

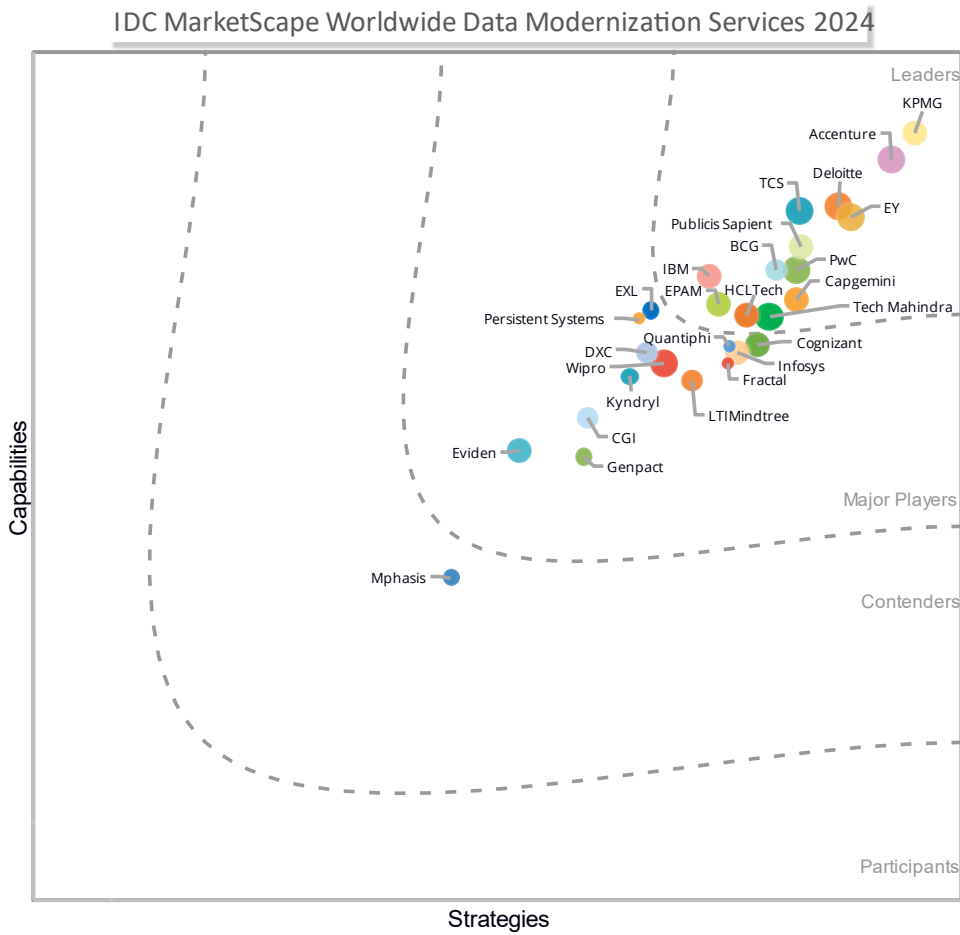
IDC MarketScape: Worldwide Data Modernization Services 2024 Vendor Assessment

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IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Data Modernization Services Vendor Assessment



Source: IDC, 2024

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IDC OPINION

This IDC study represents a vendor assessment of the 2024 data modernization services market through the IDC MarketScape model. This is the first time IDC has assessed this market. Vendors demonstrate success in the market by both clearly articulating their strategies for enabling clients' data modernization initiatives and readily demonstrating their current capabilities and proof points through existing client engagements.

As organizations look to become data-driven enterprises, they will need comprehensive enterprise intelligence strategies and architectures to ensure data becomes an asset that delivers business value. In *Four Planes of Enterprise Intelligence Architecture: A Conceptual View into the Data Plane, Data Control Plane, Data Analysis Plane, and Decisioning Plane* (IDC #US50793023, June 2023), IDC recommended that organizations focus their enterprise intelligence strategies to be top down from the decisioning plane to the data plane, as we have observed many organizations doing the opposite and ending up with projects resulting in great data management technology solutions that are disconnected from the ultimate goal of improving decision velocity. However, each plane depends on the performance of the planes below it.

IDC research across worldwide buyers of external enterprise intelligence services indicates that organizations are most challenged by capabilities related to the data control plane (e.g., data security and governance, data quality and access), which are particularly critical to the success of overall enterprise intelligence efforts. Foundational technologies such as data management, data infrastructure (including cloud, on premises, and/or hybrid), and data governance and control are focus areas for investment in the next 18 months. As capabilities in these areas mature, organizations are better positioned to move past foundational technology elements and invest in artificial intelligence (AI) to detect changes and identify long-term patterns from large data sets and event data streams, forge connections among disparate data stores, surface recommendations and actions to end users, and automate business processes.

In this assessment, IDC evaluated data modernization services vendors across scoring criteria and collected feedback from customers on their perception of the key characteristics and the capabilities of these vendors. Key findings include:

- The most critical vendor attribute for successful data modernization services engagements, according to IDC's *Data Modernization Services Buyer Perception Survey*, was "achievement of desired business outcomes." The perceived priority of this attribute over all others is consistent with other vendor evaluations IDC has completed in adjacent markets such as AI services, intelligent automation

services, and business analytics services. As such, a critical aspect of this assessment involved evaluation of vendors' case studies and examples of business outcomes delivered to their data modernization services clients.

- When customers were asked about the primary business objective driving their engagement of their data modernization services vendor, at a worldwide level, the most frequent responses were "increased operational efficiency," "improved business agility," and "revenue growth." One-quarter of the customers we surveyed said they achieved 30% or greater improvement in measurable KPIs from their data modernization services engagement.
- The top-rated vendor attribute by customers, in aggregate, was the ability to "provide data engineering (movement, replication, matching, transformation, federation, and cleansing)," followed by the ability to "provide solutions using our preferred technology providers." This aligns with IDC's evaluation of offering strategies around data plane and data control plane as top areas of strength on average across data modernization services vendors.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

This research includes analysis of data modernization services providers with global scale and broad portfolios spanning IDC's research coverage. This assessment is designed to evaluate the characteristics of each firm — as opposed to its size or the breadth of its services. In determining the group of vendors for analysis in this IDC MarketScope, IDC considered the following set of inclusion criteria:

- Worldwide data modernization services revenue of at least \$100 million over the last calendar year, with revenue generated in each major geographic region (i.e., Americas, EMEA, and Asia/Pacific)
- Offerings across the life cycle of data modernization services (e.g., project-based, managed, support, and training)
- Offers its own software (e.g., tools, platforms, or other proprietary assets) as part of data modernization services portfolio
- Go-to-market alliances with a range of data management software providers

ADVICE FOR TECHNOLOGY BUYERS

- **Maturity and business case assessment.** Expect services firms to assess your organization's data maturity and meet you where you are on your data modernization journey. Whether your current focus happens to be legacy data migration and rationalization, implementing new practices for data governance and DataOps, building data products for internal or external use, or bolstering

your data foundation for AI or GenAI adoption, a good services partner will help you focus on what business outcomes you could achieve through better decisions, then work backward to determine the right data plane and data control plane investments to support better decision intelligence. Look for consulting frameworks and ROI models that focus on achieving your specific business objectives in the short term — efficiently and cost effectively — while preparing for the next stage of enterprise intelligence transformation. But beyond frameworks, be sure your provider truly understands your organization's business context and technology landscape and that its vision and approach align with your objectives in terms of speed, cost, and resource requirements. Ask providers to share examples of data modernization work they have done with organizations like yours, and then evaluate both the quality of the outcomes delivered and the provider's understanding of your organizations' data modernization needs.

- **Modern data architecture, delivery tools, and platforms.** Seek providers that demonstrate an understanding of how to modernize your data environment while leveraging your existing technology investments, create architectures that connect the various technology components, and address common services needs across planes of the enterprise intelligence architecture. IDC's extensive research has not yet identified a single technology vendor that delivers all necessary technology components of the enterprise intelligence architecture, nor do we believe these components must be contained within a single platform. That said, our research shows that many buyers of external services for enterprise intelligence initiatives seek preconfigured technology stacks to minimize technical complexity. Seek a provider that has invested in platforms, workbenches, and other IP assets that accelerate the implementation process and deliver additional value. These can include API connectors for partner software solutions; simplified provisioning, monitoring, and management of system resources; security, integration, and governance across diverse data sources; support for knowledge management and collaboration among different data stakeholders; automated workflows; and FinOps capabilities. Also take note of how providers use AI and GenAI to accelerate and improve their delivery of data modernization services.
- **Stakeholder alignment.** According to IDC's *Data Modernization Services Buyer Perception Survey*, the most common project sponsors for data modernization services were CIOs/CTOs, information technology (IT) directors and managers, and chief analytics/data officers, who, combined, made up nearly 60% of responses. However, customers also rated "functional insights and competency" as one of the top 10 most critical attributes for data modernization services engagement success. Choose a vendor that can work across IT, business, and data teams to address key data modernization pain points, such as breaking

unnecessary data silos, standardizing business processes, implementing data governance policies, and improving data quality and availability. Seek out vendors that not only speak with budget holders but also communicate effectively with engineering teams and end users, who need to consume high-quality data at speed and scale for business decision-making, through interviews, workshops, and change management programs.

- **Expertise and working relationship.** A common theme across the buyer interviews and surveys IDC conducted for this assessment was the importance of vendors' demonstration of expertise in domain, data, and technology in selecting their data modernization services partners. Another common theme was that having enough skilled resources to meet aggressive project timelines or to address unique expertise needs can be a challenge. Look for vendors that can provide the delivery scale you need, as well as the flexibility to adjust as project needs change while maintaining continuity and transferring knowledge to your internal teams.
- **Vendor selection.** Use this IDC MarketScape in contract negotiations and as a tool to not only short list vendors for data modernization services bids but also evaluate vendors' proposals and oral presentations. Make sure you understand where these players are truly differentiated and take advantage of their expertise, technical, industry base, or otherwise.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

Accenture

After a thorough evaluation of Accenture's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

Accenture Data & AI is both Accenture's community of practice and the company's human-centered approach to apply deep industry and technical expertise to help clients use AI, analytics, automation, and the data that fuels it to achieve intelligence at scale. Accenture has nine core offerings for data modernization services, which are foundation assessment; migration, modernization, and managed services for data; data architecture services; data security services; data services of GenAI; data monetization and multiparty compute services; data governance as a service; responsible data; and LearnVantage (multimodal data learning services, built on Udacity). Accenture

considers data modernization to be a central component of GenAI-driven reinvention — one of the five key imperatives in which the company suggests clients invest is to understand and develop an AI-enabled, secure, digital core. In June 2023, Accenture announced it would invest \$3 billion over three years to expand its Data & AI practice, spanning assets, industry solutions, ventures, acquisitions, talent, and ecosystem partnerships. As part of the investment plan, Accenture created the AI Navigator for Enterprise platform to codify the company's decades of industry, function, and technical experiences, as well as its proprietary knowledge, into a "GenAI coach" with executable models, algorithms, and tools. Accenture positions the AI Navigator platform as a workbench to assess and understand clients' data foundation readiness, architect and design a future-ready data platform, and enable solution build using prebuilt GenAI-powered assets and accelerators. Also on the investment agenda, Accenture plans to double the size of its Data & AI practice to 80,000 professionals and reorganize its talent around 12 future-ready skill families, which include data engineering, management, and governance; data architecture; and AI infrastructure architecture.

Strengths

IDC considers Accenture's strategies around offerings, delivery model, portfolio, sales, growth, and innovation and R&D as key strengths. Accenture also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to design modern data architecture, provide solutions using preferred technology providers, and deliver across the life cycle of data modernization services.

Challenges

IDC believes Accenture's marketing strategy, though strong overall, could be improved further by addressing a broader range of themes in the company's data modernization services market messaging. Accenture could also benefit from continuing to encourage active investment in AI across the company's data modernization services client base and improving customer perception of its ability to create foundational data architectures for AI adoption.

BCG

After a thorough evaluation of BCG's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

Boston Consulting Group (BCG) combines strategic, functional, and industry expertise; technology expertise; and its technology build and design unit, BCG X, to deliver data modernization services to clients as part of broader business transformation consulting engagements. The firm's approach centers around enabling clients to build a data and digital strategy that identifies and articulates what BCG calls "The Data Trinity": strategic business outcomes and value levers enabled by data use cases, "advantaged" data assets that are self-funded by a creative monetization strategy, and a data and digital platform (DDP) modular technology stack that integrates trusted and reliable data for consumption at scale. BCG's data modernization services offerings across this trinity include: outside-in data value levers, inside-out data strategy, data monetization and ecosystem, data operating model, data governance and evolution for GenAI, GenAI for data management, data risks (privacy and responsible AI), data products and data mesh, data marketplace, master data management, data and cybersecurity, data platform and evolution for GenAI, data architecture and vendors selection, and data platform cost optimization and environment impact reduction. In light of rising interest in AI and GenAI, BCG evolved its data modernization services to incorporate aspects such as data mesh-native support to build data and AI products, new layers for GenAI, xOps capabilities for AI industrialization (e.g., LLMOps, DataOps, MLOps, and DevOps), and support for industry-specific needs (e.g., hardware, software, or ontologies). BCG is doubling its investment in its data modernization services offer and will continue adapting to meet market demands.

Strengths

IDC considers BCG's strategies around offerings, delivery model, client adoption, and employee skills and retention as key strengths. BCG also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to provide industry insights and competency, as well as resources with appropriate and high-quality technical and business skills.

Challenges

IDC believes that BCG's portfolio strategy could be improved by broadening the company's range of offerings across the data modernization services life cycle, such as managed services. BCG could also benefit from deepening the firm's relationships with existing alliance partners in the data modernization space, including investing in platform certifications and gaining partner recognition for its data modernization services practice.

Capgemini

After a thorough evaluation of Capgemini's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

Capgemini's data and AI group portfolio brings together expertise from multiple practices to address client challenges in developing and executing business value-led data strategies. The portfolio includes offerings such as AI and data strategy and governance, AI and data engineering, AI analytics and data science, intelligent process automation, and industry- and function-aligned offerings. Capgemini also uses the data and AI portfolio to enable customers to create transformation strategies that connect digital, data, and AI across three major playing fields: customer-first engagement, intelligent industry, and enterprise management, as well as sustainability. The company leverages a set of accelerators, called Industrialized Data and AI Engineering Acceleration (IDEA by Capgemini), to provide clients with an efficient and modernized data platform on cloud, enabling trusted data as a business asset and innovation with AI at scale. Capgemini is also infusing GenAI capabilities throughout its data and AI portfolio, both to augment the company's delivery of data integration and management services (such as development of business glossaries) and to help clients build GenAI-ready data estates. The company positions Capgemini RAISE as an operational accelerator to deliver on value cases across industries and support industrialization at scale of custom GenAI projects with guardrails to ensure reliable and tangible results at a controlled cost.

Strengths

IDC considers Capgemini's strategies around offerings, client adoption, portfolio, sales, marketing, and go-to-market alliances as key strengths. Capgemini also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to provide technical insights and competency, integrate Capgemini's project team with their internal team, deliver across the life cycle of data modernization services, and address issues around data availability and latency.

Challenges

IDC believes Capgemini's go-to-market strategy, though strong overall, could be improved further by collaboration with a broader spectrum of partners, such as data intelligence software providers, on go-to-market initiatives for data modernization services. Capgemini could also benefit from a broader range of IP monetization strategies.

CGI

After a thorough evaluation of CGI's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

CGI brings together technical, functional, and industry expertise to help global and regional clients solve business problems with AI, data, and analytics. CGI's data modernization services offerings include data and AI road maps, data platform modernization, data integration, and data and AI governance, supported by proprietary frameworks (e.g., CGI Data2Diamonds, CGI Value Creation Framework), accelerators (e.g., CGI GeoData360, CGI Data Transmission 360), and platforms (e.g., CGI PulseAI). Data strategy and interoperability are central to the company's strategy to help clients "innovate through digital transformation." CGI's approach is designed to be technology agnostic, practical, and "rightsized" to clients' needs and objectives and dynamic through metadata-driven automation to accelerate clients' data modernization efforts. CGI applies its "4E" framework (which includes envision, explore, engineer, and expand), enabled by the company's responsible data and AI and delivery life cycle, to support clients across strategy, implementation, and management of data and AI solutions. CGI also pursues an "AI Everywhere" strategy to enhance the data value chain. A global network of CGI Innovation Centers enables the company to provide localized expertise and solution cocreation capabilities to clients globally while leveraging global delivery capabilities as appropriate according to clients' preferences, data region restrictions, data regulations and compliance requirements, business complexity, and data products expertise.

Strengths

IDC considers CGI's breadth of technology alliances and strategies around client adoption and sales and distribution as key strengths. CGI also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to provide resources with appropriate and high-quality technical skills, migrate and rationalize data across legacy and cloud environments, and resolve issues related to customer service.

Challenges

IDC believes CGI's go-to-market strategy could be improved by clearer integration between CGI's and partners' tools in the company's data modernization solution offerings. CGI could also benefit from a broader range of platform and IP monetization strategies and could use a wider variety of marketing channels to promote its data modernization services.

Cognizant

After a thorough evaluation of Cognizant's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Cognizant's AI and analytics practice aims to help clients become AI-native enterprises by addressing data imperatives such as multicloud agility, data quality and accessibility, data governance and security, data management and infrastructure, and data analytics and insights. The company's data modernization offerings include cloud migration, cloud-native platform development, smart operations and continuous monitoring, DataOps, and data marketplace. Cognizant also offers data foundation services for development and maintenance of legacy (noncloud) data ecosystems, as well as data and AI management services to help clients manage their data assets securely, efficiently, and cost effectively. Cognizant's services are underpinned by a portfolio of accelerators and frameworks, many of which are industry specific, aligned to specific data and AI management areas such as master data management, customer data platforms, data quality and governance, and data responsibility and privacy. The company also applies its Value Realization Framework to help clients discover and monitor the business value of data modernization use cases, as well as the Cognizant Data and Intelligence Toolkit (CDIT), a collection of tools and frameworks, many of which leverage AI, GenAI, and automation, to deliver data modernization services. CDIT includes five suites: "The Crosswire" (discovery and assessment), "The Porter" (intelligent migration), "The Weaver" (data integration), "The Controller" (quality and validation), and "The Spectrum" (analytics and optimization).

Strengths

IDC considers Cognizant's strategies around delivery model, client adoption, portfolio, sales, and go-to-market alliances as key strengths. Cognizant also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers have highly regarded the company's ability to provide knowledge transfer and training for nontechnical end users.

Challenges

IDC believes Cognizant's marketing strategy, though strong overall, could be improved further by addressing a broader range of organization levels (including C-suite executives and end users) with the company's marketing messages for data modernization services. Cognizant could also benefit from encouraging more active investment in AI across the company's data modernization services client base.

Deloitte

After a thorough evaluation of Deloitte's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

Deloitte's AI and Data practice combines the firm's business value-led approach with a growing portfolio of repeatable tools, frameworks, and methods to assist clients in achieving sustainable business outcomes through AI and data-driven transformations. The firm's data modernization services span the advise, implement, and operate life cycle, with offerings that include trusted and governed data, modernized data architecture and platforms, data for BI, data for AI/GenAI, and data for innovation and monetization, as well as a range of domain and industry solutions. The firm continues to create and scale assets such as Data as a Service (DaaS), MDM as a Service, Smart Data Management Suite, Deloitte Code Converter (DCC), and Data X-ray to accelerate delivery of data modernization services. Deloitte invests in strategic and innovation-driven partnerships across the data modernization and AI space, enabling the firm to help clients achieve success by combining modern technology capabilities with the firm's industry and functional domain expertise in AI and data. Deloitte also created a unified assets storefront (AI and Data Assets Hub), which infuses GenAI capabilities where feasible to enhance standardization and efficiency, to focus on the development and deployment of industry cloud solutions that leverage data modernization and AI capabilities. Deloitte is investing heavily in AI and data offerings that combine the firm's deep industry knowledge with full stack engineering capabilities, as well as to increase GenAI fluency across its professionals to further enhance its industry-specific solutions.

Strengths

IDC considers Deloitte's strategies around offerings, delivery model, portfolio, growth, and go-to-market alliances as key strengths. Deloitte also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to provide data modernization strategy and target operating model, provide data engineering, deliver across the life cycle of data modernization services, work with partners, optimize ratio of onshore and offshore efforts on an engagement, and resolve issues related to customer service.

Challenges

IDC believes Deloitte's marketing strategy, though strong overall, could be improved further by addressing a broader range of themes and organization levels (including managers and end users) in the company's data modernization services market

messaging. Deloitte could also benefit from using a wider variety of marketing channels to promote its data modernization services.

DXC

After a thorough evaluation of DXC's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

DXC Technology (DXC) positions its data modernization services as part of a broader portfolio of analytics and engineering services that aim to empower clients to run "data engineering and AI platform operations with a culture of design thinking that drives innovation and growth." The company's data and AI portfolio offerings include DXC Enterprise Data and AI Platforms, DXC Data Engineering, DXC IoT and Digital Twin Services, data science and AI, and industry solutions. DXC Enterprise Data and AI Platforms offering spans the life cycle of advisory, platform development, operations, and as-a-service delivery, and focuses on reducing technical complexity and accelerating realization of business value, while leveraging clients' existing technology investments. With DXC Data Engineering, the company helps clients design, develop, and maintain systems and infrastructure for collecting, storing, processing, and analyzing large volumes of data. Underpinning DXC's data modernization services are IP assets such as DXC Analytics and AI Platform and proprietary accelerators such as DXC Automated Data Migration Framework and DXC Data Ingestion Framework, as well as industry- and function-specific accelerators. In May 2024, DXC announced a collaboration with Dell Technologies to create an AI-driven architecture for enterprise intelligence services, built on the Dell Validated Design for Generative AI with NVIDIA for Model Customization.

The assessment of DXC is based on publicly available data and information obtained via desk research, company briefings, field surveys of relevant buyers, and input from DXC for previous assessments on related topics (e.g., AI services).

Strengths

IDC considers DXC's strategies around offerings, delivery model, portfolio, marketing, and go-to-market alliances as key strengths. DXC has also showcased strengths in achieving business outcomes for clients with data modernization services through publicly available case studies across a variety of geographies, industries, and business functions. Customers have highly regarded the company's ability to integrate DXC's project team with their internal team, connect them to third-party innovation resources, and provide customer service (particularly onsite).

Challenges

IDC believes DXC's client adoption strategy could be improved by providing more resources to enable clients' internal data modernization programs, such as training services and support for establishing centers of excellence or similar functions to drive data modernization initiatives. DXC could also benefit from a broader range of strategies to drive growth, such as exploring acquisitions to enhance its data modernization capabilities and pursuing more avenues through which to monetize its IP.

EPAM

After a thorough evaluation of EPAM's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

EPAM's Data, Analytics, and AI practice combines consulting, data expertise, and product design and engineering services with the goal of "empowering smarter business decisions" for clients. The company's data modernization services span from strategy to engineering, focusing on data and AI consulting, data products development, data on cloud, data platform engineering, and AI/ML engineering, with specialized offerings for industry verticals and business functions. EPAM offers advisory services such as data strategy and data product strategy, as well as data and AI enablement services such as Data Factory, AI Factory, and its data migration and modernization framework, migVisor. The company applies its Data Factory Framework to enable enterprise data-driven transformation, through an approach that includes integrated data strategy, data product mindset, technology foundation, and new operating model. EPAM also provides expertise in areas such as responsible AI product design, organizational enablement, and experience transformation through its internal value creation network (VCN). EPAM uses a broad suite of proprietary tools for data modernization, such as migVisor Suite, CodeMie, TDspora, and Document Extraction and Processing System (DEPS). The company plans to incorporate GenAI capabilities across its data modernization workforce and assets (including migVisor Suite) to improve cost efficiency, service quality, and speed to market for data solutions.

Strengths

IDC considers EPAM's strategies around offerings, portfolio, and go-to-market alliances as key strengths. EPAM also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to deliver across the life cycle of data modernization services, provide resources with appropriate and high-quality technical skills, and provide resources with desired certifications in preferred technology platforms.

Challenges

IDC believes EPAM's delivery model strategy could be improved by increasing the share of data modernization services clients that are consuming the company's IP-based tools and assets. EPAM could also benefit from a broader range of IP monetization strategies.

Eviden

After a thorough evaluation of Eviden's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Eviden, part of the Atos Group, provides a broad portfolio of solutions for digital transformation, which includes modernization of data platforms. The company's Data and Analytics practice offers solutions for modern data architecture, data engineering and management, data governance and quality, analytics and insights, and data science. In Eviden's view, data modernization is a strategic shift from a "data informed" to "data driven" and then ideally "data centric" organization, accomplished through incremental data integration and accessibility. The company structures its data modernization services offering to help plan, design, and build cloud-based, scalable data foundation to deliver advanced analytics and GenAI use cases. The offering includes consulting services, core services for building or onboarding a data platform on cloud, cloud infrastructure management, and critical services for data security, data catalog, and DataOps. Eviden uses proprietary assets such as its Data Assessment Framework, Data Modernization Toolkit, Data Operations Toolkit, Unified Data Governance Framework, and BI Modernization Framework, as well as industry-specific solutions to accelerate service delivery.

Strengths

IDC considers Eviden's strategies around offerings, next-generation tools and methodologies, client adoption, and innovation and R&D as key strengths. Eviden also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions.

Challenges

IDC believes Eviden's marketing strategy could be improved by addressing a broader range of themes in the company's data modernization services market messaging and producing more research-driven, CXO-level thought leadership. Eviden could also benefit from more collaboration with a broader spectrum of partners, such as data governance and data intelligence software providers, on go-to-market initiatives for data modernization services.

EXL

After a thorough evaluation of EXL's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

EXL combines domain, data, and AI expertise to deliver better business outcomes, with speed, for clients. EXL's data modernization services approach focuses on delivering data through key technologies, program development, and cloud enablement, with offerings that include data strategy and program governance, data governance, data architecture and modeling, data engineering, technology and data operations, data security and privacy, and content and life-cycle management. Underpinning EXL's service delivery are a variety of proprietary frameworks, tools, and accelerators such as EXL DQLens (data quality), Code Harbor (legacy code conversion and migration), EXL Kogni (data cataloging), MODOS Cloud Automation, and MODOS Data Pipeline, as well as domain-specific solutions such as EXL Smart Platform for Health. The company is also expanding its enablement capabilities for GenAI, including data management, security, and privacy for GenAI application development.

Strengths

IDC considers EXL's strategies around offerings, client adoption, employee skills and retention, and innovation and R&D as key strengths. EXL also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to provide industry insights and competency, deliver innovation that produces results, provide data governance and security, and manage data modernization solution investment costs.

Challenges

IDC believes EXL's go-to-market strategy could be improved by collaboration with a broader spectrum of partners, such as data governance and data intelligence software providers, on go-to-market initiatives for data modernization services. EXL could also benefit from a broader range of sales and distribution strategies.

EY

After a thorough evaluation of EY's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

EY's Data and AI Transformation practice applies expertise in sectors and domains, data and knowledge management, and technology innovations to assist organizations in implementing modern data environments. EY's approach to data modernization has evolved from the firm's 2019 vision of the transformational value of ontologies and semantics to now focusing on creating AI-ready data, which integrates domain knowledge, rich metadata, context, and governance, enhanced by technology capabilities such as data agents, data security and architecture, and data storage and management made relevant to specific sectors and domains. The firm uses its foundational global technology acceleration platform, EY Fabric, to provide a suite of proprietary assets, including platforms such as EY Cloud Data Studio and Intelligent Semantic Engine, sector- and domain-specific solutions such as EY Nexus for Banking and EY DEEP: Digital Energy Enablement Platform, and data modernization life-cycle enablers such as Data Migration Factory and EY Raptor Data Validation. EY has also created AI agents within the firm's EY.ai EYQ ecosystem of GenAI capabilities to enable its practitioners to deliver data modernization services more quickly, assisting with tasks such as synthetic data creation and data cleansing and mapping.

Strengths

IDC considers EY's strategies around offerings, client adoption, portfolio, go-to-market alliances, and innovation and R&D as key strengths. EY also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to integrate EY's project team with their internal team, provide data engineering, and deliver across the life cycle of data modernization services.

Challenges

IDC believes EY's marketing strategy, though strong overall, could be improved further by addressing a broader range of themes and organization levels (including managers and end users) in the company's data modernization services market messaging. EY could also benefit from increasing the share of data modernization services clients that are consuming the company's IP-based tools and assets.

Fractal

After a thorough evaluation of Fractal's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Fractal Analytics (Fractal) is an AI and advanced analytics company offering both services and software products to help clients plan and execute their digital transformation journeys and create business value. The company takes a "design first,

decision backwards" approach that brings together AI, engineering, design, and domain (AEDD) capabilities to build solutions that are more likely to be adopted by end users. Fractal's Cloud and Data Tech practice offers a variety of data modernization services, including unified data strategy, data platform as a product, data as a product (industry-specific semantic data models), biz tech platforms and industry clouds, decision systems, data governance, platform engineering (e.g., InfraOps, Platform Ops, DataOps, BI-Ops, ML/LLMOps, FinOps), and Digital Ops. Fractal uses a variety of proprietary solutions and accelerators to deliver data modernization services, such as Morpheus Migration Workbench, Quark Data Platform, Certifi DQ (data quality and cleansing), StewXAI (augmented data steward), Unified Metadata Catalog, Enterprise Marketplace (democratization), and Argus Unified Observability Platform. Using these accelerators and its AEDD approach, the company composes industry-specific Biz-Tech Platforms and Solutions that enable clients to create connected data and decisions ecosystems.

Strengths

IDC considers Fractal's strategies around offerings, client adoption, and sales and distribution as key strengths. Fractal also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers have highly regarded the company's ability to provide technical insights and competency, integrate Fractal's project team with their internal team, offer flexible pricing models, and resolve problems or issues related to customer service.

Challenges

IDC believes Fractal's portfolio strategy could be improved by broadening the company's range of offerings across the data modernization services life cycle, such as business consulting. Fractal could also benefit from deepening the firm's relationships with existing alliance partners in the data modernization space, including investing in joint solution offerings and gaining partner recognition for its data modernization services practice.

Genpact

After a thorough evaluation of Genpact's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Genpact combines deep industry expertise and investments in data analytics technology solutions to help clients unlock tapped legacy data, capture data from edge to cloud, and ensure that all data is connected and usable wherever it is located. The company offers full-stack capabilities across data engineering, data science, data

visualization, predictive and prescriptive modeling using machine learning and AI technologies, and intelligent automation. The Cloud Data and Analytics practice's data modernization services span the data value chain, including defining data architecture, setting up and managing data orchestration, designing, building and managing data governance and security, setting up and managing data infrastructure, and data automation. Genpact applies proprietary frameworks to assess clients' analytics maturity, design data engagement platforms, and address specific data modernization needs such as data ingestion, data quality, data mapping, job orchestration, metadata, and visualization. Genpact's modular, AI-based digital business platform, Genpact Cora, enables rapid integration, orchestration, and governance of data and technologies to solve specific business challenges for clients. The company leverages a range of accelerators and tools, such as Code Modernizer, GMigrate, GValidate, and GenAssure, as well as third-party tools such as Bladebridge, to speed delivery of data modernization services. Genpact also offers PowerMe, a metadata-driven data observability platform, gained through the acquisition of Enquero in 2021, as well as Genpact Cora Data Foundation Platform, built on Microsoft Azure stack, to provide industry-specific insights.

Strengths

IDC considers Genpact's strategies around offerings and employee skills and retention as key strengths. Customers have highly regarded the company's ability to apply functional- or industry-specific methodologies and assets to solve their issues; create quality, trusted data sets and pipelines for AI model training; and deliver innovation that produces results for them.

Challenges

IDC believes Genpact's delivery model strategy could be improved by increasing the share of data modernization services clients that are consuming the company's IP-based tools and assets. Genpact could also benefit from a broader range of sales and growth strategies.

HCLTech

After a thorough evaluation of HCLTech's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

HCL Technologies (HCLTech) delivers data modernization services primarily through its Data and AI practice, part of the company's digital business services, which helps clients define their visions for data-driven and AI-enabled business transformation, including strategies to achieve these goals. The Data and AI practice organizes its offerings into

three main pillars: "Modernize Data," "Simplify Insights," and "Scale AI." HCLTech's offerings within "Modernize Data" include data estate modernization, intelligent data management, consumable data products, and smart operations, underpinned by infrastructure modernization. HCLTech uses proprietary solutions and frameworks, such as ADvantage Migrate, ADvantage Data Mesh, Gateway Suite (legacy code and database schema conversion), Data Patrol (data governance and quality), Gatekeeper (automated data testing), Meta Wisdom (knowledge graph), Advantage Seiri (data management operations), and AIOps (AI-infused data observability), to accelerate its delivery of data modernization services. The company has also incorporated GenAI capabilities into its data modernization services, such as automation conversion of scripts and semantic models, unstructured data processing, and industry-specific metadata comparisons.

Strengths

IDC considers HCLTech's strategies around offerings, innovation, and go-to-market alliances as key strengths. Customers highly regard the company's ability to provide data modernization strategy and target operating model, migrate and rationalize data across legacy and cloud environments, provide technical insights and competency, and address issues around data availability and latency.

Challenges

IDC believes HCLTech's marketing strategy could be improved by addressing a broader range of themes in the company's data modernization services market messaging. HCLTech could also benefit from providing more resources to enable clients' internal data modernization programs, such as training services.

IBM

After a thorough evaluation of IBM's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

IBM Consulting supports clients throughout the data transformation life cycle, including designing a data strategy, accelerating data delivery and time to value, and supporting data and operations evolution. For 15 years, IBM Consulting has maintained a data strategy capability revolving around identifying clients' business intelligence and reporting, data science, operational, and digital use cases. In December 2023, the company enhanced its data strategy offering to incorporate GenAI use cases, which involves assessing a client's current and future organizational, procedural, and technological capabilities in GenAI and incorporating expanded information and AI governance requirements. IBM Consulting applies its open source architecture,

integrated methods, and Modern Data Accelerator assets to build out data platform capabilities for clients. The company has infused GenAI capabilities into its three core assets, Data Platform Genius, Data Migration Assistant, and Data Product Console, which aim to streamline data architecture and processes, reduce implementation costs, and accelerate the transformation of data environments.

Strengths

IDC considers IBM's strategies around offerings, portfolio, sales, marketing, and innovation and R&D as key strengths. IBM also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to provide appropriate and high-quality technical skills, provide data engineering, and migrate and rationalize data across legacy and cloud environments.

Challenges

IDC believes IBM's go-to-market strategy could be improved by collaboration with a broader spectrum of partners, such as data intelligence and data engineering software providers, on go-to-market initiatives for data modernization services. IBM could also benefit from continuing to encourage active investment in AI across the company's data modernization services client base and improving customer perception of its ability to create foundational data architectures for AI adoption.

Infosys

After a thorough evaluation of Infosys' strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Infosys' applied AI framework guides the company's methodology and services offerings (now under the brand Infosys Topaz) to enable clients to create an AI-first core for delivering solutions that accelerate growth, unlock efficiencies at scale, and build connected ecosystems. One of the key focus areas within the Infosys Topaz offering is to transform a client's data and AI landscape into an "autonomous data and AI estate" that leverages AI across the data and AI engineering life cycle. Infosys' Data, Analytics, and AI practice also helps clients develop efficient, responsible, and fit for future governance solutions through offerings such as responsible by design. Infosys leverages its Cognitive Modernization Suite of assets, including Infosys Consumption Workbench, Infosys Data Wizard, Infosys Information Grid, Infosys Analytics Workbench, and Infosys Data Marketplace, to deliver data modernization services in an efficient and scalable manner. The company also incorporates GenAI capabilities into its data modernization services through innovations such as Automated Data

Migration, Zero Data Engineering, Enriched Metadata Extraction, Automated Code Conversion, and Auto Data Mapping. Infosys further supports clients in pursuing data modernization initiatives with consulting frameworks such as Infosys Value Management and tools such as Data Estate Analyzer.

Strengths

IDC considers Infosys' strategies around offerings, client adoption, portfolio, sales and distribution, and innovation as key strengths. Infosys also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to provide data engineering, create high-quality and trusted data value chains for AI and GenAI, and provide customer service (particularly onsite).

Challenges

IDC believes Infosys' growth strategy, though strong overall, could be improved further by a broader range of IP monetization strategies. Infosys could also benefit from a more cohesive strategy around platform-based delivery of data modernization services.

KPMG

After a thorough evaluation of KPMG's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

KPMG uses its proprietary frameworks and assets, global team of professionals, and network of alliance partners to enable clients to establish data as a strategic asset. KPMG's strategy for data modernization services starts with data migration and modernization to form the data foundation for adoption of AI-powered capabilities, with a bridge to the creation of autonomous enterprises with GenAI. The firm has developed and refined its data modernization services offerings using the KPMG Data Management Framework, which includes considerations for people, technology, and process necessary to advance a comprehensive data management ecosystem; the KPMG Modern Data Platform Reference Architecture and Service Catalog, which is composed of blueprints and code assets; and a curated, cloud-native data and analytics deployable accelerator portfolio that the firm uses to structure its solutions for expedited capability enablement. The KPMG discovery process ensures that solutions are technologically advanced, high performance, metadata rich, and aligned with the client's business objectives and industry needs. KPMG's advisory offerings for data modernization span five categories: Data, Analytics, and AI Strategy/Value Chain; Data for Business Insights; Powered Data Management; Data Foundation for AI; and Trusted Data. The firm has also developed multiple proprietary platforms to deliver data

modernization services, including KPMG Modern Data Platform, KPMG Ignite, KPMG Signals utility, KPMG Sofy Suite, KPMG Clara, and KPMG One Data Platform. KPMG coordinates its worldwide data modernization services approach and delivery practices through its global KPMG Lighthouse network of centers of excellence and innovation hubs.

Strengths

IDC considers KPMG's strategies around offerings, delivery model, client adoption, portfolio, marketing, growth, and employee skills and retention as key strengths. KPMG also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to craft proposals that address their unique needs around data modernization deployment, integrate KPMG's project team with their internal teams, and resolve issues related to customer service.

Challenges

IDC believes KPMG's go-to-market strategy, though strong overall, could be improved further by collaboration with a broader spectrum of partners, such as data governance software providers, on go-to-market initiatives for data modernization services. KPMG could also benefit from more investment in platform certifications across its data modernization services practice.

Kyndryl

After a thorough evaluation of Kyndryl's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Since spinning off from IBM in November 2021, Kyndryl brings its more than 30 years of experience designing, building, managing, and modernizing mission-critical technology systems, along with Kyndryl Consult advisory and implementation capabilities and Kyndryl Bridge open integration platform, to support clients with data modernization initiatives. The company's Data and AI services portfolio includes data foundation services offerings spanning advisory, build, implementation, and managed services across data strategy, database, data platform, data governance, privacy and security, data engineering and integration, and data operations. Kyndryl sees GenAI as "door opener" for its data foundation services (and vice versa) and has aligned its data and AI services with technology partners such as Microsoft, SAP, AWS, Google, and Oracle to help its clients navigate transformation across infrastructure, data, applications, and GenAI while leveraging their existing technology investments. Kyndryl also partners

with providers such as NVIDIA, Dell, Lenovo, and Teradata to help organizations modernize their data platforms and deploy private AI solutions on premises to meet compliance and regulatory requirements. The company has also developed data and AI services tailored for mainframe and environment, social, and governance (ESG) concerns. Kyndryl Data and AI Console underpins the company's delivery of data modernization services, providing customers with an integrated view of their data environments across pillars including data platform observability, data pipeline observability, data quality and lineage, and data discovery. Built from open source technologies and leveraging Kyndryl's proprietary AI models and automation workflows, Kyndryl Data & AI Console is designed to integrate with customers' existing data management tools and partner solutions through APIs and uses AI and automation to deliver predictive and proactive DataOps.

Strengths

IDC considers Kyndryl's strategies around offerings, go-to-market alliances, delivery model, and sales and distribution as key strengths. Kyndryl also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions.

Challenges

IDC believes Kyndryl's portfolio strategy could be improved by broadening the company's range of offerings across the data modernization services life cycle, such as training services. Kyndryl could also benefit from pursuing a broader range of IP monetization strategies and addressing more business roles in its marketing messaging for data modernization services.

LTIMindtree

After a thorough evaluation of LTIMindtree's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

LTIMindtree began operating in November 2022, following the merger of two technology consulting and digital solutions companies within Larsen & Toubro Group, Larsen & Toubro Infotech (LTI) and Mindtree. With the now harmonized entities and practices, LTIMindtree uses its combination of expertise in engineering and experience to drive innovation-led value realization and products-led monetization. The company positions its Data and AI practice to help clients modernize their technology ecosystems, optimize DataOps, amplify business outcomes, and make trusted and AI-driven decisions. LTIMindtree organizes its offerings across the data modernization value chain into three pillars: "Unify Data," which focuses on speed and certainty in

modernization of the data estate with a GenAI-infused, automation-first approach; "Simplify Platforms," which aims to reduce the computing distance between data and AI with efficiency and scale; and "Amplify Outcomes," which centers around adoption and value creation through industry-specific data products. Underpinning each of these pillars are LTIMindtree's IPs, including accelerators for migration to partner products such as Snowflake (PolarSled), Databricks (Alcazar), Microsoft Azure (Sunshine), Google Cloud Platform (Eureka), and Amazon Web Services (Scarlet), as well as assets that address specific areas of data modernization, including Observability360, FinOps, Privacy SmartHub, and iMaster (MDM). LTIMindtree also offers its own data modernization platform, called Fosfor Decision Cloud, which comprises three designer modules: Data Designer (Spectra), Insight Designer (Refract), and Decision Designer (Lumin) and integrates with several partner products.

Strengths

IDC considers LTIMindtree's strategies around offerings, sales and distribution, and go-to-market alliances as key strengths. LTIMindtree also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to provide data engineering, offer flexible pricing models, optimize ratio of onshore and offshore efforts on an engagement, and address issues around data availability and latency.

Challenges

IDC believes LTIMindtree's growth strategy, though strong overall, could be improved further by exploring strategic acquisitions to enhance data modernization capabilities. LTIMindtree could also benefit from providing more resources to enable clients' internal data modernization programs, such as training services and support for establishing centers of excellence or similar functions to drive data modernization initiatives within clients' organizations.

Mphasis

After a thorough evaluation of Mphasis' strategies and capabilities, IDC has positioned the company in the Contenders category in this 2024 IDC MarketScape for worldwide data modernization services.

Mphasis organizes its technology competencies for digital transformation into eight "tribes," which work with the company's vertical industry teams to design and deliver solutions for clients. The Data Tribe houses Mphasis' data modernization services offerings, which span three broad categories: strategy, planning, migration, and integration; preparation and organization; and advanced analytics and AI/ML/GenAI.

Mphasis applies its Xenon Data Modernization Methodology to deliver its services through a defined, three-phase program execution model for migration of on-premises enterprise data warehouses and legacy ETL workloads to public cloud. The Xenon methodology takes an automation-first approach, leveraging Mphasis' proprietary cloud migration toolkit and testing tools, as well as partner technologies. Mphasis Data Tribe also provides data management-related services in support of Mphasis.ai, a special-purpose business unit the company launched in June 2023 to provide advisory and development services and solutions for AI and GenAI.

Note that Mphasis is majority owned by Blackstone, which also wholly owns IDG/IDC.

Strengths

IDC considers Mphasis' strategies around offerings, growth, and go-to-market alliances as key strengths. Mphasis also showcased investment in a broad set of technology skill sets to support data modernization services engagements, as well as a variety of examples of AI and automation tools used to accelerate delivery across the data modernization services life cycle.

Challenges

IDC believes Mphasis' portfolio strategy could be improved by increasing the company's range of offerings across the data modernization services life cycle, such as business consulting and training services. Mphasis could also benefit from a broader range of client adoption, sales, and marketing strategies.

Persistent Systems

After a thorough evaluation of Persistent Systems' strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Persistent Systems positions its Data and Analytics practice to serve clients, including companies whose business is data, across decision sciences, monetization, and modernization. The company's data modernization services offerings span the life cycle of assessment and planning (data strategy and consulting, data ecosystem maturity assessment), platform and enablement (enterprise data management, data integration, data and ETL migrations), operation (data governance, data lineage, DataOps), and optimization (intelligent data management, data and integration operations). Powering the company's delivery of data modernization services, in addition to its services for BI and GenAI, are proprietary accelerators such as Integration Ops in a Box and Magnify (observability solutions), as well as Persistent iAURA, a suite of AI-powered solutions that are built to be compatible with technologies from partners such as Snowflake, Databricks, and the hyperscalers. Persistent organizes iAURA into four sets of services:

iAURA Platforms (includes Persistent Data Foundry), iAURA DataOps (includes data quality, data reconciliation, and data freshness), iAURA Migrate (includes data warehouse migration and ETL migration), and iAURA Insights (includes data insights and API enablement).

Strengths

IDC considers Persistent Systems' strategies around offerings, sales and distribution, go-to-market alliances, innovation and R&D, and employee skills and retention as key strengths. Persistent Systems also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to deliver across the life cycle of data modernization services, provide data engineering, provide solutions using preferred technology providers, and provide resources with appropriate and high-quality technology skills.

Challenges

IDC believes Persistent Systems' portfolio strategy could be improved by increasing the company's range of offerings across the data modernization services life cycle, such as business consulting and training services. Persistent Systems could also benefit from addressing a broader range of themes in its data modernization services market messaging and using a wider variety of marketing channels to promote its data modernization services.

Publicis Sapiient

After a thorough evaluation of Publicis Sapiient's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

Publicis Sapiient is the digital business transformation arm of Publicis Groupe, providing a range of capabilities under the acronym "SPEED" (strategy, product, experience, engineering, and data and AI). Collaborating with other Publicis companies in client engagements, including data product specialist Epsilon and the Publicis Groupe's creative and media networks, Publicis Sapiient brings expertise across digital media; marketing, advertising, and commerce technology; and customer data to enable not only data modernization but also data monetization by unlocking new sources of revenue for its clients. Publicis Sapiient's data modernization services offerings include data engineering, data analytics, AI and data solutions, and IP assets, such as PSBodhi, Fluid, RMN Accelerator, and CDP Quickstart, developed through the PS InnerSource program. PS InnerSource drives continuous innovation and collaboration around Publicis Sapiient's internal tools, components, and full software packages. Combining

these services, solutions, and IP assets enables Publicis Sapient to accelerate delivery of data modernization services. Publicis Sapient also incorporates GenAI capabilities from cloud and LLM partners into accelerators such as PSBodhi, RMN Accelerator, and CDP QuickStart.

Strengths

IDC considers Publicis Sapient's strategies around offerings, client adoption, portfolio, marketing, and employee skills and retention as key strengths. Publicis Sapient also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of industries and business functions. Customers highly regard the company's ability to design modern data architecture, provide solutions using preferred technology providers, deliver innovation that produces results, and provide resources with appropriate and high-quality technology and business skills.

Challenges

IDC believes Publicis Sapient's go-to-market strategy, though strong overall, could be improved further by collaboration with a broader spectrum of partners, such as data governance software providers, on go-to-market initiatives for data modernization services. Publicis Sapient could also benefit from a more cohesive strategy for platform-based delivery of data modernization services.

PwC

After a thorough evaluation of PwC's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

PwC's Data, Analytics, and AI practice combines deep industry knowledge and technical expertise to enable clients to reimagine their data transformations and build modernized data platform solutions. The firm's data modernization services stack from engineering and execution services such as data migration to cloud data services, to business function-level services such as finance transformation, to corporate strategic outcomes such as enterprise strategy and value and "fit for growth." PwC's approach to data modernization is closely linked to the company's industry cloud and ERP transformation solutions, positioning the firm to create sector-optimized data platform templates and prefabricated data pipelines for common business applications and data models. The firm uses its PwC Insights Platform and growing portfolio of products, solutions, frameworks, accelerators, and data sets, as well as technologies from its partner ecosystem, to deliver data modernization services. PwC also augmented its

capabilities for creating actionable data strategies that drive CEO agendas with the acquisition of data management and analytics consulting firm, Sagece, in late 2022.

Strengths

IDC considers PwC's strategies around offerings, portfolio, client adoption, growth, and employee skills and retention as key strengths. PwC also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to design modern data architectures, migrate and rationalize data across legacy and cloud environments, provide a platform for data modernization services, provide solutions using preferred technology providers, and resolve issues related to customer service.

Challenges

IDC believes PwC's innovation and go-to-market alliances strategies could be improved by more collaboration at an R&D level with technology partners around data modernization solutions. PwC could also benefit from addressing a broader range of themes in its data modernization services market messaging.

Quantiphi

After a thorough evaluation of Quantiphi's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Quantiphi's AI-first digital engineering services background, portfolio of repeatable IP and accelerators, and partnerships with major cloud providers, such as Google and AWS, enable the company to deliver infrastructure and data solutions for clients. The company's core data modernization services offering is cloud data platform modernization, which includes cloud foundation setup, migration of legacy workloads to modern cloud platforms, and setting up business intelligence and analytics layers; master data management; data governance; and data quality frameworks. Quantiphi also offers advisory workshops, change management, and post-production managed services for DataOps and system support. Quantiphi uses an industrialized, IP-driven approach to deliver data modernization solutions, which include industry-specific data model and consumption frameworks and GenAI-based automation tools such as Code Xcelerate, QodeQure, and QlosureEase. Quantiphi also brings these tools together into a GenAI-enabled data modernization suite called Codeaira, which the company positions to accelerate data migrations to Google Cloud Platform.

Strengths

IDC considers Quantiphi's strategies around offerings, client adoption, and sales and distribution as key strengths. Quantiphi also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers have highly regarded the company's ability to resolve problems or issues related to customer service, provide technical insights and competency, and provide resources with desired certifications in their preferred technology platforms.

Challenges

IDC believes Quantiphi's marketing strategy could be improved by addressing a broader range of themes in the company's data modernization services market messaging. Quantiphi could also benefit from producing more research-driven, CXO-level thought leadership and increasing visibility of the company's customer success stories for data modernization services.

TCS

After a thorough evaluation of TCS' strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

TCS recently established an AI.Cloud unit that brings together the company's cloud, AI, and data services, enabling better alignment of data and analytics strategies with the appropriate infrastructures to host solutions (whether on cloud, on premises, or hybrid), as well as the realization of visions for AI and GenAI. The company's approach for modernizing the data value chain involves data strategy for AI, reimagining the data fabric for AI, building adequate governance for data, reimagining data preparation for AI solutions, and understanding data consumption patterns. To support this approach, TCS' Data and Analytics practice offers a variety of proprietary frameworks, methodologies, and platforms, including TCS Datom (data and analytics target operating model), TCS Daezmo (data and analytics estate modernization), and TCS Dexam (data exchange and marketplace). Each of these offerings is designed to help clients create data foundations for AI solutions, as well as to leverage AI and GenAI for data modernization and management. For example, within TCS Daezmo are a variety of accelerators that use AI to fast-track cloud adoption, such as TCS BITS (GenAI-enabled auto query generator for data warehouse migration testing) and Data Q'rar (auto-generation of data quality rules). The company uses these proprietary assets, along with technologies from cloud and data management partners, to build modern data platforms for clients.

Strengths

IDC considers TCS' strategies around offerings, delivery model, client adoption, go-to-market alliances, and employee skills and retention as key strengths. TCS also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to integrate TCS' project team with their internal team, design modern data architecture, migrate and rationalize data across legacy and cloud environments, provide a platform for data modernization services, work with partners, optimize the ratio of onshore and offshore efforts on an engagement, and manage staff turnover.

Challenges

IDC believes TCS' portfolio strategy, though strong overall, could be improved further by increasing the company's range of offerings across the data modernization services life cycle, such as training services. TCS could also benefit from a broader range of IP monetization strategies and exploring strategic acquisitions to drive growth in data modernization services.

Tech Mahindra

After a thorough evaluation of Tech Mahindra's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2024 IDC MarketScape for worldwide data modernization services.

Tech Mahindra has strategically restructured its organization to enhance its Next-Gen Services (NGS) offerings, which encompass data and AI, under a comprehensive "ideate-to-deliver framework." This initiative is designed to leverage cutting-edge technologies, with a particular focus on GenAI and tailored industry solutions. The company's data modernization services span the value chain from data to insights, with offerings that include data and AI consulting, operations, management, and governance, as well as solutions such as data platform modernization on cloud, data mesh and product marketplace, data "APIfication," MLOps, LLMOps, and development of foundational LLMs. Central to these offerings is the D.A.H.L.I.A portfolio, which integrates tools, frameworks, and platforms across data consulting, ingestion, transformation, migration, governance, and quality. By combining D.A.H.L.I.A with its TechM amplifAI and Cloud BlazeTech suites, Tech Mahindra aims to deliver a unified platform for data, AI, and cloud transformations. The company partners with hyperscalers and other data cloud providers to develop industry cloud solutions, and there is continuous collaboration across multiple internal teams to drive development of industry-specific solutions. Tech Mahindra enhances this approach to address both horizontal and industry-specific needs with data models and KPIs for 13 industries and business functions made available through the iDecisions portfolio. In addition to

developing frameworks and solutions for areas such as data mesh, products, and federated governance, Tech Mahindra has also developed a modern data reference architecture that aims to support future data modernization needs in the AI-first world. The company also integrates AI and GenAI capabilities across the data engineering life cycle.

Strengths

IDC considers Tech Mahindra's strategies around offerings, delivery model, client adoption, go-to-market alliances, and employee skills and retention as key strengths. Tech Mahindra also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies and industries. Customers highly regard the company's ability to provide ROI models and cost benefit analyses to support the business case for data modernization, manage key stakeholders, showcase thought leadership related to data modernization issues, and work with partners.

Challenges

IDC believes Tech Mahindra's marketing strategy could be improved by producing more CXO-based thought leadership, increasing visibility of the company's customer success stories, and addressing a broader range of themes in its marketing messaging for data modernization services. Tech Mahindra could also benefit from a broader range of IP monetization strategies and exploring strategic acquisitions to drive growth in data modernization services.

Wipro

After a thorough evaluation of Wipro's strategies and capabilities, IDC has positioned the company in the Major Players category in this 2024 IDC MarketScape for worldwide data modernization services.

Wipro's Data, Analytics, and AI practice combines industry expertise, proprietary IP and accelerators, and strategic partnerships to provide data modernization services. The company's approach is to help clients adopt modern data platforms and composable data mesh architectures that enable creation of industry-centric business solutions, with responsible data governance at the core. Wipro's integrated Data and AI advisory service includes offerings for data and AI strategy, data transformation, data and AI governance, business insights, and industry business solutions. The company uses its MetroMapAI framework to help clients reimagine their data strategies and landscapes to be GenAI ready. Wipro offers a suite of in-house proprietary IP and accelerators, including Wipro Data Intelligence Suite (WDIS), covering three phases of the data modernization life cycle: STRATO (strategize), ALTO (realize), and CIRRO (operationalize). The accelerators within WDIS use AI and GenAI to drive automation in discovery and assessment, migration, monitoring, and optimization. The company also offers Wipro

Enterprise GenAI (WeGA) Studio that covers GenAI data engineering, model development and user experience with security measures, domain guardrails, and transparency frameworks incorporated in it. Wipro positions its industry business solutions, which are designed at the convergence of domain, process, and data and AI technology, in close collaboration with the company's strategic partners, as a differentiator.

Strengths

IDC considers Wipro's strategies around offerings, portfolio, go-to-market alliances, and sales and distribution as key strengths. Wipro also showcased strengths in achieving business outcomes for clients with data modernization services through case studies across a variety of geographies, industries, and business functions. Customers highly regard the company's ability to achieve their desired business benefits from data modernization services, provide solutions using preferred technology providers, provide data engineering, provide resources with appropriate and high-quality technical skills, and optimize the ratio of onshore and offshore efforts on an engagement.

Challenges

IDC believes Wipro's marketing strategy, though strong overall, could be improved further by addressing a broader range of themes and organization levels (including end users) in the company's data modernization services market messaging. Wipro could also benefit from exploring strategic acquisitions to drive growth in data modernization services.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings,

customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

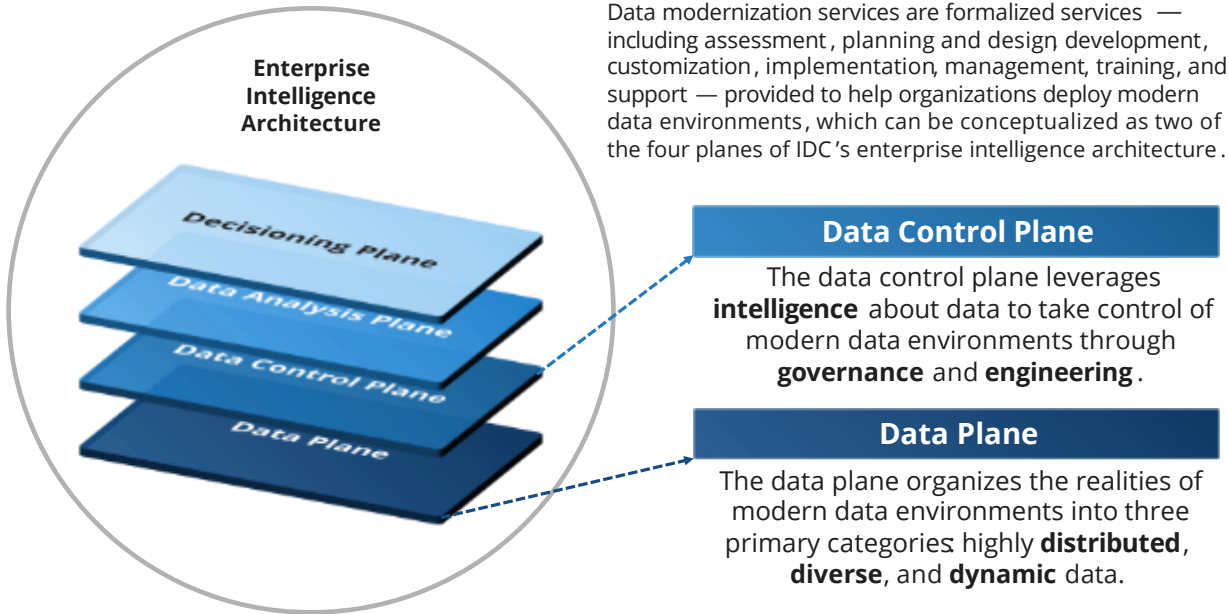
Market Definition

IDC defines data modernization services as formalized services — including assessment, planning and design, development, customization, implementation, management, training, and support — provided to help organizations deploy modern data environments.

IDC conceptualizes the enterprise intelligence architecture as having four planes: the data plane, the data control plane, the data analysis plane, and the decisioning plane. For more information, see *Four Planes of Enterprise Intelligence Architecture: A Conceptual View into the Data Plane, Data Control Plane, Data Analysis Plane, and Decisioning Plane* (IDC #US50793023, June 2023). This assessment focuses on services around two of the four planes of the enterprise intelligence architecture (see Figure 2).

FIGURE 2

Data Modernization Services



Source: IDC, 2024

Detailed definitions of the data management software tools and platforms that are relevant for Data Modernization Services engagements are available in *IDC's Worldwide Software Taxonomy, 2024* (IDC #US52000924, April 2024). This assessment does not cover services related to deployment of BI/analytics, AI, or intelligent automation software.

Customer Perceptions of Data Modernization Services Vendors

A significant and unique component of this evaluation is the inclusion of the perceptions of data modernization services buyers of both the key characteristics and the capabilities of the vendors evaluated. The buyers participating in IDC's *Data Modernization Services Buyer Perception Survey* have partnered with at least one of the participating vendors directly on a data modernization services engagement within their company. The survey findings highlight key areas where buyers expect data modernization services providers to showcase a range of capabilities. The buyers consider these capabilities a must-have for data modernization services to be able to fulfill the requirements of many business and IT issues that challenge the buyers.

Figure 3 illustrates the order of factors important for a successful data modernization services engagement for the data modernization services customers surveyed in 2024. Survey findings suggest that the ability to achieve desired business outcomes by the

consulting and delivery teams working on a data modernization services engagement is the most critical factor for the successful completion of the engagement. Customers also indicated a vendor's ability to provide security, privacy, governance, and regulatory compliance; provide quality skills in and knowledge of data modernization; provide availability of timely data and insight for decision-making; and provide technical insights and competency to be among the most critical attributes for an engagement's success.

FIGURE 3

Top 10 Factors for Successful Data Modernization Services Engagements, 2024

Q. For a data modernization services engagement to be successful, please indicate the importance of each of the following characteristics.



n = 69

Note: Mean scores are based on a scale of 1-5, where 1 is highly detrimental to success and 5 is essential to success.

Source: IDC's Data Modernization Services Buyer Perception Survey, 2024

Strategies and Capabilities Criteria

Tables 1 and 2 show the strategy and capability measures for success, respectively.

TABLE 1**Key Strategy Measures for Success: Worldwide Data Modernization Services**

Strategies Criteria	Definition	Weight (%)
Functionality or offering strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by offerings that enable clients to deal with increasingly distributed, diverse, and dynamic data requirements. ▪ Excellence is marked by offerings that enable clients to take control of their data through intelligence, governance, and engineering. 	10.00
Delivery model strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by plans to deliver data modernization services at scale utilizing more advanced and efficient tools and methodologies. ▪ Excellence is marked by a cohesive strategy for platform-based delivery of data modernization services. 	10.00
Client adoption strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by methodologies and tools to help clients justify expenditures for data modernization initiatives. ▪ Excellence is marked by activities to engage and align stakeholders to drive data modernization solution adoption. ▪ Excellence is marked by activities to enable clients' internal data modernization programs. 	14.00
Portfolio strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by a portfolio spanning the entire life cycle of data modernization services. ▪ Excellence is marked by activities to deliver new or additional services to support clients' data modernization initiatives. 	7.00
Sales/distribution strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by plans to improve direct sales efforts. ▪ Excellence is marked by plans to cater to customer needs at different levels of data maturity and preferences for different contracting models. 	8.00
Marketing strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by a well-articulated plan to market data modernization services capabilities to key stakeholders. ▪ Excellence is marked by depth and breadth of marketing messages addressing key data modernization issues. 	8.00
Other go-to-market strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by plans to improve sales channels using the technology partner ecosystem. ▪ Excellence is marked by plans to improve depth of relationships within the partner ecosystem. 	10.00
Growth strategy	<ul style="list-style-type: none"> ▪ Excellence is marked by strategic plans for both organic and inorganic growth and ones that align well with data modernization trends in the next one to three years. ▪ Excellence is marked by superior planning for developing and monetizing proprietary tools, platforms, and data products. 	10.00

TABLE 1**Key Strategy Measures for Success: Worldwide Data Modernization Services**

Strategies Criteria	Definition	Weight (%)
Innovation/R&D strategy	<ul style="list-style-type: none"> Excellence is marked by plans for attaining or retaining functional superiority over competition by improving innovation in data modernization services delivery methodologies and tools. 	6.00
Employee strategy	<ul style="list-style-type: none"> Excellence is marked by the breadth of technology skills vendor has in its data modernization services practice. Excellence is marked by the breadth of business skills vendor has in its data modernization services practice. Excellence is marked by solid plans for hiring and retaining top-performing employees. 	17.00
Total		100.00

Source: IDC, 2024

TABLE 2**Key Capability Measures for Success: Worldwide Data Modernization Services**

Capabilities Criteria	Definition	Weight (%)
Functionality/ offering delivered	<ul style="list-style-type: none"> Excellence is measured based on analyst evaluation of the breadth of current data modernization services offerings. Excellence is measured based on customer reference perception of ability to create impactful data modernization solutions. Excellence is measured based on customer reference perception of ability to execute data modernization strategies. 	14.00
Delivery model appropriateness and execution	<ul style="list-style-type: none"> Excellence is measured based on analyst evaluation of the vendor's level of IP-based delivery. Excellence is measured based on analyst evaluation of the vendor's level of AI-enabled delivery automation. Excellence is measured based on customer reference perception of delivery methodologies, tools, and teams. 	8.00

TABLE 2**Key Capability Measures for Success: Worldwide Data Modernization Services**

Capabilities Criteria	Definition	Weight (%)
Cost competitiveness	<ul style="list-style-type: none"> ▪ Excellence is measured based on analyst evaluation of the vendor's ability to achieve measurable business outcomes for clients with data modernization services. ▪ Excellence is measured based on customer reference perception of ability to deliver an appropriate and sustainable business outcome for the client. ▪ Excellence is measured based on customer reference perception of ability to enable clients' internal data modernization programs. 	16.00
Portfolio benefits delivered	<ul style="list-style-type: none"> ▪ Excellence is measured based on analyst evaluation of the vendor's ability to enable foundational data architecture for AI adoption. ▪ Excellence is measured based on customer reference perception of vendor's ability to deliver across the data modernization services life cycle. ▪ Excellence is measured based on customer reference perception of vendor's ability to enable foundational data architecture for AI adoption. 	6.00
Pricing model options and alignment	<ul style="list-style-type: none"> ▪ Excellence is measured based on analyst evaluation of the types of pricing models offered to clients. ▪ Excellence is measured based on perception of capabilities to offer flexible pricing models and optimize the ratio of onshore and offshore delivery. 	6.00
Sales/distribution structure and capabilities	<ul style="list-style-type: none"> ▪ Excellence is measured based on analyst evaluation of the size of the vendor's team of sales professionals dedicated to selling data modernization services. ▪ Excellence is measured based on analyst evaluation of the experience level of the vendor's team of sales professionals dedicated to selling data modernization services. ▪ Excellence is measured based on perception of capabilities to craft solutions and work with partners during the sales process. 	7.00
Marketing	<ul style="list-style-type: none"> ▪ Excellence is measured based on analyst evaluation of the various marketing channels used related to data modernization services. ▪ Excellence is measured based on perception of capabilities to communicate the value of services, solutions, delivery methodologies, and tools for data modernization. 	6.00

TABLE 2**Key Capability Measures for Success: Worldwide Data Modernization Services**

Capabilities Criteria	Definition	Weight (%)
Customer service delivery	<ul style="list-style-type: none"> Excellence is measured based on analyst evaluation of the vendor's ability to retain customers for additional data modernization projects. Excellence is measured based on analyst evaluation of the vendor's ability to retain customers for additional data modernization life-cycle services. Excellence is measured based on perception of capabilities to deploy local resources where appropriate to resolve problems and issues. 	6.00
Growth strategy execution	<ul style="list-style-type: none"> Excellence is measured based on analyst evaluation of revenue growth rates for data modernization services. Essential to a services vendor's growth is its ability to develop "referenceable clients." Clients that strongly believe the vendor will represent their best interests are most often referred. 	10.00
Innovation/R&D pace and productivity	<ul style="list-style-type: none"> Excellence is measured based on analyst evaluation of the breadth, depth, and impact of data modernization services innovation activity. Excellence is measured based on perception of capabilities to transfer innovation to clients via innovative service delivery, thought leadership, and connection to third-party innovation resources. 	9.00
Employee management	<ul style="list-style-type: none"> Excellence is measured based on analyst evaluation of the size of the vendor's team of professionals dedicated to delivering data modernization services. Excellence is measured based on analyst evaluation of the certifications held by the vendor's team of professionals dedicated to delivering data modernization services. Excellence is measured based on perception of the quality of resources provided for data modernization projects. 	12.00
Total		100.00

Source: IDC, 2024

LEARN MORE**Related Research**

- Worldwide Enterprise Intelligence Services Forecast, 2024–2028 (IDC #US51423624, July 2024)

- *The Professional Services Opportunity in Enterprise Intelligence Architecture* (IDC #US50755424, June 2024)
- *Data Management Services Findings from Enterprise Intelligence Services Survey, 2023* (IDC #US50755224, January 2024)
- *IDC FutureScape: Worldwide Services 2024 Predictions* (IDC #US51284223, October 2023)
- *IDC FutureScape: Worldwide Future of Enterprise Intelligence 2024 Predictions* (IDC #US51293423, October 2023)
- *Market Analysis Perspective: Worldwide Enterprise Intelligence Services, 2023* (IDC #US50081723, September 2023)
- *IDC Market Glance: Enterprise Intelligence Services, 3Q23* (IDC #US50754823, August 2023)
- *Four Planes of Enterprise Intelligence Architecture: A Conceptual View into the Data Plane, Data Control Plane, Data Analysis Plane, and Decisioning Plane* (IDC #US50793023, June 2023)

Synopsis

This IDC study represents a vendor assessment of the data modernization services market through the IDC MarketScape model. This assessment discusses both quantitative and qualitative characteristics that explain success in the data modernization services market. This IDC MarketScape covers a variety of vendors participating in the data modernization services space. The evaluation is based on a comprehensive and rigorous framework that assesses vendors relative to the criteria and to one another and highlights the factors expected to be the most influential for success in the market in both the short term and the long term.

"Whether driven by AI adoption or not, data modernization services are a critical component of organizations' strategies to become more efficient, agile, and growth-oriented businesses," says Jennifer Hamel, senior research director, Enterprise Intelligence Services at IDC. "This study spotlights 27 vendors that have established themselves as trusted partners for navigating the complexities of data modernization and continue to expand and evolve their portfolios to meet organizations' future needs across the enterprise intelligence architecture."

ABOUT IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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