Magic Quadrant for Data and Analytics Service Providers

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Initiatives: Data and Analytics Programs and Practices; IT Services and Solutions

Data and analytics leaders need help to reengineer data-driven decision making. This Magic Quadrant and associated Critical Capabilities support them with the evaluation of 18 external providers of consulting, system integration and managed services.

This Magic Quadrant is related to other research:

View All Magic Quadrants and Critical Capabilities

Market Definition/Description

Gartner defines the market for data and analytics (D&A) services as consulting and system integration (C&SI) and managed services. These services manage data for all uses (operational and analytical), and analyze data to drive business processes and improve business outcomes through more effective decision making.

The core capabilities for vendor solutions in the D&A services market include:

- D&A strategy and operating model design
- Data management
- Analytics and business intelligence (ABI)
- Data science and machine learning
- D&A governance
- Program management
- Enterprise metadata

Definitions for each of the services are as follows:

- Consulting and system integration These services include discrete project-based services that have finite start and end dates with specific deliverables. C&SI may include one or more of the following: strategy, business and IT consulting; as well as many variations of design, configuration, integration and deployment.
- Managed services These services include ongoing management and operational services that are structured as an ongoing multiyear service defined and governed by SLAs.

Definitions for each of the core capabilities are as follows:

- D&A strategy is an overall approach to how an organization expects to achieve its stated business vision through the strategic design and deployment of D&A initiatives.
- Data management consists of the practices, architectural techniques and tools to describe, organize, integrate, share, govern and implement data.
- "ABI" is an umbrella term (encompassing diagnostic, descriptive, predictive and prescriptive analytics) that includes the applications, infrastructure and tools, augmentation, automation, and best practices that enable access to and context-enriched analysis of data to improve and optimize decisions and performance.
- Data science and machine learning (DSML), or artificial intelligence (AI), applies advanced analysis and logic-based techniques. It includes machine learning (ML), augmentation, model management, data exploration and platform management to interpret events, support and automate decisions, and take actions.
- D&A governance is the specification of decision rights and an accountability framework to ensure the appropriate behavior in the valuation, creation, consumption and control of data and analytics.
- D&A program management offers a mechanism for prioritizing projects and allocating resources within D&A initiatives. It includes the use of agile methods and XOps (data, ML, model and platform ops for AI) approaches that build, deploy and support D&A, as well as asset-based services.

Enterprise metadata management is the business discipline for managing the metadata about the information assets of the organization. Metadata is information that describes various facets of an information asset to improve its usability throughout its life cycle.

The D&A services market remains highly fragmented. There are tens of thousands of system integrators (SIs), consultancies and other service providers that offer D&A services and solutions. This Magic Quadrant assesses 18 leading providers in this space.

Gartner's selection is based on specific inclusion criteria, support for core capabilities, providers' ability to scale D&A for their clients, and worldwide presence. We evaluated these full-service providers for their strategy, implementation and managed service offerings over a diverse range of D&A core capabilities. D&A leaders can use this Magic Quadrant and associated Critical Capabilities to identify and evaluate providers for their respective organizations.

For each provider, we have identified strengths and cautions; some providers may be more suitable for certain types of engagements, clients and industries than others. This also means that, for example, a provider outside the Leaders quadrant can be the best choice for a particular organization or engagement.

Due to our inclusion criteria and methodology, other capable providers are excluded from this research. But some of these specialized providers may be a better fit for your organization (see Other Research Areas, just below, and the Honorable Mentions section further down). D&A leaders can also consider using the professional services of their software vendor.

Other Research Areas

If you are selecting best-of-breed service firms for specific implementation areas, vendor platforms or technology solutions, Gartner has better-suited research covering the following:

- Al service providers: Market Guide for Artificial Intelligence Service Providers
- Master data management (MDM) service providers: Market Guide for MDM External Service Providers

Vendor Services and Capabilities

This Magic Quadrant evaluates providers specifically on the execution of D&A consulting, implementation and managed services, as well as on the vision provided for their D&A solutions. D&A service providers have developed a wide spectrum of capabilities and skill sets, enabling them to operate across multiple domains and service competencies. These capabilities incorporate business consulting, technology consulting, enterprise architecture, information architecture, design, on-site services, remote services, testing, infrastructure integration, change management and training. D&A service providers also offer services to support operational, tactical and strategic business decisions across products, customers and suppliers, as well as across business units and geographies.

Service providers in this Magic Quadrant need to demonstrate the ability to implement D&A solutions that enable D&A leaders, in concert with other key stakeholders, to identify, prioritize and select the investments that create measurable D&A value propositions. Besides labor-based services, they need to have a portfolio of products or solutions either in the form of partnerships or as proprietary intellectual property (IP). Additionally, key differentiators are breadth of capability, industry or domain expertise, technical and product expertise, geographic coverage, and local expertise. Finally, we consider business transformation skills, program management, change management and project governance to be critical.

Market Trends

The market for D&A service providers continues to grow both in revenue and size. The worldwide D&A services market is forecast at \$142 billion in 2021, and will reach \$232 billion by 2024 (see Forecast Analysis: Data and Analytics Services, Worldwide).

Organizations are deploying D&A to support digital transformation and acceleration, and the use of D&A is increasingly pervasive across enterprises, fueling market growth. In the 2021 Gartner's View from the Board of Directors survey, ¹ 69% of boards of directors said they had accelerated digital business initiatives in the wake of COVID-19. In the same survey, these boards of directors placed analytics and Al as the No. 1 and No. 2 top game-changing technologies to emerge stronger from the COVID-19 crisis. And, according to the 2020 Gartner Chief Data Officer Study survey, 72% of respondents said they are either leading (24%) or heavily involved (48%) in their organization's digital transformation initiative. ²

Organizations are deploying D&A to support digital transformation and acceleration. The use of D&A is

due to the extensive fragmentation of the market; this Magic Quadrant focuses on the largest volume segment. There are many competent and viable pure-play service providers that do not meet the targeted inclusion criteria. It is important to note that this does not imply that these service providers should not be considered or included in a client's portfolio. The global full-service providers (covered in this Magic Quadrant) are sought for their scalable services, offering different delivery models, geographic support, skill sets and so on. However, many clients also seek out pure-play or midsize D&A service providers that can offer more specialized services. Many full-service providers have acquired several of these specialized providers, with a specific focus on their Al capabilities and market share. Gartner expects that this will continue and drive further market consolidation. To showcase an illustrative list of these important options, we have included some of these vendors as part of an Honorable Mentions section and in Gartner's Tool: Vendor Identification for Al and Data and Analytics Service Providers.

The trend toward the convergence of separate D&A software and services into combined, customizable and reusable D&A assets or "servware" continues. These are either used by consultants to augment their services (a form of asset-based consulting) or sold as products (a form of asset-based services). These assets include platforms, cloud-based or on-premises solutions, packaged applications, and toolkits that are embedded in consulting, implementation, managed services and/or business process outsourcing (BPO).

Both clients and service providers report an accelerated move to the cloud, including a modernization of their D&A environment and associated architecture. With this comes the continuation of as-a-service models, such as data science as a service or D&A platform as a service.

Magic Quadrant

Figure 1: Magic Quadrant for Data and Analytics Service Providers



Source: Gartner (February 2022)

Vendor Strengths and Cautions

Accenture

Accenture is a Leader in this Magic Quadrant. Its Applied Intelligence network offers a mature, asset-led approach to help accelerate digital business transformation. Accenture's operations are geographically diversified; the geographic breakdown of its full-time equivalents (FTEs) is: North America, 10%; EMEA, 15%; Latin America, 5%; and Asia/Pacific, 70%. Its D&A service clients are mostly in retail and consumer products, banking, utilities and energy, high tech, and media. Accenture is a good match for clients looking for a combination of Al, data and business acumen to design and implement solutions, operate business functions, and build operating models that can deliver business outcomes.

Strengths

- Integrated business, D&A and technology capabilities: Accenture provides end-to-end delivery of D&A services by leveraging strategy, consulting, interactive, technology and operations capabilities. It drives clients' data-led transformation through identifying and realizing business value enabled by D&A and AI technologies and assets, agile processes, and collaboration with ecosystem partners.
- Assets accelerate speed to value: Accenture's comprehensive portfolio of prebuilt, repeatable, reusable industry and functional Al solutions and assets drive speed to value. Accenture Data Platform has more than 100 data partners, 750 insight modules and 300 data models connecting over 20 personas across the enterprise. The Solutions.Al product suite includes cross-industry Al solutions for customer engagement, B2B growth, pricing, marketing, processing, talent and skilling.
- Investment in M&A, innovation and talent: In fiscal year 2021 (FY21), Accenture invested \$4.2 billion in acquisitions, \$900 million in learning and professional development, and \$1.1 billion in R&D in assets, platforms and industry solutions. These investments include key areas such as D&A, AI, cloud and cybersecurity, and extend capabilities in new technologies. Talent growth is also a focus in the AI and D&A domain, through hiring, skilling and acquisitions, and with its AI institute, targeting an estimated 25% increase year over year (YoY) in roles for FY22.

Cautions

Inconsistent quality of resources: Accenture has one of the largest pools of D&A resources among vendors in this research. However, some clients indicate that certain Accenture resources fell short of expectations in technical and industry skills.

- Inconsistent project management: Some clients indicate that Accenture's project management could improve its project delivery timeliness and communication, and in its use of best practices, global delivery models, methodologies and processes to provide consistently high-quality skills and solutions.
- Premium pricing: Accenture is not the most competitive provider for smaller-scale enterprises that don't require its full-spectrum services or where cost is a key requirement. The vendor tends to approach engagements with larger teams drawn from multiple practices with a variety of business and technology expertise.

Atos

Atos is a Leader in this Magic Quadrant. Its global data analytics and Al capabilities and offerings also cover the Internet of Things (IoT)/Industry 4.0, automation and advanced computing. It provides services, solutions and platforms to six global industries and five regional business units. Its operations are geographically diversified, and the geographic breakdown of its FTEs is: North America, 10%; Latin America, 2%; EMEA, 29%; and Asia/Pacific, 59%. Atos' D&A clients are mostly in financial services and insurance; public sector and defense; energy and utilities; consumer products and retail; and health and life sciences. Atos is a good fit for customers looking for data architecture modernization, industry-specific solutions and edge analytics from connected devices. It has strategic alliances with technology and cloud partners, as well as in the startup ecosystem.

- Modernizing data architectures: Atos supports data landscape modernization and governance for its clients with data engineering offerings and strategic partnerships with cloud hyperscalers, and edge AI offerings supported by its BullSequana highperformance computing (HPC) hardware. These are brought together with a community of data intelligence experts.
- Verticalized data and analytics: Atos has organized its delivery across six global industries and developed industry-specific solutions in areas such as healthcare, supply chain and smart city analytics. It supports use-case ideation and deployment at scale through Atos studios and labs.
- Innovation delivery: Atos facilitates industry ecosystem collaboration through its cloud-based Digital Hub. It has intensified its Scaler program for startups and developed ThinkAl, a secure end-to-end offering for Al applications. Using software for Al-enhanced video analytics (through its acquisition of Ipsotek) in combination with its own BullSequana hardware, Atos has developed a computer vision platform.

Cautions

- Business change: Atos predominantly helps clients with technical change by applying its technology enablement and data management services, but the vendor is less sought-after for its ability to support business change management.
- Limited geographic presence outside Europe: Atos has improved its presence in North America with the integration of Syntel (which also grew its India-based delivery), Miner & Kasch (now Atos zData) and its Maven Wave acquisition. But the company needs to continue its growth in all geographic regions, in particular Latin America and Asia/Pacific (including China), to compete as a global player.
- Program and delivery management: Atos customers are generally positive about the vendor and the services provided in selected areas, but some suggest further flexibility in the area of program and delivery management, and improvements in onboarding of (senior) resources.

Capgemini

Capgemini is a Leader in this Magic Quadrant. Its global Insights and Data (I&D) service line closely collaborates with consulting (Capgemini Invent) and industry sectors. Capgemini's operations are geographically diversified, and the geographic breakdown of its FTEs is: North America, 12%; EMEA, 17%; and Asia/Pacific (including India), 70%. Its D&A service clients are mostly in financial services, manufacturing and life sciences, public services, consumer products and retail, and telecom and media. Capgemini is a good match for clients that look for end-to-end scalable D&A services from across the Capgemini group to bring innovation to their digital transformation.

- Lower total cost of ownership (TCO): Capgemini is able to combine its onshore presence in major geographies, such as Western Europe and North America, with resources from its India-based delivery centers. This combination with blended rates can have a positive impact on its clients' TCO.
- Thought leadership: Capgemini combines strong thought leadership, such as from the Capgemini Research Institute, with business acumen, technology enablement and D&A expertise. Its collaborative approach and accelerators, such as its Accelerated Solutions Environment (ASE) and global Applied Innovation Exchange (AIE) ecosystem, allows Capgemini to build intimacy at C-level to support data-driven ambitions.

Unified portfolio: Data and AI are strategic pillars for Capgemini's expansion strategy. All of its group's offerings now benefit from this data and AI portfolio of services and solutions. As a result, its clients' business and technology transformations will increasingly become more data-driven and will leverage more expertise from across the group.

Cautions

- Mixed delivery experiences: With an extensive offshore workforce and focus on large deals, some customers have voiced concerns about Cappemini's ability to source the right skills for their projects in a timely way, or to effectively communicate during planning and transitioning. Others would like the vendor to bring more guidance and technical leadership to their client initiatives.
- D&A offering maturity: Capgemini's focus on innovation, thought leadership and envisioning their clients' future business through data and AI makes the vendor often one of the first to go to market with less-mature products and services. For example, it launched its 890 by Capgemini D&A exchange back in 2019, and it is only now becoming a mature product.
- Global presence slowly expanding: With its origin in France and the majority of the workforce in India, this hybrid service provider still mostly has Europe as its home base. With increased presence in other geographies, mostly North America, the company is on its way to becoming a global player. However, it still needs to build additional capabilities in other geographies like China and the Middle East to become an established global brand.

Cognizant

Cognizant is a Leader in this Magic Quadrant. Its Data & Artificial Intelligence group is focused on modernizing decisions through data modernization and intelligent decision making. Cognizant's operations are focused on North America and Europe, although most of its resources reside in India. The geographic breakdown of its FTEs is: North America, 28%; Latin America, 2%; EMEA, 8%; and Asia/Pacific, 62%. D&A services are mostly delivered in financial services, banking and insurance; life science and healthcare; consumer products and retail; and communications, media and technology. Cognizant is a good match for clients that want to focus on the application of D&A to improve the speed and quality of decision making.

- Focus on decision making: Cognizant has continued to push the message of considering data and analytics projects in the context of decisions they influence and the outcomes they enable. Enhancements to this messaging have focused on a recognition of the importance of "soft" skills such as organizational change management as well as technical data and analytic capabilities.
- Simplified offering storyline: All service providers bring a combination of proprietary technology and intellectual property. In many cases, this has resulted in a bewildering combination of templates, products, offerings, frameworks and so on. Cognizant has been the most aggressive in repackaging these capabilities into a Cognizant Data and Intelligence Toolkit that places its components in the context of the data value chain, but allows for flexibility in their utilization in projects.
- Deep industry expertise: Cognizant has continued to deepen expertise and credibility in its key industries. It is therefore able to propose very industry-specific use cases that align with the strategic needs of organizations in those areas, rather than just "cookie-cutter" solutions repeated from other industries.

- Vision gets ahead of execution: Cognizant was an early champion for Al, ahead of most of its clients and the maturity of the technology. Cognizant's focus on decision making is similarly risky, with many organizations struggling to make the mental pivot to outcomes and decisions rather than technology, and Cognizant does not always have the reputation to help this transition.
- Weaker on change management: Cognizant has digital transformation skills and an interesting vision for D&A. The challenge is that Cognizant tends to be strongest on the data management part of many projects, less so with business vision and organizational skills to enable buy-in from the entire organization for the changes needed to ensure their success.
- Less proactive in projects: Clients report that, although Cognizant can provide highly qualified technical resources who are able to support their explicitly stated needs, it is not always proactive enough in bringing new thinking and ideas to the projects it is involved in.

Deloitte

Deloitte is a Leader in this Magic Quadrant. Deloitte's global Al and analytics practice vision is to enable an Al-enabled transformation through end-to-end D&A services. Its operations are geographically diversified. The geographic breakdown of its FTEs is: North America, 54%; Latin America, 3%; EMEA, 17%; and Asia/Pacific, 26%. The top five industries from which Deloitte derives its D&A service revenue are banking, public sector, healthcare providers, high tech and life sciences. Deloitte is a good fit for clients looking for a vendor that combines industry expertise and end-to-end data and Al capabilities to support complex business and technology transformations.

Strengths

- AI-enabled delivery: Deloitte's delivery includes consulting assets and accelerators such as its CortexAI platform, Deloitte Center for AI Computing (powered by an NVIDIA DGX AI supercomputer), and domain-specific AI platforms and solutions. These include Intela (tax), Omnia (audit), Nexus (risk) and CortexAI for Government. It has a six-part Trustworthy AI framework for its AI client engagements.
- Innovation with partners: Deloitte invests in AI hybrid businesses that combine industry expertise, assets, advisory services and managed services. Deloitte bolsters its capabilities through innovative ecosystem partnerships, such as with NVIDIA, leading cloud providers and AI startups together with its own data, algorithms and models. This allows them to enter new market segments, such as autonomous vehicle simulation, smart factory and cyberthreat detection.
- Flexible pricing and deployment: Deloitte's ReadyAl solution allows its clients a
 flexible way to quickly ramp up data, analytics and Al skills by leveraging Deloitte's
 global capabilities. The solution offers various pricing models such as capacity
 augmentation, subscription-based, managed services and value-added services.

- Premium pricing: Although price is typically not the first or second criterion in clients' selection checklists, it is (almost) always a consideration, and reference customers indicate that Deloitte's pricing is at the upper-mid-to-high price range.
- Documentation and information sharing can be improved: Clients praise Deloitte for its overall service quality and support, but suggest that the vendor needs to improve its client documentation and information sharing for its technical and functional consultations in order to enable knowledge transfer.

Complex engagement model: Deloitte has a global AI and analytics practice that supports a unified portfolio, but is organized into a network of regional member firms, which can be difficult to navigate for global clients or worldwide projects. Some companies have an existing audit relationship that limits collaboration with Deloitte on D&A.

DXC Technology

DXC Technology (DXC) is a Niche Player in this Magic Quadrant. DXC's Analytics and Engineering business unit provides IT modernization offerings and enterprise-scale D&A services. DXC's services are geographically diversified, and its geographic breakdown of FTEs is: North America, 23%; Latin America, 8%; EMEA, 33%; and Asia/Pacific, 36%. DXC's top five industries based on D&A service revenue are aerospace and defense, automotive, retail, mining, and sports and entertainment. Organizations seeking to industrialize and scale D&A initiatives supported by a good array of asset-based services will find DXC to be a strong fit for their needs.

Strengths

- Staffing and management: DXC invests in building resource availability. The clients benefit from rapid access to skills and the simplicity and high transparency of setting up their delivery teams. DXC also offers the flexibility to ramp up FTEs at differential pricing. This ensures a more balanced resource mix across geographies and greater agility in providing its customers with the required talent pool.
- Business strategy and consulting focus: Building on its technical expertise and managed services, DXC has raised its consulting visibility with investments in strategic services by integrating industry consulting, strategy and product design into one business unit. To better aid this shift, the company has evolved its comprehensive risk-reward pricing models and joint go-to-market strategies.
- Asset-based services: DXC offers a plethora of asset-based services, including MLOps as an asset-based offering. This reduces customers' entry barriers and offers cost-reduction opportunities and faster value realization. The MLOps asset library includes tool assessments, reusable software code for relevant building blocks of MLOps (such as model maintenance orchestration scripts and model-monitoring dashboards) and deployment scripts for MLOps base environments.

- Sales execution and pricing models: Despite having a number of traditional pricing models already in place, DXC needs to focus more on offering outcome-based and other flexible pricing models that are in line with the evolving market expectations.
- Need for AI-led innovation: Despite different innovation platforms and programs, including Startup Autobahn, DXC needs to focus further on cutting-edge AI innovation. This will also help differentiate its capabilities in the rapidly evolving market for AI. Co-innovation with customers for AI-led initiatives will further strengthen its existing offerings.
- Global talent pool: The integration between DXC and its acquisition Luxoft continues, and its shared portfolio enables new opportunities for DXC clients. However, with this speed of innovation also comes challenges with consistency in following through or in providing the required skills and resources from its global talent pool.

EPAM

EPAM is a Niche Player in this Magic Quadrant. EPAM's Continuum, its advisory and consulting service, provides business and technology transformation. EPAM's services are geographically diversified, and its geographic breakdown of FTEs is: North America, 4%; Latin America, 1%; EMEA, 87%; and Asia/Pacific, 8%. EPAM's top five industries based on D&A service revenue are retail, media, high tech, life sciences and healthcare, and banking. Organizations seeking to scale data and analytics, automation and engineering capabilities supported by an array of solutions will find EPAM to be a fit for their needs.

- Business model: EPAM focuses on agile product engineering to deliver solutions and services for D&A. It offers a holistic series of engagements across functional and vertical domains with integrated consulting. EPAM focuses on building key skills and capabilities for D&A strengthened by its own IP, reusable assets and solutions. EPAM offers various engagement models, including output- and outcome-based. It focuses on co-innovation with clients, partners, startups and communities.
- Integrated sales strategy: EPAM's approach as a full-stack-integrated transformation partner appeals to end users. Customers' digital transformation initiatives are also supported by EPAM's vertical and functional domain-specific solutions and integrated capabilities, such as EPAM Continuum and EPAM Anywhere. EPAM's technology offerings, modernization initiatives and strategic consulting are strengthened by its co-innovation programs and a boutique salesforce.

Market responsiveness and customer experience: EPAM has responded well to the D&A market's evolving demands in terms of flexible engagement models and an agile delivery platform. Its adaptive enterprise model is remote by design and embeds scalable processes and tools. EPAM's presales process includes multidomain teams to offer tailor-made plans to end users and expedite delivery.

Cautions

- Limited geographic strategy: Geographic strategy continues to be a factor in consideration when choosing a D&A service provider. Although EPAM has a remoteby-design delivery model, its workforce is predominantly concentrated in EMEA. Expansion across other geographies will help improve its reach in those markets.
- Focus on technology consulting: Despite moving to a new business model that is more integrated with strategic consulting, EPAM needs to invest more in business process transformation and business change management capabilities. Doing so will help drive the adoption of its services and help its customers navigate more effectively the myriad complexities that arise with digital transformation.
- Mind share and thought leadership: EPAM successfully meets the current market demand; however, it needs to exhibit thought leadership in meeting the future demands to excel in this market. The organization's D&A strategy focuses on data, but the vision around analytics, including AI, data science and machine learning, needs more refinement.

EY

EY is a Leader in this Magic Quadrant. D&A sits within its service lines (advisory, assurance and tax, for example) and is coordinated under a global D&A advisory leadership team. EY business lines leverage D&A assets and solutions through AI labs and innovation centers. EY's services are geographically diversified, and its geographic breakdown of FTEs is: North America, 21%; Latin America, 8%; EMEA, 25%; and Asia/Pacific, 47%. EY's top industries for D&A are financial services (including banking), insurance, public services, consumer products and retail. Clients looking to establish a robust data layer to support AI-driven business domain transformation will find EY a good match.

- Focus on business transformation: EY's overall vision is focused on business transformation. D&A (specifically data and AI) is a component of this vision. However, it is best thought of as coequal to the broader range of services (such as design thinking and risk or change management) that EY offers in achieving this goal of business transformation.
- Decoupled data and application layers: EY is investing in a set of ontologies to address specific markets in order to offer its Trusted Data Fabric or a data-centric transformation. This will allow the separation of the data and application layers of a technical stack, enabling broader access to data no matter where it was created.
- Talent acquisition and development: All service providers are dependent on the quality of their talent. EY has been one of the most aggressive in rethinking the development of its talent pipeline. It partners with top universities to attract graduates (standard practice), and, notably, puts considerable effort into talent development (avoiding the "up or out" approach many organizations take). It also embraces more innovative concepts such as centers of excellence for neurodiverse employees.

- Premium pricing: Due to the high cost of onshore resources, some Gartner clients have indicated that EY pricing is above many of its competitors. EY is attempting to mitigate this differential with a variety of pricing structures, although this often changes the structure rather than the overall total of the cost.
- Serves a specific client base: Because of the focus on business transformation, EY tends to sell into existing clients where it already has a strategic relationship and can leverage the other services that EY provides. This leaves the vendor poorly positioned to capitalize on emerging markets and small to midsize organizations.
- Overkill for technology-centric projects: EY's focus on business transformation
 makes it less ideal for pure system integration projects. EY has the skills to address
 these, but the lack of broader business transformation elements in many such
 projects prevents EY from bidding on them.

Genpact

Genpact is a Challenger in this Magic Quadrant. D&A is organized in its Augmented Intelligence/Data & Analytics practice. Genpact, including recent acquisition Enquero, offers D&A services at a global scale, mostly from offshore centers in India. The geographic breakdown of its FTEs is: North America, 25%; EMEA, 15%; and Asia/Pacific, 60%. Its top industries for D&A are consumer products and retail; high tech and manufacturing and banking; and financial services and insurance. Clients looking for process optimization improvements through digital transformation will find a good match in Genpact, as it combines business process understanding with D&A expertise, supported by asset-based services such as platforms and other accelerators.

Strengths

- Business process focus: Genpact has a focus on process excellence. Genpact's D&A projects are delivered as both integrated and stand-alone initiatives providing data and analytics capabilities. A typical Genpact project would be a collaboration between D&A and other business functions to deliver an improved business process with "D&A inside" to act as an enhancement or enabler of new business capabilities.
- Managed services insights: Genpact runs a wide variety of business processes for hundreds of organizations, which enables it to benchmark organizations against their peers and identify opportunities to improve performance. This data-based comparison of detailed performance metrics (while respecting confidentiality and trade secrets) allows Genpact to offer tailored recommendations for organizations about their D&A strategy.
- Focus on customer satisfaction: Genpact has a strong commitment to ongoing customer satisfaction, which is essential in the multiyear managed services contracts that it specializes in. Genpact has a mature issue identification and resolution process to ensure problems do not become serious issues.

Cautions

Process-centric: Genpact's background in process optimization makes it a suitable partner for process-centric activities rather than areas of the business that are more creative or experiential. For example, customer service projects would focus on customer service agent processes rather than capabilities to collaboratively crowdsource peer-based customer service.

- Limited geographic presence: Genpact is fundamentally focused on supporting North American clients and their global initiatives through innovation centers and delivery centers for its clients around the world.
- Nontechnical skills investment: Genpact's internal talent development program focuses on building on its existing business, industry and process expertise with technical skills such as data engineering and data science. These skills are needed, and customer feedback about the quality of this talent is generally good. However, Genpact could deepen its focus on nontechnical skills such as change management, strategy development, decision intelligence or governance.

HCL Technologies

HCL Technologies (HCL) is a Challenger in this Magic Quadrant. D&A is organized in its Digital & Analytics Services practice. With global services capabilities, most HCL resources are based in India. The geographic breakdown of its FTEs is: North America, 20%; Latin America, 2%; EMEA, 14%; and Asia/Pacific, 64%. HCL's top five industries from which it derives its D&A service revenue are banking, insurance, high tech, life sciences and consumer products. Clients looking for quality, cost-effectiveness and engineering expertise will find HCL a good fit for their needs.

- Data-first approach: HCL uses a data-first approach to help clients scale their D&A initiatives across the organization. It has developed a cloud-based adaptive data platform that is enabled by a composable and modular architecture, a data ecosystem that drives end-to-end lean data management processes, and a data marketplace to enable consumption-based analytics. The use of AI/ML helps to automate data operations and improves collaboration between data consumers and data suppliers.
- Integrated digital consulting, D&A and digital application offerings: HCL has increased focus on digital strategy and planning, D&A consulting, and industry-aligned solutions. It continues to develop and expand the FENIX 2.0 framework and TwinOps (DataOps and MLOps) to scale and operationalize D&A for clients. It also leverages its strong expertise in application services and quality engineering to modernize clients' D&A infrastructure, applications and platforms as part of its digital transformation initiatives.

Strong D&A technology implementation expertise: As evidenced by clients, HCL has consistently demonstrated strong D&A technology implementation expertise that combines agile approaches and assets to deliver solutions effectively. It is also strong in orchestrating technology-led solutions to automate or augment business processes. HCL is flexible and adaptable to clients' needs and is able to deliver good value for money.

Cautions

- Inconsistent business strategy and consulting skills: HCL has been trying to pivot toward a more business- and industry-led approach in its Digital & Analytics Services practice in the past few years. While its clients are generally satisfied with HCL's domain, industry and business capabilities, some clients have indicated that HCL lacks the business strategy expertise to become a strategic business transformation partner.
- Inconsistent project management: A few clients indicated that HCL can improve on project management and deployment methodology. They also felt that HCL could improve project delivery timeliness and documentation.
- Resourcing challenges: Some clients mentioned that key local resources from HCL can be difficult to secure, or there could be high turnover rates, especially those with business and functional knowledge, AI, advanced analytics, data science and engineering expertise.

IBM

IBM is a Leader in this Magic Quadrant. D&A is organized in its services division through which a variety of products are offered. IBM Services are shared between geographies and across service lines and growth platforms. We estimate the geographic breakdown of FTEs is: North America, 40%; EMEA, 25%; Asia/Pacific, 30%; and the rest of the world, 5%. The top industries from which IBM derives its D&A services revenue are the public sector, banking and insurance, consumer products, and manufacturing. Clients looking for large-scale D&A implementation programs, and requiring innovation in technology and a focus on user experience, will find IBM a good match.

- Increased importance within IBM: The spinout of Kyndryl managed infrastructure services from IBM has left the IBM Consulting capabilities as a significant component of the remaining IBM company (about a third of revenue), maintaining the parts that show the greatest growth potential). This importance will give the IBM Consulting group more internal power to drive partnerships and investments that suit the D&A services group.
- Focus on domains and solutions: IBM has shifted toward domain-specific solutions (such as customer or supply chain) to complement its traditional alignment to industry. This focus on solutions rather than assets simplifies its story on business impact and outcomes.
- Balance of user experience and advanced technologies: IBM's human-centered design approach has been in awkward tension with a lot of the value IBM has always placed on emerging technologies such as blockchain, edge technologies and quantum computing. Although this depth of capability in R&D still exists, IBM's focus on business impact seems to be achieving a better balance between the human-centric and technology-centric dualism than existed before.

Cautions

- Partner experience: IBM has moved heavily toward working with technology partners, such as the hyperscalers, rather than relying primarily on IBM technology, which is a positive and realistic move. However, potential clients should be aware that this movement has been rapid and recent. Although IBM can quote the number of certified professionals it has on partner platforms, the depth and extent of this expertise must be checked in a thorough reference process.
- Complexity of working: IBM brings a wide variety of capabilities to market that clients continue to indicate can be confusing for them to understand. IBM has taken steps to simplify the communication of its asset portfolio. However, it is still a company with a vast array of capabilities that have been built internally and through a series of acquisitions, and is now overlaying these products with those of its new partners that are directly competitive.
- Total cost of ownership: IBM remains one of the higher-cost options, and pricing and contract negotiations can be complex. IBM has become more flexible with its pricing to include risk sharing and outcome-based pricing, but these remain relatively uncommonly adopted.

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Infosys

Infosys is a Leader in this Magic Quadrant. D&A is organized in its global D&A practice and is expanding its global footprint and local resources. The geographic breakdown of its FTEs is: North America, 16%; EMEA, 5%; and Asia/Pacific (mostly India), 79%. The top five industries from which Infosys derives its D&A service revenue are banking and insurance, manufacturing, retail, telecom, and energy and utilities. Infosys' strength in data management, enabled by assets and domain-specific accelerators, makes it a good fit for clients modernizing their D&A landscape.

Strengths

- Assets and services evolution: Infosys has been involved in analyzing the continuously evolving demand side of D&A to update its offerings. It is supplementing its services for different operational and analytical needs around data management, data engineering, analytics and AI, and has aligned those to match individual vertical needs. This has led to more assets and evolution of existing ones being reused extensively over the last year, which helps Infosys drive data-led business transformation and achieve better mind share in the services market.
- Growing skills ecosystem: Infosys has significantly increased its number of D&A resources with domain expertise, especially local hires in key markets, adding to its business value focus. Its focus is actively building talent pipelines to fulfill current and emerging needs in data engineering, analytics and AI, cloud services, and consulting across various data domains, further fueled by robust internal platforms for reskilling and catering to cross-functional needs.
- Investing in innovation ecosystem: Infosys has invested in innovation and technology hubs, and digital studios for customer experience and design. It jointly does R&D and develops go-to-market industry offerings with cloud providers, has partnerships with major software vendors, and actively works with an ecosystem of startups. Infosys also works with academia, and has invested in or acquired several Al/analytics companies.

Cautions

Consulting market share: Infosys continues to invest in consulting capabilities to drive transformation programs, but a major portion of revenue comes from managed services. It can do better by further improving the percentage derived from advisory and consulting services.

- Hybrid model with offshore resources: Infosys has steadily been investing in local hiring and has set up additional delivery centers. It should continue this effort to reduce the proportion of offshore resources in its global delivery model, though remote work is more common in the pandemic era. Some clients mentioned challenges in onboarding resources and communicating with offshore teams.
- Project pricing: Based on Gartner Peer Insights, Infosys could further improve in providing alternate pricing models for project and department-specific needs versus large end-to-end enterprise-level needs. A few clients mentioned Infosys could do better in managing project timelines.

KPMG

KPMG is a Leader in this Magic Quadrant. D&A is integrated across its service lines, and supported by regional hubs via KPMG Lighthouse Center of Excellence for Data, Analytics and AI (KPMG Lighthouse). KPMG combines expertise from across the firm to enable digital transformation supported by asset-based (platforms and other accelerators) delivery. KPMG has a global footprint, and the geographic breakdown of its FTEs is: North America, 64%; Latin America, 1%; EMEA, 25%; and Asia/Pacific, 10%. Its top industries by D&A service revenue are banking, utilities and energy, high tech, public sector, and consumer products. Customers appreciate KPMG's strategy advisory services in combination with its technical data science and analytics skills.

- Business-first approach: KPMG's business-first approach is aimed at accelerating digital initiatives with data and AI expertise to achieve measurable business outcomes. For this, the vendor leverages its global delivery network (GDN) with offshore delivery centers, regional and local resources, and on-site consultants.
- Asset-based delivery: KPMG data and analytics delivery is an asset-based approach. These assets include platforms like KPMG Signals Repository (a data platform), KPMG Ignite (an AI platform) and KPMG Sofy Suite (a low-code platform). Assets also include its Intelligent Forecasting and Workforce Analytics solutions, and other enablers such as its Cloud Data Ingestion Framework (SAIL).
- Trusted data and AI: KPMG enables organizations in their transformation journey through its "Connected. Powered. Trusted." framework. Its approach to trusted D&A is manifested in its AI & Data Ethics Institute, as well as its offerings and solutions to mitigate risk and bias in AI solutions. The vendor continues to offer its AI governance resources to support clients.

Cautions

- Audit relationship restrictions: Because KPMG is a full-service provider, existing audit clients may encounter barriers due to restrictions on consulting services in combination with audit services.
- Selective engagements: KPMG is a good match for large enterprises and clients within its chosen market segments (predominantly banking) and geographies (mostly North America and EMEA). It often executes through its own partner network and within its existing and very loyal client base. Some clients commented that the vendor could further improve its local support and service offerings.
- Pricing and delivery: KPMG's services are priced higher than some of the other vendors listed in this Magic Quadrant. A few customers cited challenges with KPMG's delivery, highlighting a lack of continuous support for its deployments.

NTT DATA

NTT DATA is a Challenger in this Magic Quadrant. D&A is organized in its Data & Intelligence (D&I) practice. NTT DATA aims to help clients maximize business value through technology implementation expertise, innovation practices and trustworthy D&A. The geographic breakdown of its FTEs is: North America, 14%; Latin America, 8%; EMEA, 21%; and Asia/Pacific, 57%. The top five industries from which NTT DATA derives its D&A service revenue are banking, retail, automotive, telecom and insurance. Clients looking for a vendor to support their focus on building trust in D&A for the enterprise will find NTT DATA a good match.

Strengths

Strong focus on AI: NTT DATA has strong AI technology expertise and has developed AI-driven industry solutions for pharmaceutical, retail/fast-moving consumer goods and automotive verticals. Its Responsible AI Governance offering includes AI ethics principles. NTT DATA has also created its AI Center of Excellence as a network for developing AI technology assets. Its AI Hubs and AI Labs can accelerate the experimentation of new AI solutions and can help orchestrate AI talent to support clients' AI strategy and roadmap.

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- Business value of data and intelligence: NTT DATA developed a framework of D&I services to support clients to drive business value leveraged on data and AI. This framework consists of a strategy offering that provides continuous market monitoring, visioning and designing of business cases and AI prototypes. The other part of the framework is D&I at scale that focuses on the implementation and operationalization of D&A and AI technologies and solutions. D&I strategy and D&I at scale are supported by D&I Responsible Governance.
- D&A and technology execution: Clients are very satisfied with NTT DATA's D&A and technology execution capabilities, and in particular with its quality, agility, SI services and flexible approach.

Cautions

- High-cost perception: Some clients perceive NTT DATA as being expensive, especially during the RFP stage and when it is compared against other technology-oriented service providers. However, clients also commented that NTT DATA is transparent with its cost structure and is less expensive when compared with other business-oriented service providers.
- Lack of proactive recommendation: While clients are highly satisfied with NTT DATA's work, they cited that NTT DATA's consultants can be more proactive in recommending new technologies and solutions. The consultants can also be more innovative in bringing in outside-in perspectives and ideas to improve their clients' competitiveness.
- Inconsistent resource management: Some clients indicated that securing experienced resources could be challenging due to turnovers or bookings in multiple engagements. Other clients commented that NTT DATA can improve its consultants' industry and business expertise, global delivery support, and communication skills with clients.

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PwC

PwC is a Leader in this Magic Quadrant. D&A is organized in its Data Analytics & Al Services practice. The vendor has an outcome-driven consultative approach, strong D&A and Al technology capabilities, broad market coverage, and highly satisfied clients. The geographic breakdown of its FTEs is: North America, 42%; Latin America, 2%; EMEA, 38%; and Asia/Pacific, 18%. The top five industries from which PwC derives its D&A service revenue are banking, industrial machinery and components, retail, healthcare providers, and higher education. Customers looking for a vendor that can combine D&A competency with consulting accelerators and technology expertise across a range of business domains, industries and ecosystems will find the scalable services of PwC a good match.

Strengths

- Holistic strategy: PwC's D&A and AI are part of its firmwide "The New Equation" strategy that aims to help clients transform and mitigate technical, geopolitical and environmental challenges by building trust and delivering sustained outcomes. It is a holistic strategy with key investments in platform ecosystem, skills and capabilities, products and accelerators, and alliances. Clients consistently cited that they consider PwC as their strategic partner that has strong expertise in business, D&A and technology.
- Strong industry expertise: PwC has more than 650 solutions covering over 5,000 use cases that address various business problems across sectors, business functions and territories. Reference clients are very satisfied with PwC consultants' industry and subject matter expertise, which helps them to improve their D&A programs.
- Strong asset-based services: PwC continues to productize D&A expertise in various assets. It has doubled the number of analytics apps and accelerators to 4,000 in the past year. It has more than 320 datasets, 650 industry solutions, more than 100 digital assets and accelerators and data platforming PwC labs, and more than 12,000 prebuilt data and analytics tools on the Data Platform workbench. PwC's cloud-based Insights Platform contains prebuilt apps and also allows clients to build customized solutions.

Cautions

Limited focus on data management: On the data side, PwC has an impressive list of datasets and tools. However, its focus on data architecture, management, integration and implementation is limited when compared with other vendors in this Magic Quadrant.

- Inconsistent resourcing and project management: Clients are generally very satisfied with PwC's services and solutions. But some clients noted skills gaps in its consultants, and response time can be improved.
- Premium price: PwC is not the best option for clients that focus on cost-efficient services or technology-led engagements. Some clients cited its premium market pricing as a challenge; others commented that it could improve on price and contracting practices.

TCS

TCS is a Leader in this Magic Quadrant. D&A is organized in its Analytics and Insights service line. TCS has strong D&A and Al capabilities, vertical-focused offerings, rich consulting assets, and a broad ecosystem strategy. The geographic breakdown of its FTEs is: North America, 51%; Latin America, 2%; EMEA, 32%; and Asia/Pacific, 15%. Its top five industries based on D&A services revenue are banking, financial services and insurance; retail and consumer packaged goods; communications and media; manufacturing; and life sciences and healthcare. Clients looking for a scalable service provider that can help reconstruct and modernize their D&A landscape will find TCS's services and its accelerators a good fit.

Strengths

- Integrated asset-based modernization: TCS has a suite of integrated assets like Data and Analytics Target Operating Model (DATOM), DAEzMo (data and analytics landscape modernization) and Decision Fabric (Al-driven business solutions). The vendor's rich set of enablers — both horizontal Al/ML accelerators and industryspecific models — support technology landscape modernization and the potential of real-time decision making.
- Investments in talent development: TCS lays special emphasis on talent upskill and talent availability at different levels of scale. It works on scaling talent availability through its talent on campus strategy, improving D&A literacy using Analytics & Insights (A&I) academy and growing communities across important D&A personas, thus lending agility to its workforce.
- Ecosystem: TCS supports clients with a robust "strategy, scale and sustainability" ecosystem. Its strategy includes initiatives such as data literacy, cloud centricity and D&A maturity. Scaling these initiatives is done through partnerships with technology and academia vendors, including startups through its Co-Innovation Network (COIN) partnerships program. Sustainability deals with initiatives such as data for good, open data institutes and women in data.

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Cautions

- Project delivery challenges: Customers would like to see better stakeholder management and communication throughout the delivery process. Customer service and support are also areas in which the vendor could improve. Additionally, customers favor faster contract reviews and discussions.
- Longer time to market: Although customers appreciate the technical expertise of the personnel and the quality of projects delivered by TCS, some customers pointed out that TCS needs to accelerate the time taken to develop a solution and customizations required by its clients.
- Advisory and consulting market share: TCS continues to invest and grow across all segments of data and analytics services, but continues to drive a major portion of revenue from system integration and managed services. It still lags behind many of its peers in the Leaders quadrant in terms of percentage and actual revenue derived from advisory and consulting services.

Tech Mahindra

Tech Mahindra is a Niche Player in this Magic Quadrant. Its global D&A practice is known for technology implementations with diversified D&A offerings ranging from data management to insight generation. The company has a global delivery model, with the majority of its resources in India. The geographic breakdown of its FTEs is: North America, 10%; Latin America, 1%; EMEA, 6%; and Asia/Pacific, 83%. Its top five industries based on D&A service revenue are telecom, banking, insurance, automotive and retail. Organizations looking for deep technical expertise for end-to-end system integration leveraging Tech Mahindra's existing consulting accelerators will find it to be a good match.

Strengths

Technical expertise to support modern data architectures: Tech Mahindra's core strength is its technical expertise around system integration coupled with its offerings that focus on data modernization, data migration and integration efforts. For example, its Sprinter offering combines a focus on Snowflake with its long-standing unified data management framework (UDMF) that runs parallely with those complex data migrations to ensure successful migrations.

- Joint R&D and partner ecosystem: To further improve its skills and capabilities in new and emerging areas, Tech Mahindra is increasing its efforts to develop joint products and solutions with its strategic partners. These partnerships augment technology capabilities, enhance sectoral capabilities for improved domain and vertical footprints, and lead to better go-to-market strategy and revenue-sharing models.
- Vertical alignment: Tech Mahindra has organized and extensively specialized its services delivery across five major verticals and developed industry-specific horizontal solutions to cater to these. This offers organizations from these verticals a customized mix of both industry and technical expertise.

Cautions

- Limited market- and mind share: Tech Mahindra has a strong presence in D&A, supported by diverse services and solutions. However, growing mind share and brand recognition in the market are essential for it to be better positioned among its peers and be selected by future clients.
- Talent sourcing model: Tech Mahindra has been consistent with its investment in resource hiring and upskilling, but most of its resources are offshore with a global delivery model. This level of offshore staffing is on the higher side when compared to several others in the research. Some clients experience challenges in onboarding resources and communicating with offshore teams.
- Business strategy and consulting: Despite a strong focus on and expertise in technology implementation, which customers greatly appreciate, Tech Mahindra is less sought after for its ability to support business change management and business process transformation. Further investment in this area will help Tech Mahindra grow its consulting mind share and become a strategic business transformation partner.

Wipro

Wipro is a Leader in this Magic Quadrant. Its Data, Analytics and AI (DAAI) practice takes a business-led approach with a focus on assets, services and solutions. Wipro has a global delivery model. The geographic breakdown of its FTEs is: North America, 16%; Latin America, 1%; EMEA, 14%; and Asia/Pacific, 70%. Wipro's top five industries based on D&A service revenue are banking and financial services, high-tech, retail and consumer products, and healthcare. Organizations looking for D&A-led business transformation should consider Wipro for its comprehensive approach and robust partner ecosystem.

Strengths

- Business-led transformation: Wipro has evolved its business-process-led approach to D&A to form intelligent ecosystems (iECO) that offer sustainable and innovative solutions for cross-industry ecosystems. These ecosystems target specific personas and partnerships across industries. Wipro's science labs (xSL) provide a platform to experiment and innovate in collaboration with startups, technology partners and academia. Wipro's acquisitions of Capco and 4C further strengthened its domain and consulting expertise in financial services and energy-trading advisory.
- Asset-based approach: Wipro has strong asset-based services with platforms and industry-focused tools and frameworks. The solutions and services span across business advisory, data transformation, and analytics and Al. Examples include its Wipro HOLMES platform for Al and automation, the Data Discovery Platform for exploratory analytics, the Data Science Accelerator for augmented model building and management, and Smart i-Connect, its IoT platform. Also, ETHICA is a configurable framework that uses technical and business metadata for explainable, ethical and bias-free Al.
- Focus on talent and innovation: Wipro focuses on building D&A talent at scale. Topcoder provides the benefits of crowdsourcing. Local talent hiring, workforce reskilling and deep domain expertise from acquisitions add to flexibility and scale of delivery. Wipro collaborates with several top research institutes and invests in skills development and training. Its FullStride Cloud Services provide a full portfolio of cloud-related capabilities, offerings and talent.

- Resource availability and competency: Some customers commented that they faced challenges in initial resource mobilization, although the vendor was mostly able to meet the overall project timelines. Some clients also reported that Wipro's consultants' business domain knowledge and communication skills could be improved for some industries.
- Client engagement: Some clients indicated that Wipro could improve communication and expectation setting with its customers. Communications across internal teams and senior leadership could be improved for streamlined operations.
- Operations: A few clients raised a caution on infrastructure engineering and operations enablement. Some customers would like Wipro to be more proactive in defining the course of the project.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

EPAM has met the revenue inclusion criteria for the first time.

Dropped

- EXL does not meet the revised revenue inclusion criteria.
- NEC does not meet the revised geographic inclusion criteria.

Inclusion and Exclusion Criteria

To be included in this Magic Quadrant, companies had to meet several criteria. We evaluated suppliers for their D&A offerings, and made our selection based on several factors:

- Their current and potential market impact and presence
- How often they appeared on client shortlists
- How often Gartner analyst interactions with clients resulted in interest in specific providers

We selected companies based on services offered and delivered globally, regardless of headquarters location or service delivery, as dictated by their own operational models.

Providers included in this Magic Quadrant were selected using the following inclusion criteria:

 Presence — Providers must have market presence and have their solutions and services considered or evaluated by Gartner clients for D&A (as expressed during interactions with Gartner).

- Enterprise They must demonstrate that their D&A solutions are in production with clients at enterprise-scale deployments.
- Market core capabilities Their solutions must have data management, analytics and BI, data science and machine learning (AI), D&A governance, program management, and enterprise metadata capabilities.
- Revenue Providers must report D&A service revenue that includes all project-based or managed professional services revenue (direct), and report D&A service revenue as part of a larger portfolio for professional services in other application-related work (indirect). Additional D&A service-associated revenue can come from platform licensing or as-a-service products. We evaluated both pure-play and full-service D&A providers if they met the above inclusion criteria and the following revenue requirements:
 - Pure-play D&A providers derive more than 90% of their (excluding services partners) revenue exclusively from D&A services. They are expected to have at least \$250 million in annual D&A services revenue.
 - Full-service providers have at least \$900 million in their annual D&A services revenue (direct; excluding services partners), or as part of a larger portfolio (indirect) for all D&A services in application-related work (for example, CRM, ERP or supply chain management, singly or in combination).
- **Geography** Providers must offer implementation services for D&A solutions with:
 - The majority of revenue derived from clients in at least two of the three primary geographies (North America, Western Europe and Japan)
 - Additional revenue derived from clients in at least two of the four secondary geographies (Asia/Pacific, Latin America, the Middle East and Africa, and Eastern Europe).
 - The providers should not have more than 80% of their revenue from a single geography or country (as defined by Gartner).
- Software Providers are not to derive more than 40% of their revenue from activities related to a single product, their own product(s) or a single third-party software vendor.

We gather information during the evaluation process from briefings provided by the service providers, annual reports and other publicly available information. We also use data from the providers, such as preinclusion surveying and Gartner Peer Insights, as part of the research. Overall, Gartner gathers information as it continuously speaks to providers and their clients throughout the year.

Honorable Mentions

These service providers were not included as they did not meet the inclusion criteria, but each has significant market presence nonetheless. Depending on product, resourcing objectives, size of project, geography or other factors, any of these may be a better match for your needs.

Some providers focus only on a single D&A service, business or delivery model, or geography; some are smaller in size (see Tool: Vendor Identification for Al and Data and Analytics Service Providers).

The following is a nonexhaustive list.

Consultancies:

- BCG GAMMA practice is dedicated to solving critical business problems and creating competitive advantage at the intersection of data, analytics and artificial intelligence. For this, it combines forces with BCG's business consultants, IT architects (BCG Platinion), business builders (BCG Digital Ventures) and purpose experts (BCG BrightHouse) to deliver end-to-end digital capabilities.
- McKinsey McKinsey includes Quantum Black, a specialized artificial intelligence firm. McKinsey has a large D&A practice, McKinsey Analytics, that focuses on advanced analytics and AI with data science and data engineering talent. The vendor has both sector-specific vertical assets and horizontal solutions that include open-source tools like Kedro, a Python library for deploying data transformation pipelines.

System integrators:

LTI's D&A practice helps organizations accelerate their D&A implementations with toolkits, software (Fosfor), marketplace and domain analytics solutions. Its Snowflake practice has end-to-end solutions for cloud migration, automation and optimization.

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■ SDG Group is a midsize D&A system integrator with presence in EMEA and North America. SDG Group was acquired in 2020 by the ALTEN Group. SDG Group now serves as the global D&A and Al hub for ALTEN, which brings additional synergies in the area of engineering, global clients and outsourcing capabilities.

D&A-specific:

- Fractal Analytics combines AI expertise, engineering capabilities with behavioral science and design to support organizations in their decision making. It provides D&A services, solutions and products such as Eugenie.ai (for sustainable AI), Qure.ai (medical imaging), Senseforth.ai (conversational platform) and Crux Intelligence (AI for business users).
- TheMathCompany helps organizations monetize their data by building custom applications. With an industry-agnostic approach spanning problem-solving across retail, consumer products, healthcare, automotive, and more, the firm leverages a hybrid model to custom-develop Al applications, using its next-generation Al platform, Co.dx.

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Evaluation Criteria

Ability to Execute

The Ability to Execute dimension of our analysis evaluates the service provider's capacity to implement the services described in its strategic plan and in clients' proposals and contracts, as well as its track record in doing so. It encompasses the depth and breadth of services offered. Ability to Execute includes the service provider's demonstrated ability to satisfy clients' needs through a combination of tools, techniques, methodologies, alliance partners, and vertical and process expertise.

- Product or Service: Core solutions and services that compete in and/or serve the defined market. This includes current solution and service capabilities, quality, feature sets, and skills. These can be offered natively or through partnerships as defined in the Market Definition and detailed in the subcriteria.
- Overall Viability (Business Unit, Financial, Strategy, Organization): Financial viability includes an assessment of the organization's overall financial health, as well as the financial and practical success of the business unit. We assess the likelihood of the organization to continue to offer and invest in the solutions/services, as well as the solution/service position in the current portfolio.
- Sales Execution/Pricing: The organization's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.
- Market Responsiveness/Record: The ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness to changing market demands.
- Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message in order to influence the market, promote the brand, increase awareness of solutions/services and establish a positive identification in the minds of customers. This "mind share" can be driven by a combination of publicity, promotional, thought leadership, social media, referrals and sales activities.

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- Customer Experience: Solutions and services and/or programs that enable customers to achieve anticipated results with the solutions and services evaluated. Specifically, this includes quality supplier/buyer interactions, technical support or account support. This may also include ancillary tools, customer support programs, availability of user groups and service-level agreements.
- Operations: The ability of the organization to meet goals and commitments. Factors
 include quality of the organizational structure, skills, experiences, programs, systems
 and other vehicles that enable the organization to operate effectively and efficiently.

Table 1: Ability to Execute Evaluation Criteria

Evaluation Criteria 🕠	Weighting ↓
Product or Service	High
Overall Viability	Low
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	Low
Customer Experience	High
Operations	High

Source: Gartner (February 2022)

Completeness of Vision

- Market Understanding: Ability to understand customer needs and translate them into solutions and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.
- Marketing Strategy: A clear, differentiated messaging consistently communicated internally, externalized through social media, advertising, customer programs and positioning statements.
- Sales Strategy: A sound strategy for selling that uses the appropriate networks, including direct and indirect sales, marketing, service and communication, and partners that extend the scope and depth of market reach, expertise, technologies, services and their customer base.
- Offering Strategy: An approach to solution development and service delivery that emphasizes market differentiation, functionality, methodology and quality of business outcomes as they map to current and future requirements.
- Business Model: The design, logic and execution of the organization's business proposition to achieve continued success.
- Vertical/Industry Strategy: The strategy to direct resources (sales, delivery, development), skills and solutions to meet the specific needs of individual market segments, including verticals.
- Innovation: Direct, related, complementary and synergistic layouts of resources,
 expertise or capital for investment, consolidation, defensive or preemptive purposes.
- Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market.

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Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria \downarrow	Weighting ↓
Market Understanding	High
Marketing Strategy	Low
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	High
Innovation	High
Geographic Strategy	Medium

Source: Gartner (February 2022)

Quadrant Descriptions

Leaders

Leaders provide offerings that meet demand in D&A services and demonstrate the vision necessary to sustain their position as requirements for asset-based consulting and services evolve in the market. Leaders innovate in products, services and pricing, take chances and typically respond to a wide market audience by supporting broad market requirements in an attempt to help shape the market. This includes delivering business-outcome-focused D&A solutions across all core capabilities. However, Leaders may fail to meet the specific needs of more specialized segments (for example, technology, application, geographic and process segments).

Challengers

Challengers have a strong Ability to Execute and match their own offerings to what they see their own clients requesting, which may be lagging global demand or the emerging market direction. Although Challengers typically have sufficient scale and financial resources, they may lack the breadth of vision, innovation or overall ability to impact market development. Challengers can become Leaders if their vision develops in concert with their ability to maintain a high level of execution. This market is dynamic, and many providers are investing to cover global breadth and required changes in capabilities.

Visionaries

Visionaries align with Gartner's view of how the market is evolving, but they are still building proof points of their ability to deliver against that vision. This may reflect a competitive strategy, such as selling an innovation ahead of mainstream demand or aligning execution capabilities with that innovation, or it may reflect early attempts at differentiating in the market.

Niche Players

Niche Players do well in a segment of the market or have limited ability to innovate or outperform other service providers due to the high investment demands required to compete across all aspects of the Gartner Business Analytics Framework. This may be because they focus on a domain, vertical market, service offering or geographic region, or because they do not offer a broad range of services for competing platforms. Their Ability to Execute can be affected by the focus areas of expertise, as well as customer perception of services. Niche Players are often in the process of reinvesting in their offerings and developing the scale to execute for a broader set of clients.

Context

What Defines a D&A Service Provider?

"Data and analytics" is a broad term. It includes the infrastructure, applications, tools and best practices that enable access to — and analysis of — information to improve and optimize decisions and performance.

There are thousands of service providers — in a wide variety — that specialize in data management, data governance, data warehousing and BI platforms, advanced analytics for a function or process, AI and ML, IoT analytics, or analytical applications. Additionally, most D&A platform vendors have professional services that specialize in their own product portfolios.

The Magic Quadrant establishes the competencies of decision management capabilities, analytics capabilities and information management capabilities within the broader expectations of what a full-service provider offers. Such offerings include strategy consulting; a blend of process, industry, application and technology; program and project management skills; and organizational change management.

Service providers help customers combine these different elements into a unified portfolio. Increasingly, components of solutions are software assets that service providers have built or acquired, and now maintain.

How to Use This Magic Quadrant

When considering advisory and implementation partners for a request for information or request for proposal, Gartner advises organizations against simply selecting vendors that appear in the Leaders quadrant. All selections should be buyer-specific, and vendors from the Challengers, Niche Players or Visionaries quadrants may be better matches for certain business goals and solution requirements. A project's specific criteria and requirements are likely different from the inclusion criteria for this Magic Quadrant.

Furthermore, don't overlook other service providers not evaluated in this Magic Quadrant, as some may present better alternatives for your business requirements. (See the Honorable Mentions section for a few examples and Other Research Areas at the beginning of this document.)

Magic Quadrants Are Snapshots

This Magic Quadrant represents a snapshot of the D&A service market at a particular point in time. Gartner advises readers not to compare the placement of vendors from prior years. The market is changing — vendor acquisitions, partnerships, solution development and alternative delivery are evidence of this — so the criteria for selecting and evaluating vendors continue to evolve. Our assessments take into account the vendors' current offerings and overall strategies, as well as their future initiatives. We also factor in how well vendors are driving market changes or adapting to changing market requirements.

Market Overview

Reengineered Decision Making

Decision making is a core capability for every organization, and it is becoming more complex. Decisions are becoming more connected, more contextual and more continuous. D&A leaders must prepare to reengineer decision making, and ultimately make business decision making a competitive differentiator. Data and analytics leaders need support from external D&A service providers to prepare for the required transformation and help create business value and innovation. There is a lot of data and technology involved in reengineering decision making. Operational decisions become a lot more contextual, requiring high levels of automation. Tactical and strategic decisions become more automated. In all of these areas, an external service provider needs to provide support. Whether it is with strategic services, business consulting or technical services, organizations need help building a D&A environment that is ready for reengineered decision making.

Enhanced Resources and IP

Talent is scarce and attrition rates are high. Data and analytics leaders require the right people and skills to accelerate digital business and drive measurable outcomes. Sourcing talent from service providers can be a quick fix, but changing how you attract and retain requires a long-term talent strategy. D&A service providers also face the same talent shortage. One way they are mitigating this is with an increased up- and reskilling of existing resources. Another approach is to replace talent with automation. In other words, consultants are replaced with software or assets. Providers do this by capturing human expertise (like data integration) and human understanding (like domain expertise) in the form of pieces of software, IP or platforms. Those reusable building blocks or service components allow them to scale and accelerate their delivery.

Clients can also benefit from software-defined services ("servware"), as it offers reduced TCO (less coding, custom development), increased speed and agility (accelerated outcomes), continuous upgrades, reduced risk (proven), and improved accuracy (tested). Servware often comes with a predictable pricing model, like pay-per-use, and often is cloud-centric. Service enrichment through products will continue. Service providers are coming up with mixed offerings of prebuilt, ready-to-deploy assets that are often bundled with services.

Data Foundation

Modern data foundations are often based on data fabric. Data fabric is a design concept that serves as an integrated layer (fabric) of data and connecting processes. The fabric presents an enterprisewide coverage of data across applications that is not constrained by any single platform or tool restrictions. A data fabric follows a metadata-driven approach. Active metadata discovery and semantics inference are key new aspects of a data fabric, compared to traditional approaches. A data fabric is composable by design. It is made up of components that can be selected and assembled in various combinations. Designing a data fabric requires understanding your own maturity as well as the maturity of the various components. External service providers can help with consolidating passive metadata, adapting to knowledge graphs, activating metadata using Al/ML and planning the required orchestration services.

With an increased demand for quicker, faster, better D&A solutions, organizations need to change the way they work. DataOps (see Introducing DataOps Into Your Data Management Discipline) allow D&A leaders to shift toward a more continuous delivery of data to the organization by leveraging techniques from agile application development and deployment (DevOps) in data and analytics work. As this is new for many organizations, D&A leaders often turn to external service providers for assistance; these providers can also bring key roles (DBAs, data engineers, integration architects, data stewards, etc.) and infrastructure to support DataOps initiatives.

Legacy data environments are often no longer able to meet the demand for new ways of applying data to the business process, such as through Al initiatives. Clients need to rethink their data and analytics platform requirements and cloud deployment approaches to achieve desired business outcomes. External D&A service providers can help develop a robust data and analytics platform with enterprise access to data in a governed fashion. Offerings such as data estate modernization have become standard in the portfolio of services and solutions, and service providers often collaborate with cloud hyperscalers, such as Amazon Web Services (AWS), Google Cloud Platform (GCP) and Microsoft Azure.

Responsible Al

Data and analytics leaders need to increase their investments in artificial intelligence. However, with great power comes great responsibility. Al initiatives need to tackle issues such as bias in algorithms or they will fail. But not all organizations understand how to build trust in their Al models, which prevents them from realizing value. They often turn to external service providers to help set up an ethical framework for their Al practices. They also need support in convincing internal and external stakeholders, such as their existing or future clients, to trust Al and demonstrate how Al is being used in a transparent way. "Responsible Al" is emerging as an umbrella term for building organizational and societal trust in Al solutions, fairness and explainability for transparency, bias mitigation, accountability and regulatory compliance.

Data-Sharing Models

Knowledge equals power. Unfortunately, in some cases knowledge and power have led to a resistance to data sharing and siloed behavior, which is blocking a further acceleration of digital business. D&A leaders are only now shifting toward and promoting data sharing to support their data-driven transformations, but don't know how to share data at scale and with trust.

Another challenge is that D&A leaders see data sharing as a data management function, rather than a business capability. External service providers can help build a data-sharing model that links data with business outcomes, often with the support of data-sharing platforms or data marketplaces and exchanges. These help organizations explore data and offer services like data discovery, preparation and data cataloging features. This makes it easier for organizations to find or create and to curate the right data to match their use case. Providers can also help inventory their data assets, develop data products that can be monetized and generate increased value from (predictive) analytics.

Evidence

¹ 2021 Gartner View From the Board of Directors Survey: The survey was conducted to find out how board of directors view digital-business-driven business model evolution and the impacts of that on their enterprises. It also helps understand the BoDs' expectations of executive leaders and how BoDs translate their board focus to actual executive actions and overall corporate performance.

The survey was conducted online from May through June 2020 among 265 respondents from the U.S., EMEA and Asia/Pacific, out of which 38 respondents participated from Asia/Pacific. Companies were screened to be midsize, large or global enterprises. Respondents were required to be a board director or a member of a corporate board of directors. If respondents serve on multiple boards, they answered for the largest company, defined by its annual revenue, for which they are a board member.

The survey was developed collaboratively by Gartner analysts and the Research Data, Analytics and Tools team.

Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect sentiments of the respondents and companies surveyed.

² The 2020 Gartner Chief Data Officer Study was conducted to explore the business impact of the CDO role and/or the Office of the CDO. The research was conducted online from September through November 2020 among 469 respondents from across the world. Respondents were required to be the highest-level data and analytics leader, the chief data officer, the chief digital officer, or the leader with data and analytics responsibilities in IT or in a business unit, outside of the IT organization. The survey sample was gleaned from a variety of sources (including LinkedIn), with the greatest number coming from a Gartner-curated list of over 3,450 CDOs and other high-level data and analytics leaders.

The analysis in this document is based on information from several sources, including the following:

- Extensive data on functional capabilities, customer base demographics, financial statuses, pricing and other quantitative attributes gained via an RFI process engaging providers in this market.
- Interactive vendor briefings, during which the vendors provided Gartner with updates on their strategy, market positioning, recent key developments and roadmap.
- Feedback about services and providers captured during conversations with users of Gartner's client inquiry service.
- Feedback from clients about services provided as captured in Gartner Peer Insights and client calls.
- Market share and revenue growth estimates developed by Gartner using primary research, including direct conversations with vendors and customers, and secondary research, such as financial reports, marketing material and social media analysis.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

Document Revision History

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Magic Quadrant for Data and Analytics Service Providers, Worldwide - 28 February 2018

Magic Quadrant for Business Analytics Services, Worldwide - 14 February 2017

Magic Quadrant for Business Analytics Services, Worldwide - 22 September 2015

Magic Quadrant for Business Analytics Services, Worldwide - 17 July 2014

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

How Markets and Vendors Are Evaluated in Gartner Magic Quadrants

How Chief Data Officers Can Scale the Value of Data and Analytics by Working With External Service Providers

Tool: RFP Template for Engaging With Data & Analytics Service Providers

Gartner Peer Insights 'Lessons Learned': How to Choose the Right Data and Analytics Service Providers

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Table 1: Ability to Execute Evaluation Criteria

High
Low
Medium
High
Low
High
High

Source: Gartner (February 2022)

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Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria \downarrow	Weighting $_{\downarrow}$
Market Understanding	High
Marketing Strategy	Low
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	High
Innovation	High
Geographic Strategy	Medium

Source: Gartner (February 2022)

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