialists, Data Engineering Services – Large, Data Engineering Services – Midsize, Data Engineering Services – Specialists, Data Management Services – Large, and Data Management Services – Midsize.

This ISG Provider Lens™ study offers IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers/software vendors
- A differentiated positioning of providers by segments (quadrants)
- Focus on the regional market

Our study serves as the basis for important decision-making by covering providers' positioning, key relationships and go-to-market considerations. ISG advisors and enterprise

clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

Provider Classifications

The provider position reflects the suitability of providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the service requirements from enterprise customers differ and the spectrum of providers operating in the local market is sufficiently wide, a further differentiation of the providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between $20 million and $999 million with central headquarters in the respective country, usually privately owned.

- **Large Accounts:** Multinational companies with more than 5,000 employees or revenue above $1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

- **Number of providers in each quadrant:** ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

Provider Classifications: Quadrant Key

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/ services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

Data Science Services - Large

Who Should Read This Section

In this quadrant, ISG assesses service providers in the U.S., offering advisory and system integration services based on data science. It also highlights the changing dynamics of the data science services market in the region and how these providers offer services to integrate scientific methods with the business context for their clients. These providers resolve critical business challenges by combining domain knowledge and expertise across industries, thus driving robust business growth through actionable insights.

For business transformation, enterprises are adopting data-driven strategies to gain actionable insights, focusing on achieving cost optimization, improving CX, streamlining operations and boosting revenue. To accomplish these objectives, they seek service providers that have both technological expertise and business consulting capabilities. Providers, in response, create models and solutions that facilitate decision-making while also enabling enterprises to identify new opportunities and develop AI-driven use cases that deliver tangible business value.

Enterprises prefer service providers that use frameworks and accelerators to enhance CX, expedite time-to-market and facilitate rapid insight-driven decisions. Concurrently, enterprises are showing interest in providers that leverage MLOps to efficiently scale AI and analytics, and AI, ML and GenAI technologies to unlock valuable insights and improve decision-making.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Digital Officers can refer to the report to gain an understanding of the effective analytics tools and techniques for frictionless transactions in a virtual environment.

Chief Data Officers can refer to this report to gain a perspective on effective analytics tools and techniques to deliver business outcomes from data assets and ecosystems.

Technology Professionals should read this report to understand provider competencies in delivering seamless solutions, leveraging data, and AI and analytics.

ISG Provider Lens™

Analytics Services
Data Science Services - Large

Source: ISG RESEARCH

U.S. 2023

This quadrant assesses service providers that offer **data science services with expertise in scientific techniques** and **advanced technologies such as AI and ML** that support enterprises with **insights and intelligence to deliver decision-making** support and transformational value for business processes.

Gowtham Kumar Sampath

Data Science Services - Large

Definition

In this quadrant, ISG evaluates the provider portfolios offering advisory and system integration services based on data science. Providers qualifying for this quadrant offer services to integrate scientific methods with business context for their clients. These providers resolve critical business challenges by combining domain knowledge and expertise in clients' industries, enabling clients to attain substantial, data-driven business growth through actionable insights. Information generated through data science may even lead to new business models and revenue streams. The objective is to define and deploy contextual questions to extract relevant information from vast data streams — data science leverages structured and unstructured data. Service providers evaluated in this study need to address enterprise requirements, including, but not limited to, consulting, identifying business use cases, and developing statistical models and algorithms. Providers should showcase capabilities to generate and visualize insights that are ready to use for business in the form of intelligent reports and storytelling dashboards.

They should be capable of modeling and customizing ML algorithms and workflows using best-of-breed solutions to deploy their services efficiently. Providers should exhibit end-to-end capabilities in architecting, implementing, deploying and scaling enterprise-wide AI projects. These providers should also offer support and training services as standalone offerings, which differ from other service contracts.

Eligibility Criteria

1. Provide a **structured approach, framework** and service portfolio with proprietary offerings that include but not limited to **industrialized playbooks, AI and ML platforms, accelerators, advanced automation and workbenches**

2. Demonstrate established competence, with **several data science experts**, delivering services and having an **in-depth understanding of the market dynamics, regulatory requirements, and language** necessary to successfully deliver services considered within the scope of these services

3. Possess **technology expertise and business knowledge** of the region- and industry-specific requirements, statistical and mathematical modeling, with independent advisory.

4. Possess expertise and offer solutions for **federated learning, data literacy and advanced analytics (computer vision, audio, NLP, natural language generation [NLG] and Graph DB)**

Observations

Large service providers take a transformational approach that brings together expertise in technology, business and strategy to deliver immersive, human-centric and experience-led solutions that address critical enterprise challenges. Providers have already supported GenAI projects with live use cases, CoEs and expansive partnerships to gain a first-mover advantage. They offer specialized services across a range of industry and functional domains, combining their expertise in transforming business processes, applications and data, and to this end take a strong advisory-led approach with definitive strategies accompanying comprehensive AI and analytics services. These engagements leverage sophisticated frameworks and include a phased approach to understand the analytics maturity of an enterprise and devise the analytics and AI strategy accordingly.

Most providers have strategized their offerings to prioritize business use cases, data preparation, ML model development, and deployment in production and management. To realize these, providers take a collaborative approach with the execution model driving business outcomes. The case studies and references indicate that these providers engage with enterprises with some level of analytics maturity and help them scale AI across the organization. Some of the key trends gaining traction among these providers include:

- Increased focus on ML operationalization (MLOps) and knowledge graphs
- An X-first approach (customer-first, data-first or AI-first)
- Significant focus on scaling GenAI use cases
- Focus on responsible, ethical, explainable and sustainable AI

From the 105 companies assessed for this study, 23 qualified for this quadrant, with ten being Leaders and one a Rising Star.

accenture

Accenture takes a highly verticalized approach to address overall business strategy, technology, innovation, service delivery and process efficiency, driving responsible outcomes with strong compliance initiatives.

Capgemini

Capgemini offers Custom Generative AI for Enterprise, helping clients move from standard, generic public large models to a tailored and trusted solution, using its network of data and AI CoEs and experts, applied innovation exchange centers and a dedicated AI Futures Lab.

cognizant

Cognizant's unique selling proposition is its ability to leverage its expertise in AI technologies and combine it with business consulting expertise to help clients identify new opportunities and develop use cases that can deliver real business value.

Deloitte.

Deloitte's GenAI practice enables it to navigate enterprise complexities and scale AI solutions, with its Generative AI Market Incubator, AI Dossier and Trustworthy AI with CortexAI offering insights and optimizing RoI on an AI journey.

Genpact has been industrializing GenAI by building more than 100 innovative solutions and use cases across all its major service lines and engaging in over 50 experiments. The company has launched a tailored GenAI upskilling program for its employees.

HCLTech

HCLTech has built an AI marketplace, a one-stop-shop for pattern repositories with a comprehensive package of documentation that includes quick starts, tutorials and references that help data scientists connect datasets, algorithms and modules.

Infosys offers AI First Live Enterprise, a suite of solutions with the blueprint of a meta-cognitive layer, the Infosys AI Brain, andpowered by an AI agent library that derives and activates intelligence from structured and unstructured data.

TCS recently launched TCS Dexam™ on Google Cloud, a seamless data exchange platform with self-service capabilities and a secure environment to ease data extraction, analytics and visualization for enterprises.

Tech Mahindra's GenAI studio enables enterprises to produce high-quality content rapidly by providing them with the structured and customized functionalities to utilize Generative AI. It acts as a one-stop-shop to generate and enhance digital content.

Wipro is continuously investing in the GenAI CoE, conducting research with leading academic institutions, building accelerators and frameworks such as WeGA (Wipro Enterprise GenAI) and developing competency through the Wipro AI Academy.

NTT Data (Rising Star) helps enterprises prioritize analytics and data science with modern architecture and intelligence solutions with predictive analytics, ML and NLP capabilities to build resilience and improve outcomes.

Data Science Services - Midsize

Data Science Services - Midsize

Who Should Read This Section

In this quadrant, ISG assesses service providers in the U.S., offering advisory and system integration services based on data science. It also highlights the changing dynamics of the data science services market in the region and how these providers offer services specific to the midmarket, enabling clients to integrate scientific methods into their business context. These providers resolve critical business challenges by combining domain knowledge and expertise across industries, thus driving robust business growth through actionable insights.

Enterprises are embracing a transformative journey and using AI and ML technologies to gain valuable insights, introduce innovative products and services, and optimize operational costs. Simultaneously, there is much focus on mitigating the challenges and risks associated with AI. In this context, enterprises are actively seeking providers that can implement AI and ML solutions, including industry-specific products and platforms that are sustainable, secure and cost-effective and also offer consulting expertise.

Enterprises collaborate with service providers to highlight industry-specific use cases and achieve competitive advantage . Service providers that have the ability to deliver tangible business results by leveraging their IPs, tailoring AI- and ML-based models to specific industry needs and providing robust MLOps services are gaining traction among enterprises. In this environment, providers are motivated to explore and integrate emerging technologies such as GenAI, Explainable AI, auto ML and federated learning into their offerings to remain at the forefront of AI innovations and help enterprises get insights, at speed.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Digital Officers can refer to the report to gain an understanding of the effective analytics tools and techniques for frictionless transactions in a virtual environment.

Chief Data Officers can refer to this report to gain a perspective on effective analytics tools and techniques to deliver business outcomes from data assets and ecosystems.

Technology Professionals should read this report to understand provider competencies in delivering seamless solutions, leveraging data, and AI and analytics.

ISG Provider Lens™

Analytics Services
Data Science Services - Midsize

U.S. 2023

Source: ISG RESEARCH

H

PORTFOLIO ATTRACTIVENESS

Product Challenger

HARMAN Digital Transformation Solutions
Persistent Systems
Apexon
Trianz ★
Hexaware
Brillio
Encora
Infogain
Virtusa
ITC Infotech
Zensar Technologies
HTC Global Services
SLK Group
Cigniti
Indium Software
Mphasis
Birlasoft
UST

Contender

Leader

Rackspace Technology
WNS
Market Challenger

Visionet

Grazitti Interactive
Marlabs

L

L
COMPETITIVE STRENGTH
H
★ Rising Star

This quadrant assesses service providers **with expertise in scientific techniques** and **advanced technologies such as AI and ML** that support enterprises with **insights and intelligence for decision-making** and gaining transformational value.

Gowtham Kumar Sampath

Data Science Services - Midsize

Definition

In this quadrant, ISG evaluates the provider portfolios offering advisory and system integration services based on data science. Providers qualifying for this quadrant offer services to integrate scientific methods with business context for their clients. These providers resolve critical business challenges by combining domain knowledge and expertise in clients' industries, enabling clients to attain substantial, data-driven business growth through actionable insights. Information generated through data science may even lead to new business models and revenue streams. The objective is to define and deploy contextual questions to extract relevant information from vast data streams — data science leverages structured and unstructured data. Service providers evaluated in this study need to address enterprise requirements, including, but not limited to, consulting, identifying business use cases, and developing statistical models and algorithms. Providers should showcase capabilities to generate and visualize insights that are ready to use for business in the form of intelligent reports and storytelling dashboards.

They should be capable of modeling and customizing ML algorithms and workflows using best-of-breed solutions to deploy their services efficiently. Providers should exhibit end-to-end capabilities in architecting, implementing, deploying and scaling enterprise-wide AI projects. These providers should also offer support and training services as standalone offerings, which differ from other service contracts.

Eligibility Criteria

1. Provide a **structured approach, framework** and service portfolio with proprietary offerings that include but not limited to **industrialized playbooks, AI and ML platforms, accelerators, advanced automation and workbenches**

2. Demonstrate established competence, with **several data science experts**, delivering services and having an **in-depth understanding of the market dynamics, regulatory requirements, and language** necessary to successfully deliver services considered within the scope of these services

3. Possess **technology expertise and business knowledge** of the region- and industry-specific requirements, statistical and mathematical modeling, with independent advisory.

4. Possess expertise and offer solutions for **federated learning, data literacy and advanced analytics (computer vision, audio, NLP, natural language generation [NLG] and Graph DB)**

Observations

Midsize providers are distinguished by their moderate scale in revenue, the number of experts, and regional presence, in contrast to large providers. The providers assessed in this quadrant target both the large, midmarket and small enterprises. They approach data and analytics offerings with a transformative strategy involving digital engineering and enterprise modernization. They design their data science offerings to enable data-driven decisions that improve CX and enhance operational efficiency. It is to be noted that they lean toward a technology-led strategy. However, several providers have started balancing their portfolios, focusing on business context and revisiting their strategies to address business challenges.

GenAI offerings from these providers are designed to address enterprise initiatives to improve and enhance their creativity, problem-solving and decision-making capabilities with specific use cases based on their verticalized strategy.

These providers have significant experience in executing large and midsize projects for enterprises across verticals, however, most have built capabilities around specific verticals, including banking, finance and insurance, manufacturing, healthcare, retail and telecom. Providers are also focusing on functional expertise, developing solutions for specific use cases in these verticals for their enterprise clients. Such strategies are encouraging them to create robust frameworks, accelerators and tools to address the growing need to predict consumer behavior, ensure solve supply chain efficiencies and address other concern areas for enterprises.

The providers focus on building unique and verticalized AI and ML offerings, operationalizing MLOps and scaling AI and platform-led approaches with pre-built tools and accelerators.

Apexon

Apexon designs contextualized human-centric applications that drive real-world outcomes, leveraging unique proprietary tools and market-leading solutions to empower businesses to navigate the vast and complex GenAI landscape.

Brillio

Brillio has created a dedicated Data Science CoE and invested in developing AI labs, a GenAI Studio and a research council for driving innovation and growth, where it collaborates with key partners.

Encora

Encora aims to offer persona-based Insights-as-a-Service to stakeholders to explore, identify, prototype, pilot and scale new data science (AI/GenAI) use cases to deliver breakthrough CX, ultimately yielding higher efficacy and growth.

HARMAN

HARMAN DTS leverages the potential of GenAI with state-of-the-art AI platforms and services to empower businesses with solutions that enhance creativity, problem-solving and decision-making.

HEXAWARE

Hexaware's GenAI Consulting & Practice Unit plans to roll out a range of platforms, tools, blueprints, workshops and tailored strategies to expedite and enrich clients' AI journeys, addressing critical industry use cases across enterprise functions and technologies.

Infogain

Infogain has expanded its GenAI capability, establishing a dedicated team to steer GenAI use cases for both clients and internal projects with pilot programs, including an HR policy chatbot, developer productivity enhancement and a sales and marketing assistant.

Mphasis
The Next Applied

Mphasis launched a business unit, Mphasis.ai to capitalize on the growth momentum of GenAI with a dedicated team of engineers and architects and by investing in building frameworks, similar to the NextLabs and NextAngles products to address real-life problems.

Persistent

Persistent, in collaboration with Google Cloud, has developed a six-week GenAI deployment acceleration program, with proprietary accelerators and frameworks alongside Google Cloud's advanced Vertex AI platform.

UST

UST showcases its expertise in GenAI through diverse initiatives and partnerships that drive efficiency and innovation in the field. It has developed an intelligent search solution to assist data scientists in finding relevant providers and information.

virtusa

Virtusa launched a global GenAI CoE in partnership with Google Cloud that will provide thought leadership in AI and build industry-leading solutions to help enterprises adopt AI technologies and accelerate growth.

TRIANZ DIGITAL EVOLUTION SIMPLIFIED

Trianz (Rising Star) is building several data science use cases in a collaborative model with its clients, particularly in insurance and healthcare with a roadmap of building and expanding use cases for other industries.

Infogain

Leader

"Infogain specializes in designing and developing intelligent platforms that unlock meaningful experiences, fostering reliable interactions between enterprises and their customers and enabling measurable business outcomes in alignment with the future."

Gowtham Kumar Sampath

Overview

Infogain is headquartered in California, U.S. and operates in eight countries. It has more than 6,000 employees across 17 global offices. Infogain's analytics, data science and AI services provide the capabilities, accelerators and ready-to-use solutions and encompass GenAI, NAVIK AI solutions, marketing analytics, customer analytics, market research, data science and predictive AI and ML. Infogain's data modernization services such as DataOps modernization and data platform modernization provide the capabilities to make strategic and tactical decisions, driven by data and insights.

Strengths

Delivering reliable solutions: Infogain's comprehensive offerings encompass analytics, data science and AI services with innovative capabilities, accelerators and ready-to-use solutions. Its team of experts with extensive experience has enhanced these technologies to deliver reliable solutions and services. The approach relies on delivering core AI capabilities with analytical frameworks and business and industry context.

Adaptable and tailored platform: The NAVIK AI Platform is a versatile business solution, acting as the intelligence layer within evolving enterprise infrastructures. It can be tailored for multinational firms or adapted to suit small businesses, where it integrates analytics into the core of their organizational, operational and strategic decision-making processes. Enterprises can implement one or more NAVIK solutions to address specific requirements, covering various functions and industry domains.

Seamless and transformative integration: Infogain's AI solutions offer organizations a comprehensive approach, from identifying projects to implementing AI-driven solutions, thus showcasing various benefits with key stakeholders. Enterprises can utilize Infogain's extensive experience in integrating bespoke AI solutions into their ongoing digital transformation initiatives without interruptions.

Caution

Infogain's prebuilt platform and solutions need to be elucidated with more references and case studies that highlight their capabilities for customization, helping address complex and unique enterprise challenges.

The company should develop verticalized strategies and solutions to better compete in the market.

Data Science Services - Specialist

Data Science Services - Specialist

Who Should Read This Section

In this quadrant, ISG assesses specialist analytics service providers in the U.S., offering advisory and system integration services based on data science. It also highlights the changing dynamics of the data science services market in the region and how these providers offer services to integrate scientific methods with the business context for their clients. These providers resolve critical business challenges by combining domain knowledge and expertise across industries, thus driving robust business growth through actionable insights.

Enterprises are focusing on optimizing decision systems to improve business outcomes and enhance data-driven decision-making. They are seeking end-to-end solutions, supported by ML-powered data, analytics and automation, at scale, to hasten business growth . Enterprises need service providers with domain expertise that can assist with developing strategies, designing operating models and creating goal-oriented roadmaps, with the objective to achieve cost and operational efficiency and ensure innovation, resilience and security in transformations.

Enterprises engage with service providers with consulting capabilities for maturity assessment of the current state and developing roadmaps to achieve their objectives efficiently.

Providers should focus on providing added value to clients by reducing deployment time by leveraging accelerators and technologies such as NLP and computer vision. Service providers should have end-to-end data and AI solutions, in the form of IPs and industry-specific accelerators, to improve decision-making, accelerate AI use case development and deliver tangible business impact for enterprises.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Data Officers can refer to this report to gain a perspective on effective analytics tools and techniques to deliver business outcomes from data assets and ecosystems.
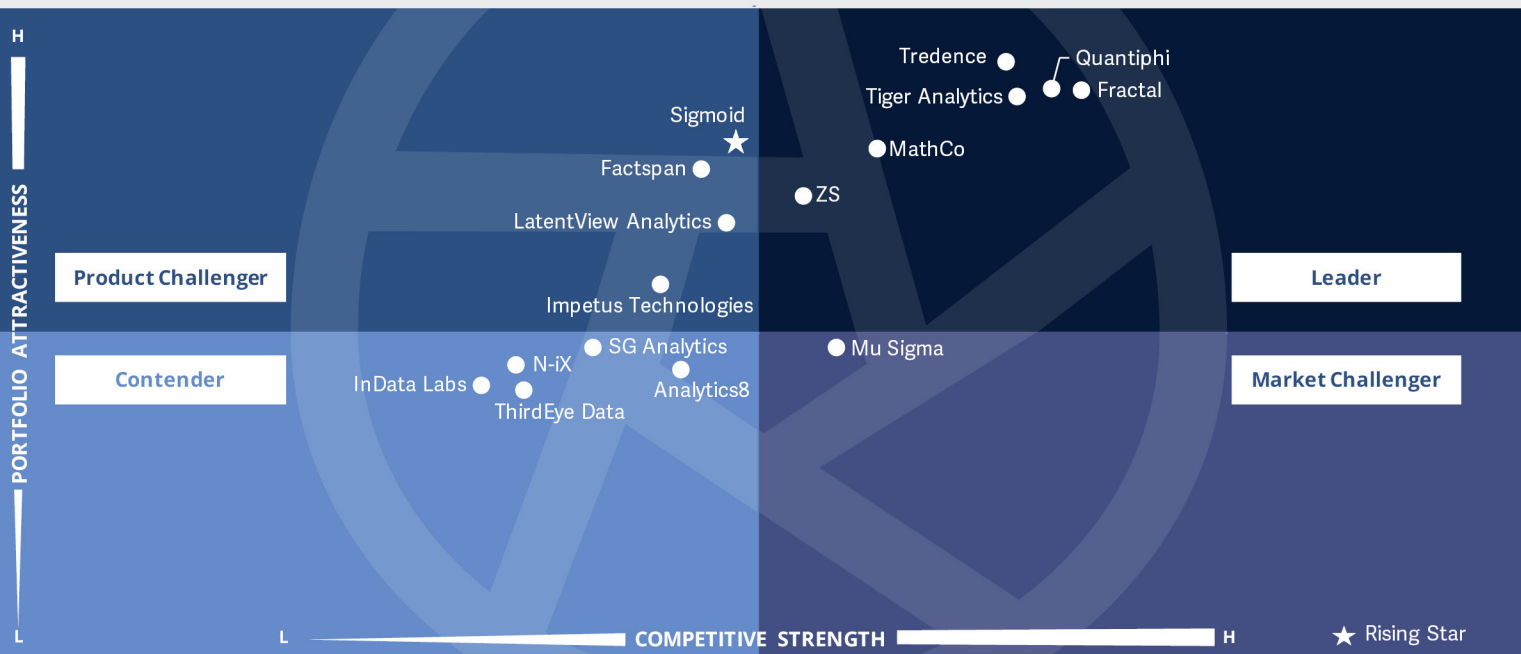
Chief Digital Officers can refer to the report to gain an understanding of the effective analytics tools and techniques for frictionless transactions in a virtual environment.

Technology Professionals should read this report to understand provider competencies in delivering seamless solutions, leveraging data, and AI and analytics.

ISG Provider Lens™

Analytics Services
Data Science Services - Specialist

Source: ISG RESEARCH

U.S. 2023

PORTFOLIO ATTRACTIVENESS

H

L

COMPETITIVE STRENGTH

L   H

Product Challenger

Contender

Leader

Market Challenger

Sigmoid ★
Factspan
LatentView Analytics
Impetus Technologies
SG Analytics
N-iX
InData Labs
ThirdEye Data
Analytics8

ZS
MathCo
Tredence
Tiger Analytics
Quantiphi
Fractal
Mu Sigma

★ Rising Star

This quadrant assesses service providers **with expertise in scientific techniques** and **advanced technologies such as AI and ML** that support enterprises with **insights and intelligence for decision-making** and gaining transformational value.

Gowtham Kumar Sampath

Data Science Services - Specialist

Definition

In this quadrant, ISG evaluates the provider portfolios offering advisory and system integration services based on data science. Providers qualifying for this quadrant offer services to integrate scientific methods with business context for their clients. These providers resolve critical business challenges by combining domain knowledge and expertise in clients' industries, enabling clients to attain substantial, data-driven business growth through actionable insights. Information generated through data science may even lead to new business models and revenue streams. The objective is to define and deploy contextual questions to extract relevant information from vast data streams — data science leverages structured and unstructured data. Service providers evaluated in this study need to address enterprise requirements, including, but not limited to, consulting, identifying business use cases, and developing statistical models and algorithms. Providers should showcase capabilities to generate and visualize insights that are ready to use for business in the form of intelligent reports and storytelling dashboards.

They should be capable of modeling and customizing ML algorithms and workflows using best-of-breed solutions to deploy their services efficiently. Providers should exhibit end-to-end capabilities in architecting, implementing, deploying and scaling enterprise-wide AI projects. These providers should also offer support and training services as standalone offerings, which differ from other service contracts.

Eligibility Criteria

1. Provide a **structured approach, framework** and service portfolio with proprietary offerings that include but not limited to **industrialized playbooks, AI and ML platforms, accelerators, advanced automation and workbenches**

2. Demonstrate established competence, with **several data science experts**, delivering services and having an **in-depth understanding of the market dynamics, regulatory requirements, and language** necessary to successfully deliver services considered within the scope of these services

3. Possess **technology expertise and business knowledge** of the region- and industry-specific requirements, statistical and mathematical modeling, with independent advisory.

4. Possess expertise and offer solutions for **federated learning, data literacy and advanced analytics (computer vision, audio, NLP, natural language generation [NLG] and Graph DB)**

Observations

The focus and well-defined strategies of providers identified as specialists in this quadrant encompass data science services that are tied to their unique capabilities in solving business problems with a data-centric approach that utilizes technology, data and domain expertise. These providers possess unique insights on specific verticals with an in-depth understanding of business and functional challenges. This helps them design and develop structured platforms, accelerators and solutions to address industry-specific needs. The specialists also use unique insights from their experience in handling AI and ML development and deployment projects to devise contextual strategies and achieve impactful outcomes.

Their typical data and analytics offerings include data science, data engineering and management capabilities, where they rely on a single platform or suite with multiple modules designed to suit industry- and function-specific requirements. The increasing focus on analytics, AI and ML and GenAI often require enterprises to have some degree of analytics maturity.

Due to their specific focus on analytics, typical enterprises often do not view these providers as the ideal partners for overall business transformation. In response, several of these providers have revisited their approach and rebranded themselves to showcase the transformative capabilities of their data science offerings to compete better in the market.

Some of the key characteristics and trends observed include

- Strong vertical specialization addressing complex and unique challenges
- One-stop-shop solutions for specific data and domain challenges
- Strong AI and ML, and MLOps capabilities

From the 105 companies assessed for this study, 15 qualified for this quadrant, with six being Leaders and one a Rising Star.

Fractal

Fractal's Flyfish includes a data-driven, human-centric approach that understands consumer behavior and guides them to the right products digitally, while ensuring a human-like interaction to create a personalized shopping experience to increase revenue and build brand loyalty.

quantiphi

Quantiphi has a dedicated R&D practice that continually develops in-house solutions and leverages channel programs to test and pilot niche AI offerings, including Biaoniq, and Healthcare data engine for medical imaging, federated learning and others.

MathCo

MathCo offers Co.dx, a customizable and flexible retail media analytics platform that covers all dimensions of marketing, providing publishers with a wide range of basic analytics and customized analytics experiences as per their unique needs.

Tiger Analytics

Tiger Analytics leverages GenAI as a part of its data science services to drive innovation and deliver advanced solutions, and actively explores partnerships and investments to enhance its capabilities.

Data Science Services - Specialist

Tredence

Tredence offers an end-to-end ecosystem of AI and ML-based accelerators to address complex data science challenges for enterprises and help them unlock the power of data by putting AI at the center of their modernization strategy.

ZS

ZS offerings enable a clear analytics roadmap and help identify opportunities to integrate AI and advanced analytics by prioritizing investments to align organizations with Personalize.AI, ZS Panorama™, Atlas Intelligence and Demand Outlook.

Sigmoid

Sigmoid's expertise spans real-time insights, optimized supply chains, refined marketing and elevated CX. This holistic approach yields transformative outcomes, elevating decision-making capabilities and fostering sustainable growth for enterprises.

Data Engineering Services - Large

Who Should Read This Section

In this quadrant, ISG assesses providers in the U.S., offering advisory and system integration services based on data engineering. The report highlights the changing dynamics of the data engineering services market in the region and how these providers deliver comprehensive data engineering services to collect and aggregate structured, partially structured and unstructured data from several sources. Data is gathered from different systems, contextually processed and structured in a manner to make it consumable.

Enterprises have large volumes of diverse data from disparate sources. To modernize their data infrastructure, they are increasingly opting for cloud migration to address challenges such as legacy infrastructure, data latency, scalability and cost. They are focused on creating a scalable data ecosystem through a data strategy that aligns with their business goals and helps drive decision-making.

Enterprises are exploring approaches such as data mesh and data fabric architecture to meet their business requirements. They are also adopting a consultative approach to data transformation and focusing on the migration and modernization of their data assets. Service providers are playing a crucial role by leveraging technologies such as AI, DataOps and Auto ML, along with accelerators, to help enterprises achieve cost efficiency, scalability and real-time insights and empower them during the entire life cycle of data transformation.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Digital Officers can refer to the report to gain an understanding of the effective analytics tools and techniques for frictionless transactions in a virtual environment.

Chief Data Officers can refer to this report to gain a perspective on effective analytics tools and techniques to deliver business outcomes from data assets and ecosystems.
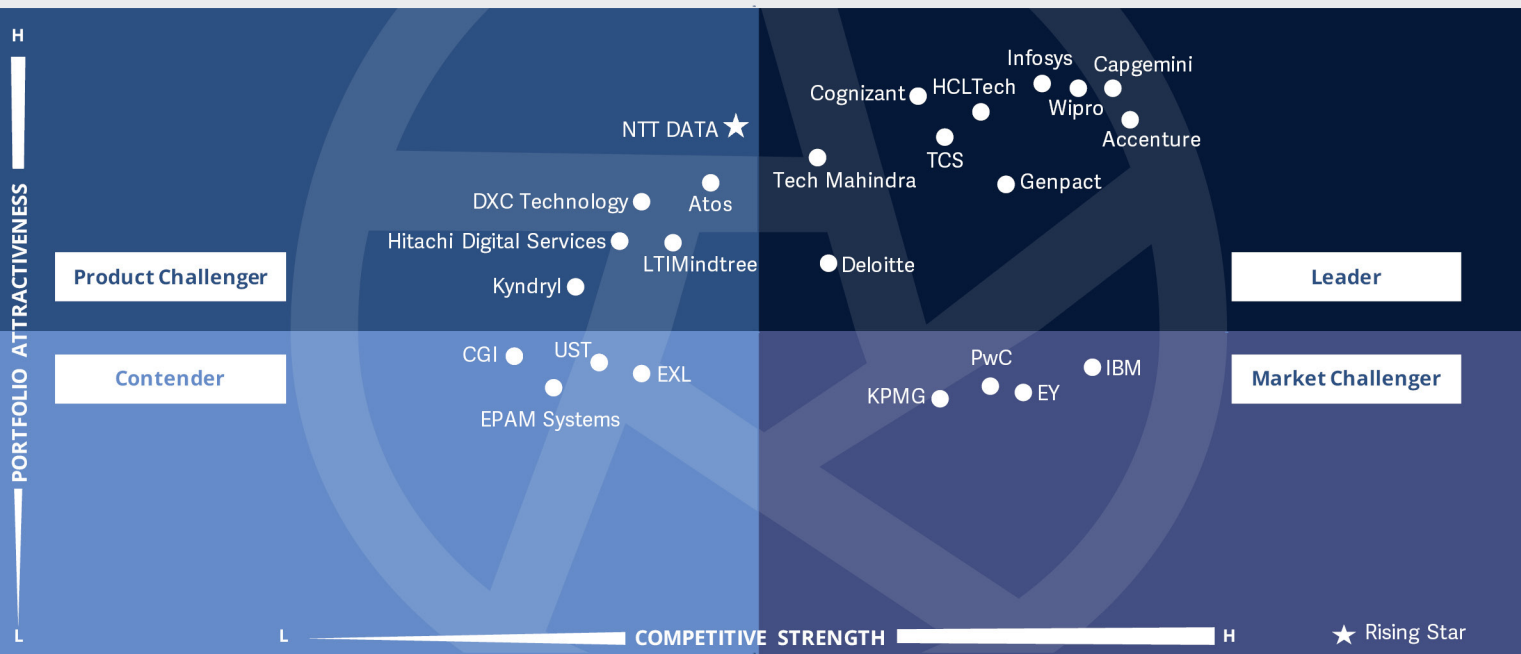
Research and Innovation Professionals should read this report to understand the IP assets of providers such as pre-built solutions and the application of AI and ML to automate processes and use cases.

ISG Provider Lens™

Analytics Services
Data Engineering Services - Large

Source: ISG RESEARCH

U.S. 2023

PORTFOLIO ATTRACTIVENESS

COMPETITIVE STRENGTH

H

L

L   H

Infosys
Capgemini
Cognizant
HCLTech
Wipro
Accenture
NTT DATA ★
TCS
Tech Mahindra
Genpact
DXC Technology
Atos
Hitachi Digital Services
LTIMindtree
Deloitte
Kyndryl

Product Challenger

Leader

CGI
UST
EXL
PwC
IBM
KPMG
EY

Contender

Market Challenger

EPAM Systems

★ Rising Star

This quadrant assesses providers that **develop data pipelines and data models**, manage file format conversion and **undertake data transformation**, and also provide **data quality, data security and control**, compliance and creation and management of data lakes.

Gowtham Kumar Sampath

Data Engineering Services - Large

Definition

In this quadrant, ISG assesses providers in the data engineering services category that are capable of delivering a comprehensive set of services to collect and aggregate structured, partially structured and unstructured data from several sources, including text, calculations, images and sound. Data is obtained from different systems, contextually processed and made available in a structured manner in accordance with access settings. Service provider offerings include, but are not limited to, developing data pipelines and models, managing file format conversion and undertaking data transformation — cleansing and extract, transform and load (ETL) operations. The offerings also include managed services for applications. Data engineering, in the context of this study, includes building data warehouses and data lakes, empowering clients to leverage big data analytics. Providers should also showcase expertise and experience in implementing data modernization projects that include capabilities but not limited to cloud migration for hybrid- and multicloud environments, data mesh, data fabric and

data ecosystems. These offerings should help enterprises improve operational and business capabilities to drive initiatives across enterprise-wide AI, business intelligence and reporting, and advanced analytics services. Data engineering services should also account for emerging trends such as DataOps, FinOps and DevSecOps to ensure enterprises and business leaders can extract actionable insights, value and data-driven decisions from their data.

Eligibility Criteria

1. Possess **technology know-how and architectural consulting expertise**

2. Display competence in the **approach undertaken, methods applied** and service portfolio depth

3. Offer competence with **several data engineering experts** in respective regional markets

4. Demonstrate technology **expertise, business knowledge and domain competence** with independent consultation and available solution providers

5. Provide **standardized/customized frameworks and platforms** for data aggregation and cleansing

6. Offer experience in **building data hubs, data fabrics, modular data lakes**, multicloud data integration capabilities and access to partner data ecosystems

7. Offer **support and training services** as standalone offerings, separate from other service contracts

Data Engineering Services - Large

Observations

The role of large service providers in the realm of data engineering and modernization has been evolving, particularly in the context of cloud, AI and data strategies. Large service providers have developed significant data engineering capabilities because of their expertise in system integration services and experience in migrating cloud, application and data assets. This combination of skills positions them well to handle complex data engineering projects.

These service providers aim to aid enterprises in modernizing their business transformation efforts with cloud, AI and data technologies as the foundation. The data modernization offerings are designed to develop strategies that assist business teams in improving efficiency and reducing project timelines and costs, while creating an agile, dynamic data platform that can adjust to evolving business requirements.

Several service providers offer migration solutions, often referred to as Migration Factories, to streamline the transfer of data assets to the cloud. They also emphasize the importance of a cloud-centric and data-centric foundation, where data is stored and processed in the cloud environment, offering scalability and flexibility.

To summarize, these approaches underscores the role of large service providers in helping enterprises harness the power of data and modernize their operations. This modernization involves the use of cloud, AI and data strategies, with a focus on building a data-centric culture. The goal is to enable organizations to make more informed decisions, improve efficiency and stay competitive in a rapidly evolving business landscape.

From the 105 companies assessed for this study, 23 qualified for this quadrant, with 10 being Leaders and one a Rising Star.

accenture

Accenture's focus is on aligning data strategy with business objectives, addressing challenges such as accessibility and trustworthiness through modern data engineering and AI-assisted governance to shift data foundations to integrated, analytics-ready sources.

Capgemini

Capgemini's accelerators and thought leadership revolve around emerging trends with next-generation technologies and extensive relationships with hyperscalers and specialized partners such as Alation, Blueprisim, Starbust and Dataiku.

cognizant

Cognizant relies on years of experience to provide a range of solutions tailored to meet clients' specific needs. The data offerings are intended for clients' digital transformations with the intelligence for facilitating data-driven decision-making.

Deloitte.

Deloitte's specialized partnership with Snowflake and Dataiku enables it to have extensive knowledge to deliver a modern data ecosystem wherein it supports enterprises seamlessly transition to the cloud. It enables access to AI-based innovations while managing risk, security and compliance.

genpact

Genpact's offerings are designed to provide value to ecosystems involving multiple stakeholder. It invests in expanding deep strategic partnerships with best-of-breed technology vendors to gain competitive advantage and accelerate value for clients.

HCLTech

HCLTech IPs enable organizations to better prepare for market dynamics and unpredictable changes by enabling improvements in key processes, including data modeling, mapping designs, data pipelines development, data testing and operations.

Infosys

Infosys relies on an AI-first approach to data operations that will improve CX and EX through GenAI. These AI-first enterprises can handle internal and external user queries in real time, improving productivity and innovation.

TCS TATA CONSULTANCY SERVICES

TCS' offering TCS Daezmo™ is a comprehensive suite that covers modern data warehouse and data lake implementation, appliance replatforming, data office, master data management and data marketplace setup.

Tech Mahindra

Tech Mahindra nurtures a curated ecosystem of over 70 partners, including hyperscalers and OEMs. Strategic acquisitions such as that of Thirdware, Momenton, Tenzing, and Ct.Co further enhance its capability to offer comprehensive solutions to address critical business challenges.

wipro

Wipro's offering the Data Intelligence Suite includes a highly structured process for data modernization and the journey is initiated with an advisory-led approach to identify the data estates that need modernization, including data stores, data pipelines and BI visualization.

NTT DATA

NTT Data's (Rising Star) data engineering services are adaptable and capable of handling tasks of varying scales and complexity. This adaptability allows enterprises to prioritize performance optimization and fine-tune data processing and storage systems for efficiency.

Data Engineering Services - Midsize

Who Should Read This Section

In this quadrant, ISG assesses providers in the U.S., offering advisory and system integration services based on data engineering. The report highlights the changing dynamics of the data engineering services market in the region and how these providers deliver comprehensive data engineering services to collect and aggregate structured, partially structured and unstructured data from several sources. Data is gathered from different systems, contextually processed and structured in a manner to make it consumable.

Enterprises recognize the need to strategically transform their data environments, which involves the adoption of a data-centric approach and the maximization of data value. They are seeking tailored approaches that allow them to leverage advanced analytics, aligned with their objectives to drive meaningful business outcomes. In addition, they are looking at harnessing the power of AI and ML to build data pipelines and automate ETL processes.

Service providers are pivotal to enabling this transformation, wherein they leverage their data engineering expertise to address complex data transformation tasks, ensuring data accuracy and reliability. They are offering capabilities such as tailored data modernization solutions, building data pipelines that support ML workflows and automating ETL processes through workflow orchestration tools as preferred by enterprises. In short, these providers assist enterprises in achieving data-driven success.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Digital Officers can refer to the report to gain an understanding of the effective analytics tools and techniques for frictionless transactions in a virtual environment.

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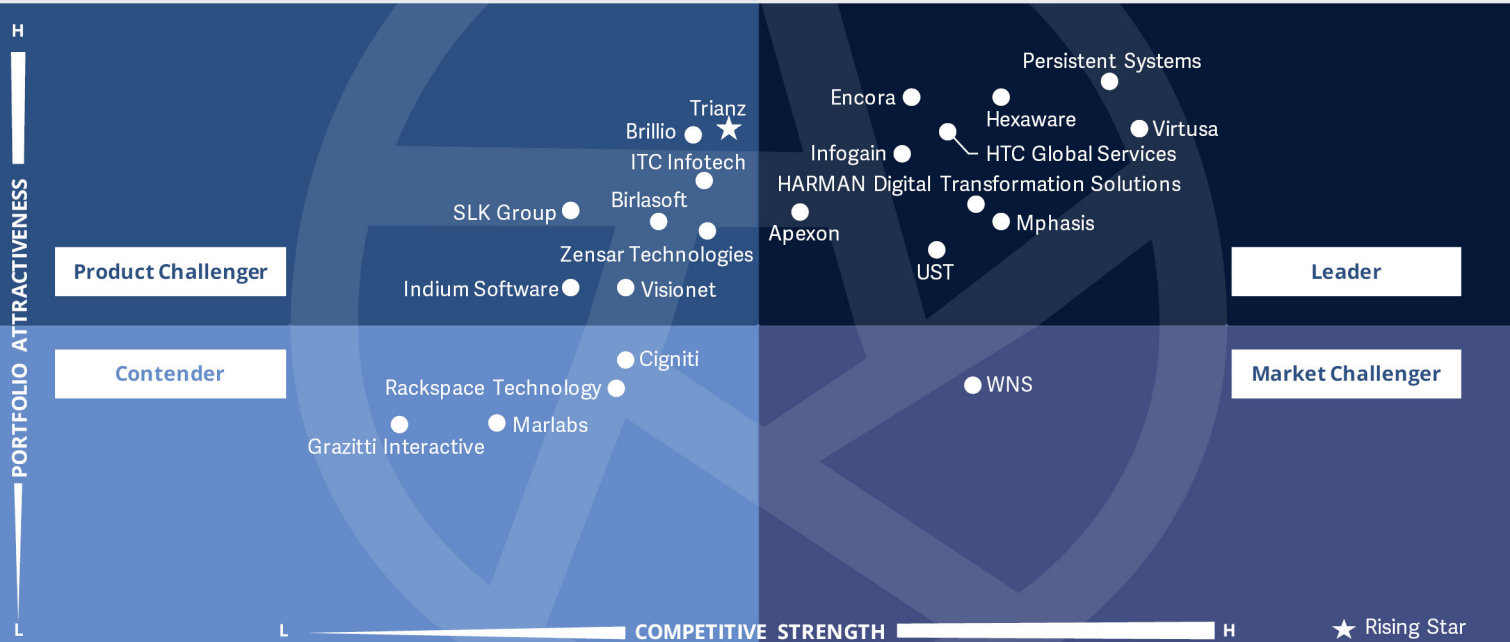
Research and Innovation Professionals should read this report to understand the IP assets of providers such as pre-built solutions and the application of AI and ML to automate processes and use cases.

iSG Provider Lens™

Analytics Services
Data Engineering Services - Midsize

U.S. 2023

PORTFOLIO ATTRACTIVENESS

H

Product Challenger

Contender

L

Encora

Persistent Systems

Trianz ★
Brillio
ITC Infotech
Birlasoft
SLK Group
Zensar Technologies
Indium Software   Visionet

Hexaware
Virtusa
Infogain
HTC Global Services
HARMAN Digital Transformation Solutions
Apexon
Mphasis
UST

Leader

Cigniti
Rackspace Technology
Grazitti Interactive   Marlabs

WNS

Market Challenger

L   **COMPETITIVE STRENGTH**   H   ★ Rising Star

This quadrant assesses providers that **develop data pipelines and data models**, manage file format conversion and **undertake data transformation**, and also provide **data quality, data security and control**, compliance and creation and management of data lakes.

Gowtham Kumar Sampath

Data Engineering Services - Midsize

Definition

In this quadrant, ISG assesses providers in the data engineering services category that are capable of delivering a comprehensive set of services to collect and aggregate structured, partially structured and unstructured data from several sources, including text, calculations, images and sound. Data is obtained from different systems, contextually processed and made available in a structured manner in accordance with access settings. Service provider offerings include, but are not limited to, developing data pipelines and models, managing file format conversion and undertaking data transformation — cleansing and extract, transform and load (ETL) operations. The offerings also include managed services for applications. Data engineering, in the context of this study, includes building data warehouses and data lakes, empowering clients to leverage big data analytics. Providers should also showcase expertise and experience in implementing data modernization projects that include capabilities but not limited to cloud migration for hybrid- and multicloud environments, data mesh, data fabric and

data ecosystems. These offerings should help enterprises to improve operational and business capabilities to drive initiatives across enterprise-wide AI, business intelligence and reporting, and advanced analytics services. Data engineering services should also account for emerging trends such as DataOps, FinOps and DevSecOps to ensure enterprises and business leaders can extract actionable insights, value and data-driven decisions from their data.

Eligibility Criteria

1. Possess **technology know-how and architectural consulting expertise**

2. Display competence in the **approach undertaken, methods applied** and service portfolio depth

3. Offer competence with **several data engineering experts** in respective regional markets

4. Demonstrate technology **expertise, business knowledge and domain competence** with independent consultation and available solution providers

5. Provide **standardized/ customized frameworks and platforms** for data aggregation and cleansing

6. Offer experience in **building data hubs, data fabrics, modular data lakes**, multicloud data integration capabilities and access to partner data ecosystems

7. Offer **support and training services** as standalone offerings, separate from other service contracts

Observations

The midmarket providers' approach to data engineering is technology-centric, prioritizing a data-first strategy aimed at transforming existing data platforms into responsive, future-ready systems. They assess the current data landscape of an enterprise to identify unique characteristics, spot bottlenecks and identify areas where data-centric enhancements can have a significant impact. This approach involves close collaboration with business stakeholders, conducting comprehensive discovery to understand specific objectives and customizing data engineering services to align with enterprise requirements. It identifies gaps and assesses readiness for the adoption of advanced analytics.

Service providers have also developed factory-based approaches, which include frameworks, reference architectures, accelerators and best practices — systematic and automation-driven approaches that ensure a continuously monitored migration journey for clients. The offerings also provide a pre-integrated suite of ready-to-use accelerators and solutions, designed to handle the typical complexities associated with such projects.

Several providers invest in maintaining a vendor-agnostic stance, leveraging existing customer investments while offering expertise in both pre-packaged solutions and customized offerings. This flexibility enables enterprises to evaluate and invest in technologies such as cloud-based data platforms, data lakes, data warehouses and data virtualization, facilitating seamless data integration, storage, and processing.

Some of the key trends observed in the market include:

- Data migration frameworks
- Data mesh and data fabric
- Data as a platform

From the 105 companies assessed for this study, 22 qualified for this quadrant, with 10 being Leaders and one a Rising Star.

Apexon executes a thorough discovery process by interacting with influential enterprise stakeholders, and extensive collaboration enables it to gain knowledge about unique opportunities, obstacles, desired outcomes, data requirements, challenges and opportunities to add value.

Encora

Encora's recent investments related to the expansion of its data engineering capabilities include the acquisitions of Excellarate and Softelligence in the last 12 months. These strategic acquisitions have bolstered Encora's capabilities in digital engineering, data and AI.

HARMAN DTS supports the modernization of an enterprise's data environment taking a data-centric approach that leverages real-time data processing and streaming pipelines using technologies such as Apache Kafka or AWS Kinesis.

Hexaware's offers decades of experience to help customers transform their data estates, where it focuses on key areas, leading to value delivery across hyperscalers such as Azure, Google Cloud and AWS, technology partners such as Snowflake and Databricks, and other third-party tools.

HTC Global Services takes an agile approach to data migration and leverages innovative accelerators for ETL and rapid migration and also establishes governance structures that cover data governance and data quality, security and privacy, and continuous improvement and optimization.

Infogain

Infogain leverages its expertise in building robust data pipelines and excels in real-time data processing and streaming. This enables organizations to derive immediate insights and take prompt actions from data in motion, ensuring agility and responsiveness.

Mphasis acquired Datalytyx, a next-gen data engineering firm that provides data engineering, DataOps, and master data management solutions on Snowflake and Talend environments. It also acquired Stelligent Systems to boost its end-to-end capabilities in public cloud.

Persistent

Persistent Systems has expanded its cloud leadership with the acquisition of DataGlove and MediaAgility to help eliminate the complexity of choice and integration typical of data platform modernization projects using the Persistent Data Experience Hub (DxH).

UST Global's data engineering capabilities encompass advanced analytics, data visualization, real-time data processing, data quality management and data integration, enabling enterprises to make informed decisions and unlock the full potential of their data for business success.

virtusa

Virtusa's engineering-first mindset delivers a data strategy that enables deeper insights into a business while concurrently offering a fit-for-purpose architecture, end-user training to improve adoption and a blueprint for a global data organization of the future.

Trianz leverages its AssessPro framework to identify and assess an organization's existing data landscape, sources and strategic roadmap while leveraging in-built accelerators and best practices to conduct industry benchmarking and undertake a feasibility analysis.

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Infogain

> "Infogain helps architect an adaptive, automated and secure blueprint for a data environment that aligns short- and long-term goals with the right solutions, tools and processes that ingest, transform and deliver analytics-ready and contextual data."
>
> *Gowtham Kumar Sampath*

Overview

Infogain is headquartered in California, U.S. and operates in eight countries. It has more than 6,000 employees across 17 global offices. Infogain's analytics, data science and AI services provide the capabilities, accelerators and ready-to-use solutions that harness GenAI, NAVIK AI solutions, marketing analytics, customer analytics, market research, data science, and predictive AI and ML. Its data modernization services such as DataOps modernization and data platform modernization include capabilities for making strategic and tactical decisions driven by data and insights.

Strengths

Full-stack and holistic platform: Infogain's NAVIK AI is a comprehensive platform addressing a wide spectrum of requirements, including data infrastructure, data engineering and analytics needs. Its modular components consist of data integration repositories and pipeline scripts, an array of highly trained algorithms based on cutting-edge ML models and pre-configured UI components. With NAVIK AI, Infogain can rapidly conceptualize, develop and implement AI-driven solutions tailored to clients' unique requirements.

Modernizing data assets: Infogain takes a modern, holistic approach to building data assets. Experts build, orchestrate and manage data pipelines with well-defined, specific processes for building, testing, deploying and monitoring code and configuration assets across the data lifecycle. This approach enables streamlined data ingestion to tackle challenges such as data complexity, volume, velocity and variety.

Cloud-led modernization: Infogain's cloud infrastructure services enable organizations to build secure, cutting-edge platforms to drive modernization and innovation initiatives in areas such as IT infrastructure, applications, data analytics, IoT, and AI and ML. Infogain's proficiency, industry-proven methods and tools simplify the path toward single- or multicloud deployments across major hyperscalers.

Caution

In addition to its extensive portfolio of proprietary tools and solutions, Infogain should promote more references and case studies to highlight its customization capabilities.

The company should also highlight case studies and references in trending topics such as DataOps, data mesh and data fabric.

Data Engineering Services - Specialist

Who Should Read This Section

In this quadrant, ISG assesses specialist analytics service providers in the U.S., offering advisory and system integration services based on data engineering. The report highlights the changing dynamics of the data engineering services market in the region and how these providers deliver comprehensive data engineering services to collect and aggregate structured, partially structured and unstructured data from several sources. Data is gathered from different systems, contextually processed and structured in a manner to make it consumable.

Enterprises are undertaking transformations of their existing data infrastructure to align with modern business needs. As a part of this transformation, they are shifting from on-premises infrastructure to cloud-based solutions to attain scalability and cost-efficiency and ensure rapid deployment. They are aiming to become data-centric, have a better understanding of customers, achieve operational efficiency and explore new revenue models. Alongside, there is much focus on maintaining data quality, adhering to data governance principles and meeting compliance requirements.

Enterprises are seeking providers with expertise in DataOps solutions to guide them through the entire data engineering life cycle. The providers help enterprises effectively organize, cleanse and manage their data, enabling them to uncover valuable insights to seize opportunities, mitigate risks and enhance customer engagement. Enterprises prefer providers with advanced AI and ML capabilities to accelerate the deployment of solutions and ensure quality.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Digital Officers can refer to the report to gain an understanding of the effective analytics tools and techniques for frictionless transactions in a virtual environment.

Chief Data Officers can refer to this report to gain a perspective on effective analytics tools and techniques to deliver business outcomes from data assets and ecosystems.
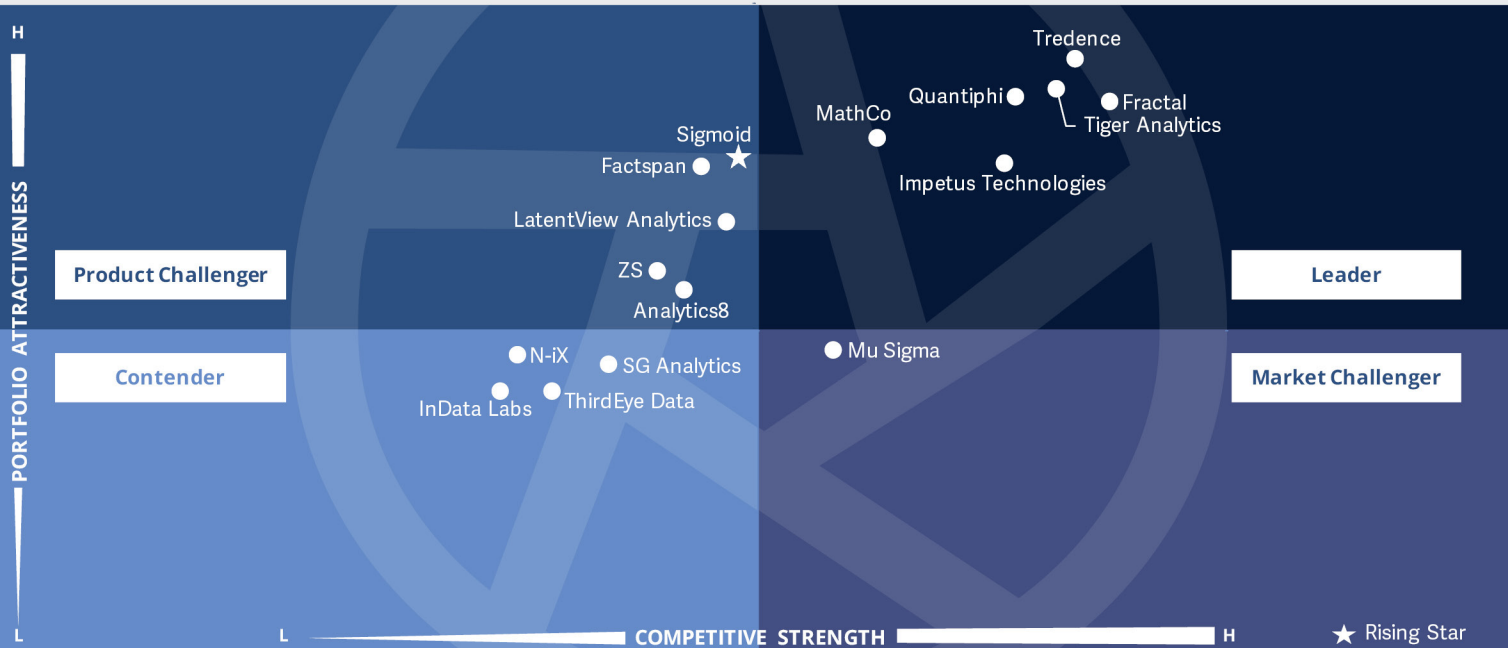
Research and Innovation Professionals should read this report to understand the IP assets of providers such as pre-built solutions and the application of AI and ML to automate processes and use cases.

This quadrant assesses providers that **develop data pipelines and data models**, manage file format conversion and **undertake data transformation**, in addition to providing **data quality, data security and control**, compliance and creation and management of data lakes.

Gowtham Kumar Sampath

Definition

In this quadrant, ISG assesses providers in the data engineering services category that are capable of delivering a comprehensive set of services to collect and aggregate structured, partially structured and unstructured data from several sources, including text, calculations, images and sound. Data is obtained from different systems, contextually processed and made available in a structured manner in accordance with access settings. Service provider offerings include, but are not limited to, developing data pipelines and models, managing file format conversion and undertaking data transformation — cleansing and extract, transform and load (ETL) operations. The offerings also include managed services for applications. Data engineering, in the context of this study, includes building data warehouses and data lakes, empowering clients to leverage big data analytics. Providers should also showcase expertise and experience in implementing data modernization projects that include capabilities but not limited to cloud migration for hybrid- and multicloud environments, data mesh, data fabric and

data ecosystems. These offerings should help enterprises to improve operational and business capabilities to drive initiatives across enterprise-wide AI, business intelligence and reporting, and advanced analytics services. Data engineering services should also account for emerging trends such as DataOps, FinOps and DevSecOps to ensure enterprises and business leaders can extract actionable insights, value and data-driven decisions from their data.

Eligibility Criteria

1. Possess **technology know-how and architectural consulting expertise**

2. Display competence in the **approach undertaken, methods applied** and service portfolio depth

3. Offer competence with **several data engineering experts** in respective regional markets

4. Demonstrate technology **expertise, business knowledge and domain competence** with independent consultation and available solution providers

5. Provide **standardized/ customized frameworks and platforms** for data aggregation and cleansing

6. Offer experience in **building data hubs, data fabrics, modular data lakes**, multicloud data integration capabilities and access to partner data ecosystems

7. Offer **support and training services** as standalone offerings, separate from other service contracts

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Observations

The specialists adopt a platform-centrice approach, integrating people, processes and technologies to facilitate customers' transition from their current state to a unified data platform. These providers also prioritize the shaping of data foundations in alignment with specific business goals and by embracing a cross-functional perspective. Their expertise lies in creating reusable analytical data foundations for business data products, promoting efficiency and reusability.

Within their data engineering services, specialists offer end-to-end capabilities, covering consultation, implementation and management. The offerings are designed with a clear focus on reducing costs, avoiding technical debt and enhancing long-term sustainability. The providers strategically engage with both technology and business teams, playing a crucial role in rationalizing data platforms, modernizing existing platforms and facilitating a smooth transition to cloud-based solutions. This holistic approach ensures that clients benefit from a well-rounded and sustainable data ecosystem that can drive business success.

The providers have also invested in accelerators that play a pivotal role in significantly streamlining the development and delivery efforts for bespoke solutions, thereby expediting the adoption of analytics and AI within a business. Several providers are also leveraging the automation of the entire data engineering value chain and provisioning customized frameworks and accelerators that place much emphasis on DataOps. The providers offer a comprehensive suite of DataOps services that encompass everything from data pipeline development and automation to monitoring and optimization.

From the 105 companies assessed for this study, 15 qualified for this quadrant, with 6 being Leaders and one Rising Star.

Fractal

Fractal uses a business-focused approach to IT in engineering its solutions, aligning analytics, determining AI and ML approaches and in identifying suitable technologies. Its data-first approach transitions data from legacy platforms and infrastructure to enable agile analytics within an enterprise.

IMPΞTUS

Impetus Technologies delivers a unique set of solutions for data engineering, AI/ML, DevOps, and automated data migration, alongside cloud engineering services with a holistic platform-centric approach.

quantiphi

Quantiphi has worked on multiple data engineering projects, ranging from data foundations to migration and setting up enterprise data warehouses. It has developed robust tools to accelerate and deliver solutions better and faster and at low costs.

MathCo

MathCo's offering involves fully automating the data engineering value chain, where it provides its customers with custom frameworks and accelerators centered around DataOps with particular emphasis on Data Quality Management and Data Observability.

Tiger
Analytics

Tiger Analytics offers modernization services and assists organizations in shaping data and platforms by following modern architecture principles and delivering possibilities for incremental business growth through groundbreaking use cases.

Tredence

Tredence uses its expertise in cloud and data engineering to develop services and accelerators using native cloud components, assisting clients with big data modernization and cloud platforms within short time periods.

Sigmoid

Sigmoid's unique selling proposition for data engineering services is in its comprehensive approach to solving data-related challenges and optimizing data operations. It has extensive certifications in technology stacks such as AWS, Google Cloud, Azure, Snowflake and Databricks.

Data Management Services - Large

Who Should Read This Section

In this quadrant, ISG assesses data management service providers in the US. It also highlights the changing dynamics of the data management services market in the region and how providers support end-to-end storage, management and governance of data for clients by adhering to relevant compliance guidelines and standards.

Enterprises are establishing a strong data foundation and effective data management practices in the modern business landscape to address challenges such as data silos and data inconsistencies. They are focusing on the right infrastructure, governance and culture to ensure data quality and reliability by giving much attention to aspects such as data sharing models, secure operations, data governance and master data management.

Enterprises are engaging with providers with capabilities in modern technologies such as RPA and AI and ML to enhance data and risk management and ensure compliance. Service providers should focus on offering self-service solutions to enable quick access to data,

generate actionable insights and drive growth through data accuracy and reliability. They should also offer accelerators and frameworks for data life cycle management.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Digital Officers responsible for strategizing a digital approach can gain a better perspective on effective analytics tools and techniques for frictionless transactions in a virtual environment.

Chief Data Officers can refer to this report to gain a perspective on effective analytics tools and techniques to deliver business outcomes from data assets and ecosystems.
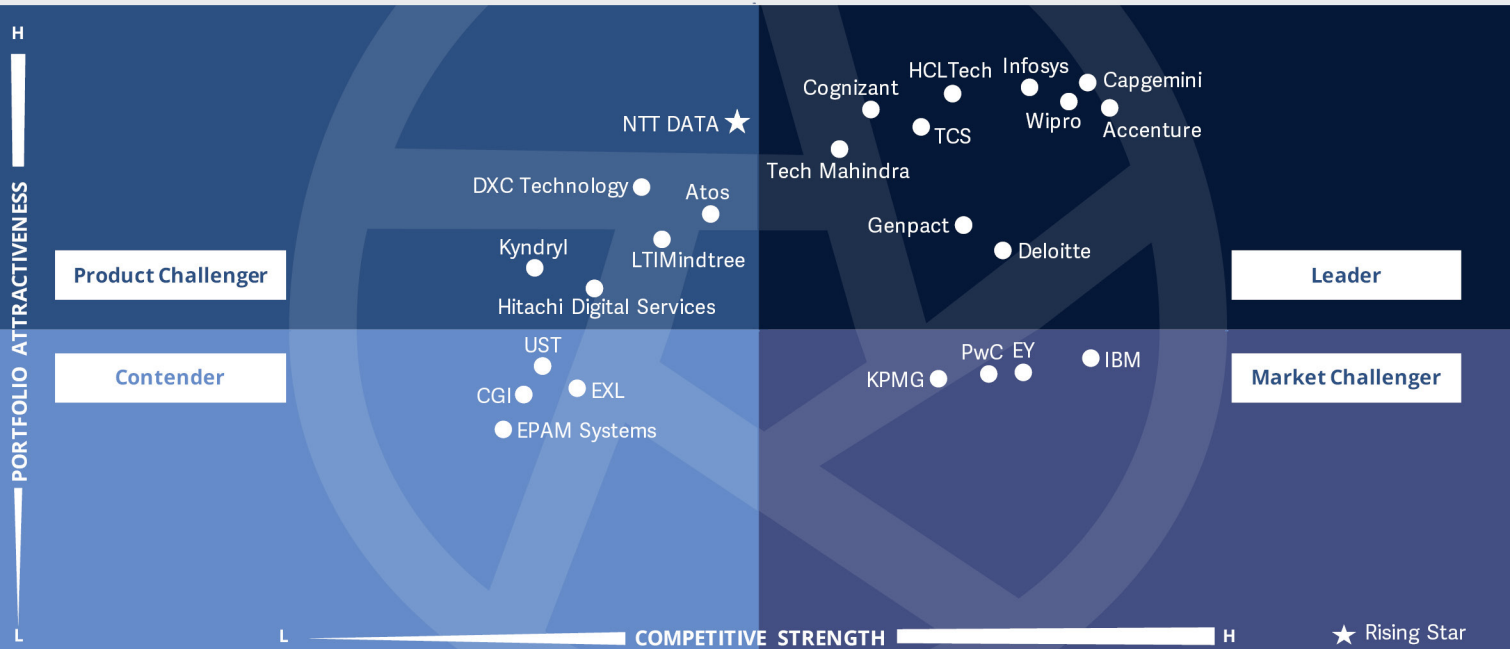
Data Management Professionals should read this report to understand the relative positioning and capabilities of providers that can help in implementing and maintaining compliance and governance standards.

ISG Provider Lens™

Analytics Services
Data Management Services - Large

Source: ISG RESEARCH

U.S. 2023

Product Challenger

Contender

Leader

Market Challenger

NTT DATA ★
DXC Technology ●
Atos ●
Kyndryl ●
LTIMindtree ●
Hitachi Digital Services
UST ●
CGI ● ● EXL
EPAM Systems ●

Cognizant ●
HCLTech ● Infosys ● Capgemini ●
TCS ● Wipro Accenture
Tech Mahindra
Genpact ●
● Deloitte
PwC ● EY ● ● IBM
KPMG ●

PORTFOLIO ATTRACTIVENESS

COMPETITIVE STRENGTH

★ Rising Star

This quadrant assesses providers that offer **master data management, metadata management, data migration and data lineage** services, in addition to providing **data quality, data security and control,** compliance and creation and management of data lakes.

Gowtham Kumar Sampath

Data Management Services - Large

Definition

In this quadrant, ISG assesses service providers in the data management services category that are capable of managing end-to-end storage, sharing, archiving and data retrieval by adhering to relevant compliance guidelines. Providers should offer consulting capabilities that include, but are not restricted to, assessment, strategy development and roadmap creation. These capabilities should also include assistance for planning, designing and deploying data management services. Providers should help enterprises in organizing and cataloging data from different sources. Offerings from service providers include, but are not limited to, workflow management, data modeling, data integration, master data management, metadata management, data migration and data lineage services as part of the data management services. Providers should also possess the self-service capability to make data available for stakeholders to be consumed in a simple format. Providers should set data governance strategy to ensure regulatory compliance standards are met. They should also be able to develop and implement

data governance systems and policies and procedures for effective and efficient data management. The quadrant encompasses services for ensuring data quality, data security and control, complying with GDPR, and creating and managing data lakes, among others.

Eligibility Criteria

1. Offer **consulting expertise for assessment, strategy and roadmap**, along with **lifecycle and workflow management**

2. Possess the capability to **manage and govern data by establishing trust** and **adhering to relevant compliance guidelines**

3. Encompass the ability to **develop data architecture** and **offer data modeling**

4. Offer data integration, **data migration, master data management and metadata management** capabilities as part of data management services

5. Provide **data cataloging** from disparate sources, **data stewardship and business glossaries**, along with **maintaining and controlling data quality** and providing **data security**

6. Track **data lineage** back to the data origin

7. Offer **regulatory compliances** such as GDPR

8. Possess experience in **establishing CoEs** as part of the services offering

Observations

Large service providers are developing innovative data transformation strategies with the aim of establishing trusted data platforms to improve business outcomes and enable data-driven decision-making. These strategies are based on several key principles: the unification of data from multiple sources, curation and democratization across an enterprise to facilitate consumption.

By leveraging their technology and innovation expertise, along with experience in addressing industry-specific challenges, providers are implementing robust data management and governance practices, with data reliability as the foundation of their data management services. Providers also showcase a strong understanding of common data challenges across enterprises to develop proven methodologies, frameworks and templates that deliver tangible value and significantly impact outcomes. The offerings are structured on establishing and modernizing data ecosystems in the cloud, industrializing data lakes, and on embedding data governance, lineage and security while enabling self-service with real-

time and contextual insights. The services provide comprehensive support for data quality management, metadata management, data security, end-to-end privacy programs and compliance with industry-specific regulations and standards.

Several providers are investing in developing effective AI governance frameworks to manage component and ethical model risks throughout a data lifecycle. The approach envisions analytics-driven enterprises with industrialized and cutting-edge capabilities, enabling opportunities in new markets, improved CX, operational efficiencies and enhanced risk management.

From the 105 companies assessed for this study, 23 qualified for this quadrant, with 10 being Leaders and one Rising Star.

accenture

Accenture's intelligent data governance and compliance offering leverages automation with machine-led compliance to manage, govern and catalog data, while establishing trust and ensuring regulatory compliance and maximizing returns on data and digital investments.

Capgemini

Capgemini's IDEA microservices architecture is flexible and allows better customization and scalability of services to suit a client's requirements and can be seamlessly integrated into existing systems, while also capable of evolving in tandem with changing objectives over time.

cognizant

Cognizant engages with clients as a strategic partner for their end-to-end data privacy and ethics compliance journey, across advisory, technology and delivery implementation and operations, with offerings covering privacy governance, privacy automation and privacy by design.

Deloitte.

Deloitte helps build a foundation of data assets, enabling organizational flexibility in a dynamic market environment, offering solutions for data quality, data governance, master and metadata management, data privacy, information architecture and lineage.

Data Management Services - Large

Genpact's Data Control Center (DCC) establishes a framework of governance by linking data to business outcomes, providing visibility to business stakeholders and enabling long-term sustainability of a data governance program.

HCLTech

HCLTech is an authorized partner with the Enterprise Data Management Council and is authorized to conduct data management assessments for its clients to understand their current state and develop a data management roadmap for them.

Infosys' Data Operations Workbench is an intelligent platform that enables a unified provisioning, monitoring and management of data platforms in a hybrid landscape with capabilities to assess databases, applications, tools, cloud services and data pipelines.

TCS is a key data governance partner of Microsoft Azure Purview solution that offers a unified governance framework, data strategy and standardization, while ensuring data platform integrity, an easy search of contextual data and cloud cost monitoring.

Tech Mahindra's extensive experience and industry-led global governance frameworks provide comprehensive guidance and best practices for effective data governance within an organization's data ecosystem, aligning people, processes, and technology.

Wipro's data governance offerings play a critical role in enabling the compliance process, with governance, data classification and access control as key mechanisms and intelligent solutions powered by AI and ML offering centralized, automated control and risk visibility.

NTT DATA's (Rising Star) acquisition of Sapphire has provided it with extensive capabilities in the SAP midmarket with a focus on driving digital transformation through cloud adoption to comprehensively and consistently support clients and their customers.

Data Management Services - Midsize

Data Management Services - Midsize

Who Should Read This Section

In this quadrant, ISG assesses data management service providers in the U.S. It also highlights the changing dynamics of the data management services market in the region and how providers support end-to-end storage, management and governance of data for enterprise clients by adhering to relevant compliance guidelines and standards.

Enterprises need to manage data from multiple sources and the accuracy of this data is critical for timely business insights and decision-making in compliance with regulatory guidelines. To this end, they are seeking solutions that can help overcome issues such as poor data quality and inconsistencies, and data silos.

Enterprises are collaborating with providers with capabilities in master data management to establish a single source of truth for accurate insights. Service providers should leverage AI and ML and offer relevant frameworks, accelerators and templates for data quality and data governance in keeping with the requirements of enterprises.

IT Leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their business.

Chief Digital Officers responsible for strategizing a digital approach can gain a better perspective on effective analytics tools and techniques for frictionless transactions in a virtual environment.
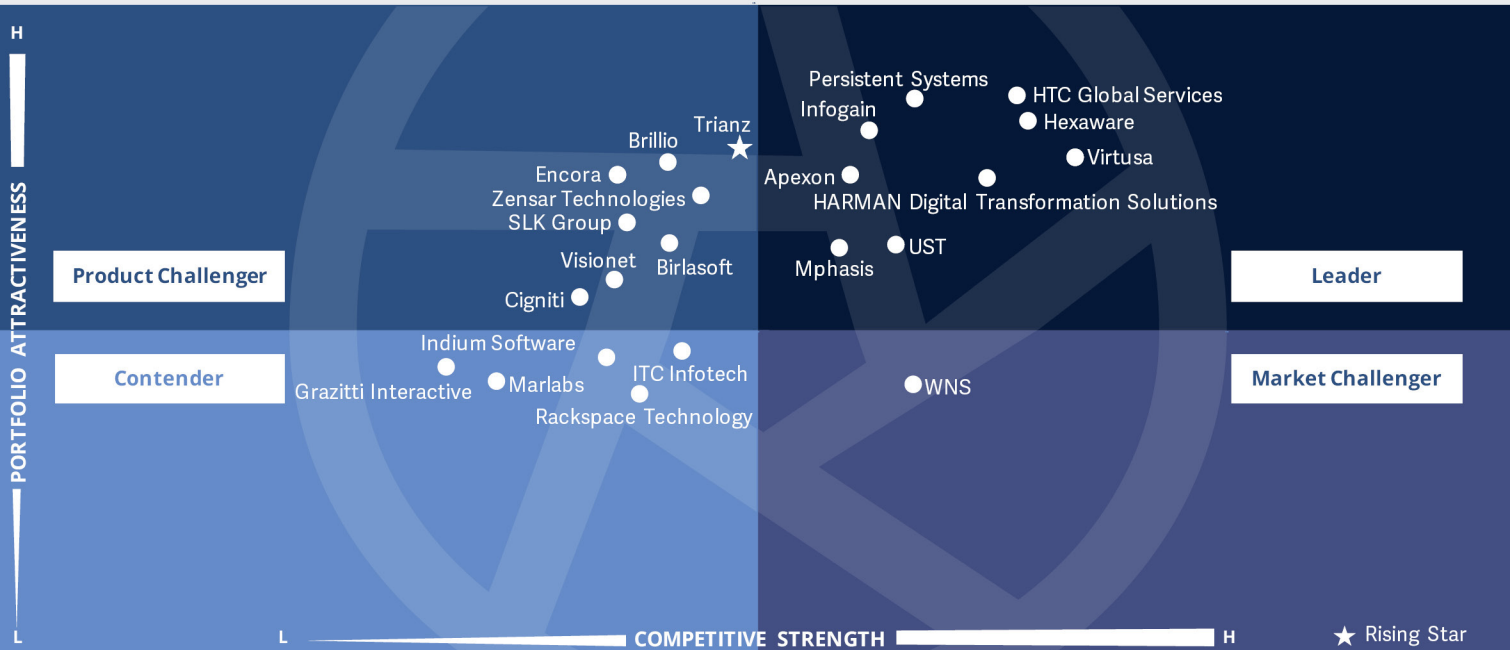
Chief Data Officers can refer to this report to gain a perspective on effective analytics tools and techniques to deliver business outcomes from data assets and ecosystems.

Data Management Professionals should read this report to understand the relative positioning and capabilities of providers that can help in implementing and maintaining compliance and governance standards.

This quadrant assesses providers that offer **master data management, metadata management, data migration and data lineage** services, in addition to providing **data quality, data security and control**, compliance and creation and management of data lakes.

Gowtham Kumar Sampath

Data Management Services - Midsize

Definition

In this quadrant, ISG assesses service providers in the data management services category that are capable of managing end-to-end storage, sharing, archiving and data retrieval by adhering to relevant compliance guidelines. Providers should offer consulting capabilities that include, but are not restricted to, assessment, strategy development and roadmap creation. These capabilities should also include assistance for planning, designing and deploying data management services. Providers should help enterprises in organizing and cataloging data from different sources. Offerings from service providers include, but are not limited to, workflow management, data modeling, data integration, master data management, metadata management, data migration and data lineage services as part of the data management services. Providers should also possess the self-service capability to make data available for stakeholders to be consumed in a simple format. Providers should set data governance strategies to ensure regulatory compliance standards are met. They should also be able to develop and implement

data governance systems and policies and procedures for effective and efficient data management. The quadrant encompasses services for ensuring data quality, data security and control, complying with GDPR, and creating and managing data lakes, among others.

Eligibility Criteria

1. Offer **consulting expertise for assessment, strategy and roadmap**, along with **lifecycle and workflow management**

2. Possess the capability to **manage and govern data by establishing trust** and **adhering to relevant compliance guidelines**

3. Encompass the ability to **develop data architecture** and **offer data modeling**

4. Offer data integration, **data migration, master data management and metadata management** capabilities as part of data management services

5. Provide **data cataloging** from disparate sources, **data stewardship and business glossaries**, along with **maintaining and controlling data quality** and providing **data security**

6. Track **data lineage** back to the data origin

7. Offer **regulatory compliances** such as GDPR

8. Possess experience in **establishing CoEs** as part of the services offering

Observations

In the midmarket landscape, enterprises are prioritizing data security and compliance, with several providers offering advanced tools for auditing and monitoring data to enhance security. Providers with cloud expertise are playing a pivotal role in fortifying businesses with multilayered security strategies to counter advanced security threats, where offerings are based on the foundation of compliance and robust data governance, and that emphasize the importance of trustworthiness and privacy, to ensure data accuracy for business users. This comprehensive approach involves rigorous risk assessment and other evaluations, enabling rapid threat detection and mitigation.

Providers are also taking strategic, tailored approaches for regional enterprises navigating the complexities of data localization laws, ensuring efficient storage and processing of data while maintaining optimal performance and availability. Providers specialize in tailoring data governance for enterprises, covering key aspects such as data capture, storage, processing and sharing.

Investments are directed toward leveraging AI for detecting security threats, ensuring compliance and interpreting regulatory documents and contracts for the benefit of organizations across sectors. Providers are also investing in developing industry-wide frameworks that often incorporate elements such as ethical AI assessments, discovery processes and MLOps maturity assessments, aimed at ensuring the ethical deployment of AI and safeguarding enterprises from potential harm.

From the 105 companies assessed for this study, 22 qualified for this quadrant, with 9 being Leaders and one Rising Star.

Apexon is focused on data integrity, confidentiality, availability and compliance with regulations in all its operations. Its offerings implement data quality checks and cleansing processes to ensure data accuracy and reliability.

HARMAN DTS helps enterprises foster data literacy across an enterprise when implementing data-related initiatives and helps ensure smooth change management by empowering employees to become more data-driven and make better-informed decisions.

Hexaware establishes compliance frameworks aligned with industry standards and regulations, ensuring appropriate data handling practices by defining data quality metrics, implementing data cleansing techniques and establishing data profiling and monitoring procedures.

HTC Global Services leverages AI-powered tools to track data use, monitor changes and ensure compliance with regulatory requirements and automated audits, using AI to significantly provide momentum to the process of identifying discrepancies or non-compliance issues.

Infogain

Infogain helps enterprises adopt a decentralized approach to data management, emphasizing on democratization, data fabric and data mesh, while connecting everyone in an organization responsible for data use and quality and improving data access, literacy and culture.

Mphasis
The Next Applied

Mphasis offers a well-defined data governance framework, powered by open-source tools that help enterprises gain data governance maturity by addressing people, processes, practices, technologies, security and organizational culture challenges.

Persistent

Persistent Systems assists clients in establishing a data stewardship program to ensure the effective management of data assets. This includes defining data steward roles, responsibilities and workflows, and establishing data governance committees and councils.

UST

UST Global's data governance committee and advanced technologies manage critical initiatives and ensure efficient data management with employee training fostering a culture of responsible data handling and offering reliable, secure and compliant data solutions.

virtusa

Virtusa offers a robust data governance framework that goes beyond compliance and risk management to help unlock insights and deliver differentiated CX, where it leverages its partnerships with IBM, Oracle and Microsoft, among others.

TRIANZ | DIGITAL EVOLUTION SIMPLIFIED

Trianz (Rising Star) has an expansive partner ecosystem for data and analytics, spanning integration, storage, BI, advanced analytics, MDM and big data. It also has a strong association with external partners to fulfill project-specific enterprise requirements.

Infogain

Leader

"Infogain's data platform modernization services help enterprises realize their data vision, ranging from envisioning a data platform strategy to architecting and building a modern, future-ready cloud data platform."

Gowtham Kumar Sampath

Overview

Infogain is headquartered in California, U.S. and operates in eight countries. It has more than 6,000 employees across 17 global offices. Infogain's analytics, data science and AI services provide capabilities, accelerators, and ready-to-use solutions that include generative AI, NAVIK AI solutions, marketing analytics, customer analytics, market research, and data science predictive AI and ML. Infogain's data modernization services, such as DataOps modernization and data platform modernization, provide capabilities for making strategic and tactical decisions that are driven by data and insights.

Strengths

Cloud-led security solutions: Infogain's Cloud SecOps platform incorporates built-in governance mechanisms, encompassing profiling, MDM, data quality, metadata classification, data cataloging and data lineage capture. Infogain's cloud experts secure businesses by fortifying cloud environments against contemporary security threats. The approach involves risk assessment, evaluation and deploying multilayered security strategies, facilitating rapid threat detection and mitigation.

Robust governance approach: Infogain helps enterprises establish a data governance council featuring organizational leadership for oversight and alignment with strategic goals. The approach includes training programs to instill data governance principles and emphasizes the significance of data quality, security and compliance in daily data practices. Key performance metrics are set up to gauge the effectiveness of data governance practices and their influence on data literacy and decision-making.

End-to-end governance offerings: Infogain combines data governance, change management and data literacy to ensure secure and high-quality data handling. This integration leverages change management methodologies to promote adopting data governance practices, highlighting their role in improving data literacy efforts and driving positive transformations.

Caution

Infogain should provide comprehensive data regarding the quantifiable results and tangible benefits derived from its data management references and case studies, with a particular focus on data cataloging, data literacy and data quality.

The company should further promote its thought leadership on utilizing AI and ML in data management and governance.

Appendix

The ISG Provider Lens™ 2023 – Analytics Services research study analyzes the relevant software vendors/service providers in the U.S. market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of November 2023, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars ($US) unless noted.

The study was divided into the following steps:

1. Definition of Analytics Services market

2. Use of questionnaire-based surveys of service providers/ vendor across all trend topics

3. Interactive discussions with service providers/vendors on capabilities & use cases

4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)

5. Use of Star of Excellence CX-Data

6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.

7. Use of the following key evaluation criteria:

   * Strategy & vision

   * Tech Innovation

   * Brand awareness and presence in the market

   * Sales and partner landscape

   * Breadth and depth of portfolio of services offered

   * CX and Recommendation

Author & Editor Biographies

Lead Analyst

Gowtham Kumar Sampath
Assistant Director and Principal Analyst

Gowtham Sampath is a Assistant Director and Principal Analyst with ISG Research, responsible for authoring ISG Provider LensTM quadrant reports for Banking Technology/Platforms, Digital Banking Services, Cybersecurity and Analytics Solutions & Services market. With 15 years of market research experience, Gowtham works on analyzing and bridging the gap between data analytics providers and businesses, addressing market opportunities and best practices. In his role, he works with advisors in addressing enterprise clients' requests for ad-hoc research requirements within the IT services sector, across industries.

Furthermore, he authors thought leadership research, whitepapers, articles on emerging technologies within the banking sector in the areas of automation, DX and UX experience as well as the impact of data analytics across different industry verticals.

Research Analyst

Vartika Rai
Research Analyst

Vartika Rai is a research analyst at ISG and is responsible for supporting and co-authoring Provider Lens™ studies on Analytics Services, and SAP Ecosystem. She supports the lead analysts in the research process and authors the global summary report. Vartika also develops content from an enterprise perspective and collaborates with advisors and enterprise clients on ad-hoc research assignments. Vartika started her current role in June 2022. Before this role, she worked on secondary research, competitive intelligence, market trends, and newsletter analysis.

IPL Product Owner

Jan Erik Aase
Partner and Global Head – ISG Provider Lens™

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor.

Now as a partner and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

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Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,600 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.

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