

Magic Quadrant for Data and Analytics Service Providers

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Explore the Interactive Version

Data and analytics service providers enable the delivery of selective initiatives focused on trusted data-driven insights and decision making for business leaders. This research helps guide data and analytics leaders in the evaluation phase of service providers.

This Magic Quadrant is related to other research:

Strategic Planning Assumptions

By 2023, over 75% of large organizations will hire artificial intelligence (AI) specialists in behavior forensic, privacy and customer trust to reduce brand and reputation risk.

By 2023, AI-enabled automation in data management will reduce the need for IT specialists by 20%. Through 2023, employers with data-for-good programs will have 20% higher attraction and retention rates for Generation Z data and analytics professionals than those that do not.

Market Definition/Description

Data and analytics (D&A) services are consulting, implementation and managed services for decision, analytics and information capabilities, executed on a technology platform that supports an organization's fact-based decision making. Solutions contain information analysis and information management competencies, with commercial off-the-shelf and proprietary assets. Information analysis solutions focus on use cases and outcomes; information management solutions focus on information infrastructure and governance.

The D&A services market is very similar to the overall services market — being highly fragmented. There are thousands of system integrators (SIs), consultancies and other service providers that offer D&A services and solutions. This Magic Quadrant assesses 20 leading providers in this space. Their selection is based on specific inclusion criteria, support for critical capabilities, their ability to scale D&A for their clients, and worldwide presence. We evaluate full-service providers for their strategy, implementation and managed service offerings over a diverse range of information management, decision and analytics capabilities. Clients can use this Magic Quadrant to identify and evaluate providers for their own organization.

Each provider has its own strengths and cautions, and may be more suitable for certain types of engagements, clients and industries than others. It is therefore quite possible that a provider outside of the Leaders quadrant is 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 may be a better fit for your organization (see the Honorable Mentions section further down and Other Research Areas just below). Data and analytics leaders can also consider using the professional services of their software vendor.

Vendor Services and Capabilities

D&A services include the following:

- **Consulting and implementation services** for strategy, design, development, deployment and integration:
 - *For specific processes, functions, applications or initiatives in user organizations.* These include program strategy and definition, data preparation, tool and application evaluation, program development and management (implementation), training, scientific method for discovery and exploration, engineering solutions for access (monitoring), and organizational change (people and processes). They also include analyzing information (data) use, governance of information (data management), and ethical use of data and analytics.
 - *To optimize an enterprise's processes and integrate related technology, applications and platforms.* Processes include application-related work to enable D&A systems through information analysis and information management initiatives.
- **Managed services** for commercial and proprietary platforms, and solution services that provide effective alignment and integration based on a proven framework such as Gartner's Business Analytics Framework (see "Market Guide for Data and Analytics Service Providers"). These include provision of support services, analytics outsourcing, a D&A platform as a service and D&A solutions as a service.

This Magic Quadrant evaluates providers specifically on the execution of D&A consulting, implementation and managed services, as well as on the total 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 data and analytics 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, breadth of capability, industry or domain expertise, technical and product expertise, geographic coverage, and local expertise are key differentiators. Finally, we consider business transformation skills, program management, change management and governance to be critical.

This Magic Quadrant credits providers for innovations in design, delivery and deployment of D&A; and the application of innovative business and operating models, best practices, methodologies and approaches.

Market Trends

The market for D&A service providers continues to mature and grow both in revenue and size (see "Scenarios for the IT Services Marketplace, 2019"). As a result, the number of service providers also increases, and differentiation becomes more critical. Many service providers are changing their business and operating models. In some areas (i.e., MDM) larger SIs use smaller/specialist SIs regionally, supplementing bench strength to meet demand on an as-required basis.

The global full-service providers (covered in this Magic Quadrant) are sought for their scalable services. However, a large number of clients also seek out pure-play D&A service providers that can offer more specialized services. A prevailing approach to the growth of the former has been their acquisitions of some of these pure-play service providers. Gartner expects that this will continue and drive market consolidation.

Due to the extensive fragmentation of the market, this Magic Quadrant focuses on the largest volume segment. Thus, there is a large number of 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 portfolio. In order 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 "Market Guide for Data and Analytics Service Providers."

There is an increasing trend toward the convergence of once separate D&A software and services into combined, customizable and reuseable D&A assets (see Note 2 on the definition of servware). 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). See also the Market Overview section in this document.

A continuing trend from last year is the focus on artificial intelligence (AI) — specifically data science (DS) and machine learning (ML) — capabilities from vendors, both in their services and products. Some service providers have even repositioned themselves as AI service providers, although they still deliver traditional D&A services like extraction, transformation and loading (ETL) or business intelligence (BI).

Besides advising clients on the ethical use of data, analytics and AI, a large portion of vendors in this Magic Quadrant have also established their own data-for-good programs. "Data for good" is a movement in which people and organizations transcend organizational boundaries to use data to improve society. Service providers can leverage such initiatives to better compete for D&A talent, and to grow a more ethical internal culture.

Magic Quadrant

Figure 1. Magic Quadrant for Data and Analytics Service Providers

Source: Gartner (February 2020)



Vendor Strengths and Cautions

Accenture

[Accenture](#) is a Leader due to its breadth and depth of digital and D&A capabilities, and its ability to scale D&A (including AI) with a mature, asset-based services approach, which helps clients transform their business.

Accenture Applied Intelligence, part of Accenture Digital, consists of AI, D&A and automation. It combines the expertise of Accenture Strategy and Accenture Consulting to build new capabilities, create new strategies and proprietary solutions, and provide implementation and support for clients across business functions, industries and geographies.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 41,500 worldwide; the geographic breakdown of its FTEs is North America (27%), EMEA (30%) and APAC (43%). Accenture has more than 9,000 data experts and 3,000 data scientists.
- *D&A service revenue:* \$7.5 billion; the geographic breakdown by revenue is North America (40%), EMEA (45%) and APAC (15%).
- *Top five industries by D&A service revenue:* Banking, utilities and energy, telecom, insurance, and life sciences.
- *Top five software partners by D&A service revenue:* Microsoft, Amazon Web Services (AWS), SAP, Google and Oracle.
- *Revenue breakdown of D&A services:*
 - 60% from project-based services
 - 40% from multiyear managed services

The vendor differentiates through its integrated digital business and technology services, proprietary solutions, extensive ecosystem of capabilities and asset-based services, and its ability to deliver clients' business outcomes at scale and speed.

Strengths

- **Integrated digital business and technology services:** Accenture provides end-to-end delivery of D&A services by leveraging the strengths across Accenture Strategy, Accenture Consulting, Accenture Digital, Accenture Technology and Accenture Operations. Its strong capabilities in strategy, design, Internet of Things (IoT), security, application services and cloud — combined with industry and business process expertise, AI, D&A and automation — allow it to support various phases of clients' transformation journeys.
- **Ability to scale impact with speed:** Accenture continues to develop applied intelligence solutions around customer engagement, supply chain, asset management, financial crime detection and virtual workforce by combining data supply chain, AI, analytics, automation, and strategy and consulting. These solutions are designed to plug in to Accenture Insight Platform+ (AIP+) to scale business impact and improve speed to deployment, connectivity, confidence, intelligence and action. AIP+ is a collection of Accenture software assets with a managed service architecture. It is also a platform accelerator that can be plugged into clients' businesses and works with their existing assets and native cloud service providers.
- **Extensive ecosystem of capabilities:** Accenture has one of the most extensive ecosystems of capabilities in this Magic Quadrant. It uses the "borrow, buy and build" approach to combine its own proprietary solutions and partner solutions. "Borrow" includes investments through Accenture Ventures in companies at the regional, local and specific capability level. "Buy" focuses on growing new talent and technologies, such as search technologies and data intelligence, through acquisitions. "Build" includes Accenture's proprietary IP assets, accelerators and tools such as AIP+ and more than 270 advanced analytics apps.

Cautions

- **Vendor evaluation process and contract negotiation:** Some survey respondents indicated that the vendor evaluation process and contract negotiation process can be long and cumbersome due to Accenture's size and organizational complexity.
- **Collaboration:** Some reference clients indicated that Accenture should be more collaborative by better aligning their requirements with its own subject matter expertise. Reference clients also cited that Accenture can be more proactive in recommending new ideas and the use of new technologies.

- **Premium pricing:** Accenture is not the most competitive provider for smaller-scale enterprises that do not require its full-spectrum services, or where cost is a key requirement. It scored below the group average and among the lowest in total cost of contracted services.

Atos

[Atos](#) is a Challenger and continues its strategy of positioning D&A (including AI) as one of its growth pillars to drive digital business for its clients. The acquisition of Syntel has given Atos broader presence in North America and India.

D&A is organized in the vendor's Codex service line, but is also pervasively included in other parts of the business. Atos combines D&A technology, expertise and partnerships with an industry focus and vertical go-to-market strategy.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* Atos has 9,345 FTEs worldwide; the geographic breakdown of its FTEs is North America (2%), Latin America (1%), EMEA (33%) and APAC (64%).
- *D&A service revenue:* \$1.4 billion; the geographic breakdown by revenue is North America (11%), Latin America (3%), EMEA (78%), APAC (6%) and the remainder spread across other regions.
- *Top five industries by D&A service revenue:* Public sector, defense, banking, consumer products and retail, and energy and utilities.
- *Top five software partners by D&A service revenue:* SAP, Informatica, Microsoft, Google and open-source software.
- *Revenue breakdown of D&A services:*
 - 43% from project-based services
 - 30% from multiyear managed services
 - 27% from other D&A-related services (platform license, as-a-service product)

Atos supports a global portfolio of D&A-enabled technology transformation services and solutions through a diverse partner ecosystem.

Strengths

- **Alliances and partnerships:** Atos has established a diverse partner ecosystem with a joint go-to-market strategy and solution development. It works closely with Google Cloud on delivering AI-enabled cloud solutions through their combined global AI labs. Powered by the BullSequana S server, the company developed the Atos Codex Datalake Engine, including data management software, based on Cloudera Enterprise. It also has a set of services and solutions (ready-to-go applications) for MindSphere, the open IoT operating system from Siemens.
- **Information architecture and innovative technologies:** Reference clients appreciate Atos for its continued focus and expertise in the areas of information architecture and data platform development. For example, Codex AI Suite, with machine learning at its core, accelerates the customized development and deployment of models and use cases. This expertise is partly based on the efforts from its own scientific community, which create a vision for the future of trends and technology in business. Other accelerators include R&D labs, the Atos Business Technology and Innovation Centers (BTICs) and collaboration with startups, universities, research institutes and clients.
- **Data and analytics (AI) governance and ethics:** Atos has developed a comprehensive and multidisciplinary approach to D&A governance and ethics, both internally with a code of ethical behavior and externally. For example, the company developed an ethical AI framework to ensure that, by design, it acts responsibly when creating AI-enabled systems.

Cautions

- **Geographic presence:** Atos has a strong presence in Europe, has grown its D&A presence in North America, but has very limited presence in Latin America and is mostly valued for its SAP and infrastructure expertise in APAC. The vendor's ambition to become a leader in its home market and a global player has been boosted by its acquisition of service provider Syntel.
- **Business change management and acumen:** Reference customers scored Atos lower than its peers for business change management and business acumen, and value the company more for its expertise in application services. Atos is mitigating this shortcoming by hiring industry domain experts and developing prebuilt vertical solutions and accelerators.
- **Service delivery:** Focusing on consistent delivery is a cornerstone of the Atos approach, but some customers indicated that this robust project engagement methodology and consequent dialogues has sometimes led to delays and extra costs.

BearingPoint

[BearingPoint](#) is a Niche Player due to its strong focus on data governance to drive sustained business value for clients.

BearingPoint's D&A is supported through its consulting practice, leveraging business advisory, implementation, industry and technology expertise. It is also supported by IP assets, digital platforms and regulatory technology solutions.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 2,400 worldwide; the geographic breakdown of its FTEs is North America (11%), EMEA (55%), Latin America (1%) and APAC, including Japan (33%).
- *D&A service revenue:* \$538 million; the geographic breakdown by revenue is North America (17%), EMEA (57%), Latin America (2%) and APAC, including Japan (24%).
- *Top five industries by D&A service revenue:* Banking, insurance, automotive, retail and consumer products.
- *Top five software partners by D&A service revenue:* Microsoft, SAP, AWS, Oracle and IBM.
- *Revenue breakdown of D&A services:*
 - 93% from project-based services
 - 5% from multiyear managed services
 - 2% from other D&A-related services

BearingPoint differentiates through addressing clients' information readiness, understanding their business goals and capabilities, and using a data-focused approach and data enablers to deliver business outcomes. It partners with West Monroe Partners, ABeam Consulting and gA (Grupo Assa) in joint projects and share IPs to extend global coverage.

Strengths

- **Integrated D&A operating model:** BearingPoint has an integrated D&A model that leverages expertise from consulting, business services, digital platforms and regulatory technology. Its focus on generating strategic and operational added value from D&A, data privacy and protection, as well as regulatory compliance, underpins the company's delivery of sustained business outcomes for clients.
- **Investment in IP assets:** BearingPoint has invested in IP assets that can be used in D&A and other consulting engagements to quickly address clients' business challenges. These IP assets include HyperCube (a multidimensional D&A platform that can take huge volumes of data); Infonova Digital Business Platform (a cloud-based platform to help companies co-invent and co-innovate

within a partner ecosystem); Abacus (a solution that enables banks and regulators to monitor and manage regulatory data quality); and Factory Navigator (an online platform leveraging a digital twin in manufacturing or supply chain).

- **Data science and AI:** BearingPoint's D&A service offerings aim to cover the full data value chain including data advisory, data science and AI, and data foundry services. Reference customers indicated that BearingPoint has strong skills in data science and AI. In fact, the vendor scored the highest in this category from the customer reference survey out of all vendors in this Magic Quadrant.

Cautions

- **Limited managed service:** BearingPoint has a strong focus on project-based D&A service engagement and is developing as-a-service offerings and integrating them into its operating model. However, compared with other service providers in this Magic Quadrant, BearingPoint's D&A managed service business is the smallest.
- **Proactive guidance:** Reference clients' overall satisfaction with BearingPoint's services was mixed. While they were generally happy with its expertise in D&A strategy and solution implementation, some clients mentioned a need for more proactive guidance from the vendor. This includes providing more frequent feedback and innovative ideas, and assuming a more active leading role in subject matter expertise.
- **Geographic coverage:** BearingPoint and its partners cover different geographic regions and use each other to support global clients. But each partner may have a different focus and capabilities. BearingPoint mainly covers Europe, West Monroe Partners covers North America, gA covers Latin America, and ABeam Consulting covers APAC (mostly Japan). Buyers must evaluate the strengths and scale of the partners relative to their local or multinational requirements alongside the expertise that BearingPoint itself brings.

Capgemini

[Capgemini](#) is a Leader in this Magic Quadrant. The provider has updated its portfolio of D&A services to meet changing market demand with a different operating model and innovative solutions. D&A is organized in Capgemini's global Insights & Data service line, which serves as a hub for collaborating with, among others, its industry sectors and Invent consulting practice.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 23,000 worldwide; the geographic breakdown of its FTEs is North America (9%), EMEA (17%), India (67%) and the rest of the world (7%).
- *D&A service revenue:* \$2,3 billion; the geographic breakdown by revenue is North America (28%), EMEA (61%), APAC (9%) and the rest of the world (2%).
- *Top five industries by D&A service revenue:* Financial services; manufacturing and life sciences; public services; consumer products and retail; telecom, and media and entertainment.
- *Top five software partners by D&A service revenue:* SAP, Microsoft, IBM, Oracle and Informatica.
- *Revenue breakdown of D&A services:*
 - 60% from project-based services
 - 35% from multiyear managed services
 - 5% from other D&A-related services (platform license, as-a-service product)

Capgemini engages its clients with relevant thought leadership and research, and brings innovation to its D&A delivery.

Strengths

- **Innovation in delivery:** Capgemini's Perform AI portfolio supports business transformation and innovation by delivering trusted and ethical AI at scale. The company does this through services, accelerators and targeted industry solutions and use cases, which are also consumable through the "890 by Capgemini" exchange. This catalogued platform supports the exchange of data, insight and outcomes for the client's own organization, partner ecosystem and public third parties.
- **Cross-group collaboration:** Capgemini's global Insight & Data service line has intensified its collaboration with other parts of the Capgemini group. For example, it works with the vendor's cloud infrastructure services business unit for the development of D&A foundations. Most notable is its collaboration with the Invent practice, which combines consulting, digital (via the Idean and Fahrenheit 212 acquisitions) and data science capabilities (via the LiquidHub acquisition). The service line also works with Sogeti, Capgemini's technology and engineering brand for AI.
- **Balancing global resources:** Capgemini has a large onshore presence in Western Europe and North America and is building up its APAC presence, with a special focus on growing in China. The vendor combines onshoring and offshoring consultants in a hybrid sourcing model, bringing economies-of-scale advantages and effectively lowering clients' total cost of ownership. It has also doubled up on future talent and has implemented extensive training programs to upskill its workforce.

Cautions

- **Asset-based consulting:** To mitigate potential staffing issues, clients look for providers that have developed repeatable methodologies, reusable frameworks and other artefacts to augment and, in some cases, replace their resources. Capgemini scored slightly below the group average for use of these accelerators. In order to improve its operational rigor, the company needs to more aggressively position accelerators into their engagements.
- **Contracting and commercial terms:** With the delivery of D&A shifting from predominantly labor-based services (consultants) toward asset-based services (platforms and solutions), it becomes more difficult for clients to correctly understand the commercial terms for these engagements. Capgemini scored below the average of vendors in this Magic Quadrant for its contracting and outcome-based commercial terms.
- **Managed services:** Although clients are generally satisfied with Capgemini-managed services, they appreciate the vendor more for its development services. Overall, it seems that the vendor has limited visibility with Gartner clients when it comes to its managed D&A service offerings (multiyear services, defined and governed by SLAs). Capgemini is currently developing more automation capabilities and industry-specific assets and accelerators, thus improving client awareness and appreciation of its managed services.

Cognizant

[Cognizant](#) is a Challenger and is transforming its services to better match the changing customer demand for more AI. It is doing this with a new management team and increased market focus. D&A is organized in the vendor's global Cognizant AI & Analytics practice.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 48,000 worldwide, mostly in India offshore centers; the geographic breakdown of its FTEs is North America (33%), EMEA (8%) and APAC (59%).
- *D&A service revenue:* \$5,1 billion; geographic breakdown by revenue is North America (78%), EMEA (18%) and APAC (4%).
- *Top five industries by D&A service revenue:* Banking and insurance, healthcare (both payer and provider) and life sciences, retail, and consumer goods.

- *Top five software partners by D&A service revenue:* Informatica, Cloudera, Microsoft, Tableau and IBM.
- *Revenue breakdown of D&A services:*
 - 72% from project-based services
 - 28% from multiyear managed services

Cognizant has shifted toward an AI-focused approach for the future of D&A.

Strengths

- **AI capabilities:** Cognizant has one of the most distinctive visions for AI of the service providers in this group, emphasizing the entire data-to-decision process around AI. Overall, there is no question that AI will be significant in D&A, and Cognizant should be well placed when this need goes mainstream. Cognizant's thinking on topics such as ethical use of AI and AI governance is better developed than most competitors, and even some AI software providers.
- **Ability to scale:** Reference customers consistently praised the quality of the Cognizant team they were working with and the vendor's ability to rapidly scale teams with appropriate resources as the project demands. It should be noted, however, that some references felt that Cognizant's processes could be more flexible.
- **Technology skills:** Cognizant has a large proportion of its service delivery staff in its India offshore centers, but also has regional delivery centers — for example, in North America. Reference customers praised the vendor's ability to bring in consultants with the right amount of technical enablement capabilities and technical architecture skills, especially for their data modernization projects.

Cautions

- **Value proposition:** Cognizant has established AI as a clear strategic direction but is out ahead of current needs of the market. Although most organizations have some sort of AI initiative underway or planned, these projects are often relatively niche and mainstream adoption of AI is still several years away. With such a strong focus on AI, Cognizant is struggling to establish a clear value proposition for its other capabilities.
- **Limited cross-industry experience:** Half of Cognizant's historical revenue comes from banking, insurance and financial services. Recently, the vendor hired chief digital officers across all major industries to expand coverage and industry-specific knowledge, but clients should be diligent to ensure business process knowledge and depth when evaluating Cognizant outside of its historically strong industries.
- **Mixed appreciation:** Although Cognizant has traditionally struggled with nontechnology services such as business process transformation and business change management, it also scored lower than its peers in technology-centric areas such as asset-based consulting, which should be a strength. The vendor is making investments and acquisitions to remedy this.

Deloitte

[Deloitte](#) is a Leader. Deloitte helps its clients to become insight-driven organizations by augmenting their consultants with digital assets, supported by an expanding ecosystem of partners.

D&A capabilities are organized in the Deloitte global AI and Analytics practice.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 33,200 worldwide; the geographic breakdown of its FTEs is North America (57%), Latin America (3%), EMEA (17%) and APAC (23%).

- *D&A service revenue:* \$7,7 billion; the geographic breakdown by revenue is North America (60%), Latin America (2%), EMEA (22%) and APAC (16%).
- *Top five industries by D&A service revenue:* Financial services (including banking), healthcare and life sciences, public services, consumer products and retail, and high tech.
- *Top five software partners by D&A service revenue:* Google, AWS, Oracle, SAP and Informatica.
- *Revenue breakdown of D&A services:*
 - 58% from project-based services
 - 37% from multiyear managed services
 - 5% from other D&A-related services (platform license, as-a-service product)

Deloitte combines a strategy and AI-led approach with deep industry and domain expertise, delivered by humans and machines.

Strengths

- **Creating value with human and digital FTEs:** Deloitte has started a “cognitization program,” the aim of which is to make reusable components to both increase efficiency and value in consultants’ implementation efforts and to augment them in the delivery of D&A. These digital assets come in various shapes and forms, including data, analytics and AI building blocks, platforms (like ConvergeHEALTH for healthcare) and industry solutions (like WorkEDGE for workforce or FinservDEEP for financial services). The company also works with Experfy to make use of freelance analytics and AI resources.
- **Strategy- and AI-led approach:** Deloitte’s approach to data, analytics and AI is often strategy led, using its consultants’ deep industry and domain expertise. For this, it brings together business transformation capabilities from its own consulting, risk, tax, audit and assurance businesses, and combines these with its technology skills to deliver actionable outcomes for specific use cases.
- **Governance services:** Reference customers value Deloitte for its expertise in providing governance services for D&A. The company has developed its “trustworthy AI framework,” making use of its risk, audit and assurance background. The framework consists of six parts and can, for example, help diagnose the “ethical health” of clients. In addition, it addresses areas like customer privacy, AI systems transparency and policy adherence.

Cautions

- **Member firms:** Deloitte has a global AI and analytics practice that supports a unified portfolio. The company is organized in a network of regional member firms, but is globalizing from individual country member firms to regional clusters. Some companies have an existing audit relationship that limits collaboration with Deloitte on D&A.
- **Premium pricing:** Price is still a top selection criterion and some Gartner clients have indicated that Deloitte can charge a premium for its services. Its market pricing is above the average for vendors in this Magic Quadrant, as supported by reference customer survey data.
- **Managed services:** In the past, Deloitte has been mostly focused on delivering strategic and implementation services and less on managed services, leading to lower scores from reference customers for this capability. Deloitte has embarked on a strategy to provide more multiyear services, for which it has updated its operating model, capacity planning and resourcing model.

DXC Technology

[DXC Technology](#) is a Niche Player. The vendor’s analytics practice is well-positioned to help customers with their D&A infrastructure and application development.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 11,400 worldwide; the geographic breakdown of its FTEs is North America (13%), Latin America (6%), EMEA (21%) and APAC (60%).
- *D&A service revenue:* \$1.5 billion; the geographic breakdown by revenue is North America (43%), EMEA (41%), Australia and New Zealand plus APAC (11%), Japan (3%) and the remainder spread across other regions..
- *Top five industries by D&A service revenue:* Public sector, banking and insurance, high tech, consumer products, and travel and transportation.
- *Top five software partners by D&A service revenue:* Microsoft, SAP, IBM, AWS and SAS.
- *Revenue breakdown of D&A services:*
 - 60% from project-based services
 - 35% from multiyear managed services
 - 5% from other D&A-related services (platform license, as-a-service product)

DXC is well-known for its scalable resources and industrialized delivery. The vendor partners with leading technology providers for D&A.

Strengths

- **Technical expertise:** Reference customers and survey scores indicate that DXC is appreciated for its D&A infrastructure, application development and application management capabilities. The vendor also scored well in areas such as technology architecture and system integration experience, ensuring security and governance throughout.
- **Industrializing delivery:** DXC takes an industrialized approach to D&A technology and solution delivery. The company provides D&A frameworks, templates, methodologies and other accelerators as part of its delivery. DXC's Global Methods is a full life cycle toolkit for strategy and planning, implementation, and management and sustainability. For this, it has also intensified collaboration with other DXC business units and industry teams.
- **Partnerships:** DXC continues to invest in its relationships with strategic partners such as Microsoft, AWS, Google, IBM, and Hitachi Vantara to develop designated solutions and bring innovative technologies to its customers. The vendor also augments its data expertise by working closely with Cloudera, Snowflake and Databricks.

Cautions

- **Meeting expectations:** Despite DXC usually being able to meet expectations and deliver on targets, a frequent concern from reference customers was that there didn't seem to be enough drive from the vendor to exceed these expectations. This was more noticeable in situations requiring innovation or proactive problem solving.
- **Contracting experience:** Some DXC customers have indicated in Gartner inquiries that contracting practices and commercial terms with the vendor were challenging.
- **Availability of strategy skills:** DXC delivers the full range of solutions that organizations need for D&A projects, but is not always seen as a strategic or innovative partner by its reference customers. While DXC is building more innovation centers and has partnered with PwC for digital transformation, there needs to be more improvement in this area based on feedback from references.

EXL

[EXL](#) is a Niche Player. Combining its analytics and domain area expertise, it designs, delivers and manages solutions and services at scale for its clients. Its D&A practice is organized across two key business areas: analytics and operations.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 4,350 worldwide; the geographic breakdown of its FTEs is North America (20%), EMEA (2%) and APAC (77%).
- *D&A service revenue:* \$520 million; the geographic breakdown by revenue is North America (87%), EMEA (8%) and the remainder spread across other regions.
- *Top five industries by D&A service revenue:* Banking, healthcare, insurance, media, and utilities and energy.
- *Top five software partners by D&A service usage:* Informatica, Microsoft Azure, Tableau, Teradata and Snowflake.
- *Revenue breakdown of D&A services:*
 - 14% from project-based services
 - 53% from multiyear managed services
 - 33% from other D&A-related services (platform license, as-a-service product)

EXL enables its clients to accelerate their digital business initiatives by making extensive use of its proprietary tools, platforms and solutions, such as its Know Your Customer (KYC) solution and Digital Maturity Spectrum.

Strengths

- **Close partnering with clients:** EXL impresses upon clients that its stated intention is to be an indistinguishable extension of the client team. Feedback from reference customers shows that this one-team approach results in a high level of satisfaction and trust among clients. Its reputation for being flexible and responsive to changing business needs was also highlighted in the survey conducted.
- **Domain expertise and strong analytics expertise:** Reference customers scored EXL's analytics and BI service expertise above the group average. EXL has extensive experience in analytics, leveraging vast data assets through its partner ecosystem to deliver to its clients domain solutions such as claims, regulatory and risk, and customer experience. Such solutions are increasingly powered by its innovations in capabilities such as AI, image analytics and visualization, in which the vendor has made significant investment.
- **Deep expertise in D&A-managed services:** EXL has over 15 years' experience in multiyear managed services for D&A. Reference customers scored its capabilities above the group average, and this is reflected by rapid growth in both revenue and resourcing in this area.

Cautions

- **Concentrated geographic and sector distribution:** 87% of EXL's D&A revenue comes from North America and 8% from EMEA, with the remainder of revenue generated from other geographies. Furthermore, 53% of its revenue is derived from financial services and 36% comes from healthcare. Though end-user organizations should certainly be aware of this distribution when engaging with EXL, they should also consider the vendor's track record with its existing clients and the alternative engagement models it offers.
- **Limited vision in D&A governance:** Though EXL has extensive capabilities and expertise in analytics and BI, its perspective on D&A governance seems to be more tactical than strategic. Its current view of governance is primarily focused on ensuring protection and quality of data for analytics. If EXL is able to invest in broadening its governance vision, the capabilities that follow would allow its clients to gain greater business value.
- **More strategic thinking needed inside engagements:** EXL is seen as a trusted partner by its clients. Feedback provided by some of its reference customers has highlighted that project teams are

sometimes too operationally focused, and they could add more value by thinking beyond the current project.

EY

[EY](#) is a Leader in this Magic Quadrant. EY enables business transformation with a data-centric approach, leveraging its own vertical and domain knowledge as well as expertise from a range of technology innovation partners.

D&A is organized and deployed as a business practice within specific domains embedded across the firm (e.g., advisory, assurance, tax and transaction advisory services) and its go-to-market strategy is coordinated under a global data and analytics advisory leadership team.

The following numbers are Gartner estimates:

- *D&A full-time equivalents*: 22,000 worldwide; the geographic breakdown of its FTEs is North America (20%), Latin America (10%), EMEA (30%) and APAC (40%).
- *D&A service revenue*: \$4,6 billion; the geographic breakdown by revenue is North America (35%), Latin America (6%), EMEA (38%) and APAC (21%).
- *Top five industries by D&A service revenue*: Financial services including banking, insurance, public services, consumer products and retail.
- *Top five software partners by D&A service revenue*: IBM, Microsoft, SAP, SAS and Stratio.
- *Revenue breakdown of D&A services*:
 - 60% from project-based services
 - 33% from multiyear managed services
 - 7% from other D&A-related services (platform license, as-a-service product)

EY follows a strategy of infusing D&A in its business lines with reusable assets and solutions, and scales emerging technologies through its global EY wavespace innovation centers.

Strengths

- **Data centricity**: EY has shifted toward a data-centric, go-to-market strategy, building a “buy” versus “build” proposition for its “federated Data Fabric” offering. It does this together with AI technology partner Stratio, which enables organizations to develop a governed and unified data layer. EY has developed sector- (e.g., banking, retail) and domain-specific (e.g., fraud, risk) ontologies for this semantic layer. It also works with data brokers such as Oxford Economics, Thomson Reuters and Dow Jones.
- **Business transformation**: The D&A service line collaborates with the business lines to provide the vertical and domain knowledge for data-enabled transformations. In the EY wavespace innovation centers, clients can experience emerging technologies, while the implementations are done with reusable D&A assets and industry-specific platforms and solutions.
- **“Trust by design”**: EY has the ambition to infuse trust into all D&A artifacts such as cloud-based technologies, data ontologies, ethical use of AI/ML, apps, business logic and value. In this regard, the vendor has launched the EY Trusted AI Platform enabled by Microsoft Azure, which provides an integrated approach to evaluate, quantify and monitor the impact and trustworthiness of AI systems.

Cautions

- **System integration and technical architecture**: With its focus on supporting business decisions, reference customers scored EY slightly lower than the group average for system integration skills

and technical architecture. EY sometimes partners with Cognizant or Tech Mahindra to deliver technical solutions and services.

- **Managed services and support:** Last year, EY announced its strategic intention to grow its D&A managed service capability on which the vendor executed this year. Despite some growth, reference customers scored EY's D&A managed services and support capabilities below the group average.
- **Limited execution outside existing client base:** EY often executes within its existing client base by cross-selling D&A through its business lines. The D&A service line does, however, have its own go-to-market strategy and also addresses midmarket needs.

Genpact

[Genpact](#) is a Niche Player. Leveraging its BPO heritage, the vendor remains focused on business process expertise and its blend of AI and human judgment.

D&A is organized in Genpact's global analytics practice.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 11,000 worldwide; the geographic breakdown of its FTEs is North America (21%), EMEA (12%) and APAC (67%).
- *D&A service revenue:* \$1.1 billion; the geographic breakdown by revenue is North America (70%), EMEA (25%) and APAC (5%).
- *Top five industries by D&A service revenue:* Banking financial services, insurance and capital market; high tech and manufacturing; retail and consumer goods; life sciences; and healthcare.
- *Top five software partners by D&A service revenue:* SAP, Oracle, Microsoft, AWS and Salesforce.
- *Revenue breakdown of D&A services:*
 - 34% from project-based services
 - 48% from multiyear managed services
 - 18% from other D&A-related services (platform license, as-a-service product)

Strategically, Genpact remains a solid performer with an emphasis on process optimization and management rather than transformational innovation.

Strengths

- **Quality of employees and teams:** Reference customers consistently mentioned the quality of the team and the people in the team as a key strength for Genpact. The balance of comments from references suggests that Genpact has chosen to focus on maintaining the quality of employees even if that means slightly slower recruitment.
- **Repeatability and innovation:** Genpact has a strong focus on workflow and operationalizing the analytic process to make it fast and repeatable. Reference customers liked the emphasis on process and ensuring that everything that is done is repeatable (probably a reflection of the BPO heritage), but also praised Genpact's ability to be flexible even in relatively new situations.
- **Balance of technology and personnel:** In previous years, Genpact has placed a strong emphasis on teams, and on the variety of skills and expertise it brings to the table. Although this is still a strong element of the story, Genpact has also been increasing its focus on and visibility of its technology assets, such as its CORA platform. This brings a balance between the two that has become a key part of its overall messaging.

Cautions

- **Lack of D&A brand awareness:** Originating from GE but an independent company since 2005, Genpact is best known for its BPO services but remains much less visible in the D&A space.

Beyond the issue of market success being constrained by lack of awareness, this also has implications for Genpact's ability to attract top talent and address the most challenging projects.

- **Resource management:** Genpact is heavily dependent on sourcing expertise from India, although it has increased the number of North American staff significantly in the last 12 months. Reference customers consistently cited the vendor as responsive and customer centric, but concerns were also raised by references about working with India-based offshore teams.
- **Limited geographic presence:** Genpact has a variety of innovation centers, delivery centers and clients around the world, but is fundamentally focused on supporting North American clients. Its global presence means it can support global companies, but other vendors have more local presence and may be more suitable for organizations without a need for strong support in the U.S.

HCL Technologies

[HCL Technologies](#) is a Challenger. It demonstrates flexible and effective execution of D&A solutions with high levels of customer satisfaction.

D&A is organized in the HCL Digital & Analytics Services practice, which aims to bring digital business architectures, technology platforms and data innovation to enable clients' digital transformation journey.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 8,970 worldwide; the geographic breakdown is North America (17%), Latin America (3%), EMEA (13%) and APAC (67%).
- *D&A service revenue:* \$820 million; the geographic breakdown is North America (55%), Latin America (5%), EMEA (25%) and APAC (15%).
- *Top five industries by D&A service revenue:* Banking, consumer products and retail, high tech, insurance, and life sciences.
- *Top five software partners by D&A service revenue:* Informatica, Microsoft, Oracle, IBM and Teradata.
- *Revenue breakdown of D&A services:*
 - 40% from project-based services
 - 56% from multiyear managed services
 - 4% from other D&A-related services

HCL differentiates through its ability to deliver D&A at scale by adopting DevOps-based operating models, agile and automated processes, as well as leveraging its strong data and application engineering expertise.

Strengths

- **D&A technology expertise:** HCL was cited by reference clients as having strong implementation expertise, especially in data management and analytics/BI. Reference clients also indicated that HCL is able to combine its technology expertise with agile approaches to deliver solutions effectively.
- **Flexibility and partnership with clients:** HCL is often recognized by reference clients for its flexibility, ownership and accountability in project execution, and partnership attitude. HCL also places heavy emphasis on cultural alignment with clients and considers this a key success factor in clients' digital transformation journeys.
- **Value for money:** Reference clients commented that HCL consistently delivers good value and quality, and at competitive price points. They also gave HCL very high scores in several satisfaction categories, including contracting practices, transparency of commercial terms, and total cost of contracted services negotiation.

Cautions

- **Strategy execution:** HCL has a well-aligned digital and D&A services strategy, with key investments made in this area and execution of this strategy in progress. HCL needs to continue to demonstrate how this strategy reflects clients' business outcomes. For example, it needs to continue to develop its consulting expertise and augment its capabilities with assets such as platforms, applications and framework, as well as partner technologies and solutions.
- **Bench strength:** Some reference clients commented that key local resources from HCL can be difficult to secure, especially those with advanced analytics, data science and engineering expertise. Replacement or ramp-up time for new resources can be longer than expected and may cause short-term project disruption.
- **Inconsistent capability:** HCL continues to invest and develop D&A services capabilities and has received very high scores from reference clients on technology enablement (particularly around application and infrastructure expertise), data management, and analytics and BI implementation. However, some reference clients scored HCL below the group averages for design-led, managed D&A, and AI/data science expertise.

IBM

[IBM](#) is again a Leader in this year's Magic Quadrant. Through its services division ([IBM Services](#)) it offers a variety of products, a highly effective marketing strategy and innovative vision focusing on cognitive services, all of which combine for a strong market position.

D&A is organized in the Cognitive Business Decision Support service line. IBM Services' D&A practice is composed of a set of global offerings spanning all industries, geographies and domains. The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 20,000+ worldwide; the geographic breakdown of FTEs is North America (40%), EMEA (25%), APAC (30%) and rest of the world (5%).
- *D&A service revenue:* \$5 billion.
- *Top five industries by D&A service revenue:* Public sector, banking and insurance, telecom, consumer products, and aerospace and defense manufacturing.
- *Top software partners by D&A service revenue:* IBM, Informatica, Teradata, SAP and open-source software.
- *Revenue breakdown of D&A services:*
 - 54% from project-based services
 - 28% from multiyear managed services
 - 18% from other D&A-related services

IBM is different from other Leaders in this Magic Quadrant as it is a broader IT provider with its own hardware, software and research business, as well as professional services.

Strengths

- **Broad expertise:** IBM Services is working to enable a client business model it describes as The Cognitive Enterprise. The interesting thing about IBM's approach is that it does not just focus on AI but also aims to combine it with other emerging technologies such as blockchain, automation, the IoT and 5G/edge networks. Given IBM's expertise in each of these areas across services, software and hardware, the vendor has a compelling story to tell on enabling industry transformation.
- **Partnership and knowledge transfer:** Reference customers repeatedly mentioned the strong sense of partnership they had with their IBM team, and how highly responsive it was to requests. They

frequently mentioned the willingness of the IBM team to think outside the box, adjust its approach to meet client needs, and help develop the client's own thinking and knowledge transfer.

- **Increased focus on outcomes:** IBM Services is aligned to six key focus areas, but with a strong link to the expected business outcome and value. For example, customer-related initiatives tie to improved experiences; operations and supply chain projects tie to streamlined operations; and procurement, finance and talent tie to improved efficiency and quality of back-office processes; with exponential technologies like AI, blockchain and edge enablers of that value.

Cautions

- **Complexity of working:** IBM Services brings a wide variety of capabilities to market, which many reference customers noted introduced challenges as different parts of IBM struggled to find the appropriate resources and deliver a fully integrated solution. Respondents also rated it lower than the market average for product independence. IBM is in an awkward position with some clients wishing the services arm had more independence from the rest of the company, while other clients wish there was tighter integration between the services, software and hardware parts of IBM.
- **Total cost of ownership:** Several reference customers noted that the cost of services from IBM Services can be higher than those of other, similar providers in this Magic Quadrant. Some respondents also commented on paying a premium for some of IBM's consultants, the complexity of licensing and the need for the vendor to improve the transparency of its commercial terms.
- **Future direction:** IBM remains a Leader in the market for D&A services, but its vision has not evolved as broadly as other Leaders, specifically Accenture and Deloitte. The market has caught on to some of what was visionary about IBM's strategy, and its satisfaction scores (although remaining among the highest) are no longer quite at the same level as certain competitors.

Infosys

[Infosys](#) is a Challenger. It has a comprehensive D&A service and solution portfolio along with strong D&A technology and partner portfolios.

Its D&A practice is a global offering spanning all industries, geographies and domains.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 24,600+ worldwide; the geographic breakdown of FTEs is North America (19%), Latin America (0.5%), EMEA (7%) and APAC (72%).
- *D&A service revenue:* \$1.85 billion; the geographic breakdown is North America (69%), Latin America (2%), EMEA (20%) and APAC (8%).
- *Top five industries by D&A service revenue:* Banking, industry machinery and components, insurance, retail, and high tech.
- *Top five software partners by D&A service revenue:* Informatica, Microsoft, SAP, IBM and Cloudera.
- *Revenue breakdown of D&A services:*
 - 39% from project-based services
 - 61% from multiyear managed services

Infosys differentiates itself by helping clients gain insights from, and monetize all types of, data sources. It does so through investments in developing a data marketplace and innovation hubs and labs, as well as through its focus on D&A modernization.

Strengths

- **Ecosystem of data and analytics assets:** Infosys invests in D&A assets including platforms, accelerators and workbenches. Examples include Infosys Nia for Data (a data management platform that combines open-source software and Infosys IP for distributed data management challenges); and Infosys Digital Brain (a cross-platform solution delivering outputs to decision support systems for real-time sense and response in operational intelligence). Reference customers responded well to the vendor’s comprehensive portfolio of asset plus consulting capabilities and scored Infosys in the top third of all evaluated vendors for this capability.
- **Data management infrastructure and support:** Reference customers value Infosys’ expertise in managing complex (and often distributed) data management environments. The vendor differentiates itself through strategic investments in data management assets, strong independent software vendor (ISV) technology partnerships and highly skilled data management resources. The Infosys Data Operations Workbench and Data Marketplace (a collaboration platform to allow citizen users to find, integrate, prepare and share data) are two examples of its rich data management asset ecosystem.
- **Focus on innovation and co-creation:** Infosys is shifting more toward a “business outcome”-focused approach when developing D&A solutions. For this, Infosys is co-creating solutions with clients through various “Living Labs” and “Concept Centers.” To further drive client- and partner-led innovation, Infosys has invested in over 15 innovation hubs across various geographies (with five focused solely on D&A) along with various R&D and technology innovation labs.

Cautions

- **Hybrid sourcing model:** Infosys has ramped up local hiring and invested significantly in increasing delivery through nearshore/onshore operating models. Close to 30% of its resources are now based out of nearshore/onshore location and in their innovation and digital hubs. Several reference customers cited communication challenges with offshore teams and expressed a desire for a better mix of offshore and nearshore/onshore resourcing for their projects.
- **Pricing models:** Infosys offers various alternate pricing methods — such as outcome-, value- and subscription-based models — and close to 25% of its clients are engaging with Infosys in these new models, mostly in functional engagements. Some of its customers with a technology modernization focus are still engaged in traditional pricing models. This intended shift in pricing and contracting approach has resulted in some client concerns around contracting and evaluation.
- **Business process transformation and change management:** Some reference customers expect Infosys to partner better in their business process transformation and business change management journey. Infosys needs to improve on its engagements with reference customers to stand out as a strategic partner and showcase a better understanding of business needs. Infosys is making significant investments by adding functional consultants and leveraging its consulting arm to strengthen its change management focus.

KPMG

[KPMG](#) is a Leader. KPMG supports enterprisewide transformation by providing D&A services to connect the front, middle and back offices of its clients with KPMG Connected Enterprise. D&A is organized in KPMG’s global advisory service line and supported by KPMG Digital Lighthouse, the vendor’s global center of excellence, with 26 regional hubs. The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 17,500 worldwide; the geographic breakdown of its FTEs is North America (61%), Latin America (2%), EMEA (27%) and APAC (10%).

- *D&A service revenue*: \$4.1 billion; the geographic breakdown by revenue is North America (61%), Latin America (1%), EMEA (27%) and APAC (10%).
- *Top five industries by D&A service revenue*: Financial services (including banking), consumer products and retail, utilities and energy, high tech, and public services.
- *Top five software partners by D&A service revenue*: Google, IBM, Microsoft, Oracle and open-source software.
- Revenue breakdown of D&A services:
 - 48% from project-based services
 - 43% from multiyear managed services
 - 9% from other D&A-related services (platform license, as-a-service product)

KPMG makes extensive use of its own accelerators, platforms and solutions such as KPMG Ignite (AI platform), KPMG Sofy Suite (analytics platform), KPMG Signals Repository (data and signals platform) and KPMG Graph Intelligence (knowledge graph platform).

Strengths

- **Business transformation**: Reference clients indicated that KPMG can leverage its industry and domain knowledge as well as data, analytics and AI expertise to create enterprisewide transformation and tangible outcomes. They appreciate the vendor especially for its high-quality resources, client centricity and collaborative approach.
- **Asset-based delivery**: KPMG is extensively adopting the use of assets in its consulting efforts. For example, it uses its KPMG Signals Repository (a data platform with over 55,000 data sources), KPMG Ignite AI platform (a component-based platform for data engineers and data scientists) and KPMG Sofy Suite (modular business apps using KPMG IP) to scale D&A.
- **Technology enablement**: KPMG is more widely known for its business consulting than technology consulting skills, but it scored well above the group average for its technology enablement. The vendor has developed trusted technology solutions together with its existing and newer alliance partners such as Alibaba Cloud (for cloud-based digital transformation), Salesforce (for customer journeys) and Stradigi AI (for its Kepler ML platform).

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. It often executes through its own partner network and within its existing and very loyal client base.
- **Premium pricing**: KPMG clients indicate that their services are priced higher than some of the other vendors in this Magic Quadrant, as the transformative character of the delivered projects requires more experienced constants and on-premises-centric delivery.

NEC

[NEC](#) is positioned in the Niche Players quadrant. It has strong capabilities on D&A technology development, integration and implementation, as well as AI and biometrics.

D&A is organized in NEC's AI Analytics division. Its solutions and services have a strong industry orientation, especially in defense and security and the public sector.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 4,740, including 900 data scientists, worldwide; the geographic breakdown is North America (9%), Latin America (1%), EMEA (28%) and APAC (62%).
- *D&A service revenue:* \$1.3 billion; the geographic breakdown is North America (7%), Latin America (5%), EMEA (3%) and APAC, including Japan (85%).
- *Top five industries by D&A service revenue:* Public sector, insurance, defense and security, travel and transportation, and automotive.
- *Top five software partners by D&A service revenue:* Oracle, SAS, Hortonworks, SAP and Informatica.
- *Revenue breakdown of D&A services:*
 - 73% from project-based services
 - 27% from multiyear managed services

NEC differentiates by developing many of its own technologies, particularly in AI and biometrics. These technologies are embedded in its D&A solutions, which are combined with other NEC technologies to achieve the digital inclusion vision.

Strengths

- **AI and biometrics:** NEC has a proven global footprint and strong capabilities in AI and biometrics. Through its AI Discovery Program, NEC supports more than 500 clients with the creation of new opportunities using AI technologies (branded as “NEC the WISE”) and biometric technologies (branded as “Bio-IDiom”). NEC also has developed an AI Engagement Map for 42 industries that can be customized for different business domains at the local, regional or global level. In April 2019, NEC launched an AI Academy in partnership with Tokyo University and Shiga University. To date, the Academy has trained more than 3,600 people including NEC staff and clients on AI literacy, technologies, methodology and certification.
- **Society- and human-centered approach:** NEC has a strong focus on “digital inclusion” that uses AI, D&A and other digital technologies to bring benefits — such as greater safety, security, efficiency and equality — to society and humans. In April 2019, the vendor also launched the NEC Group AI and Human Rights Principles to drive socially acceptable AI. These principles include fairness, privacy, transparency, responsibility to explain, proper utilization, AI and talent development, and dialogue with multiple stakeholders.
- **Satisfied customers:** Reference clients were highly satisfied and scored NEC above the group average in many categories, including overall experience and quality of D&A, AI, technical expertise and service capabilities. Clients commented that NEC is very flexible, detail oriented and willing to listen to their requirements. They also said the vendor is very responsive and proactive in recommending new ideas and solutions, especially around the use of disruptive technologies such as AI and ML.

Cautions

- **Less focus on the data component:** While NEC has strong AI-embedded solutions and overall D&A technical capabilities, its approach to the data component — in terms of data strategy, architecture, management, integration and implementation — has been light. Some reference clients indicated that NEC could improve its data services strategy and capabilities around data integration and infrastructure.
- **Geographic coverage and local bench strength:** Although NEC has a strong global footprint in AI and biometrics solutions, 85% of its overall D&A services revenue is generated from APAC and Japan. NEC is working on expanding its global coverage through the acquisitions of KMD, Northgate Public Services and i2N, partnership with Netcracker, and organic growth of NEC

subsidiaries in North America and Europe. But its D&A services brand strength is relatively weak in regions outside of Japan. Some reference clients from outside of Japan also commented that key local technical resources from NEC can be difficult to secure.

- **Business consulting:** NEC has a companywide vision on digital inclusion and digital transformation. However, it is not well-known in the market for expertise in business consulting required by companies that want to use AI and D&A to underpin their digital transformation. NEC is working on strengthening its business consulting expertise by developing assets, methodologies and frameworks that can augment its consultants' business process capabilities.

NTT DATA

[NTT DATA](#) is a Challenger. It has good global presence and strong technology implementation expertise.

D&A is organized in NTT DATA's Data & Intelligence practice. It aims to help clients build a data-driven business powered by D&A, AI and collaboration with NTT Group, partners and clients.

The following NTT DATA numbers are Gartner estimates:

- *D&A full-time equivalents:* 7,220 worldwide; the geographic breakdown is North America (12%), Latin America (8%), EMEA (22%) and APAC, including Japan (58%).
- *D&A service revenue:* \$1.3 billion; the geographic breakdown is North America (29%), Latin America (3%), EMEA (22%) and APAC, including Japan (46%).
- *Top five industries by D&A service revenue:* Retail and consumer products, automotive, banking, insurance, and telecom.
- *Top five software partners by D&A service revenue:* Oracle, Informatica, SAP, Microsoft and Cloudera.
- *Revenue breakdown of D&A services:*
 - 68% from project-based services
 - 17% from multiyear managed services
 - 15% from other D&A-related services

NTT DATA differentiates through its "clients first" focus and technically skilled on-site/onshore resources in targeted regions.

Strengths

- **Investments in AI:** NTT DATA continues to invest in AI through its Artificial intelligence Center of Excellence. The center provides AI training to NTT DATA talent globally, and has proprietary AI assets, business, technology and industry expertise to help clients build and execute their digital vision. NTT DATA also works with other AI vendors and communities, startups, academia and institutions to co-innovate and co-create AI-embedded solutions and services, as well as monitor the latest disruptions in the market. NTT DATA has launched its own group AI guidelines and has contributed to the European Commission ethical guidelines and think tanks about AI ethics in Europe and America.
- **Technology expertise:** Reference clients gave NTT DATA high scores for technology enablement, particularly for its D&A quality, expertise in AI, application and system integration services. NTT DATA has created a Data and MLOps framework, which is supported by its IP assets such as everis Lumen Suite. The framework is an end-to-end methodology and contains toolsets to manage the D&A and ML algorithm life cycle. Lumen Suite is a workbench for development and deployment of ML models.
- **Flexibility:** Reference clients have good overall experience with NTT DATA and would highly recommend and rehire the vendor for similar engagements. Clients commented that NTT DATA

consultants are very committed and flexible in their approach. They said they will also go the extra mile to provide suggestions to improve the solutions and business outcomes for clients.

Cautions

- **Global leverage of innovation:** NTT DATA has pockets of innovative solutions, especially in AI technologies in healthcare and the public sector, that were created in conjunction with NTT Group companies, partners or clients. The vendor has also invested significantly in R&D (\$3.6 billion annually) and half of this is service innovation. In recent years, NTT DATA has worked hard at integrating its regional and global practices. However, it is still in the process of aligning and leveraging best practices and innovation globally. Reference clients consider NTT DATA a solid implementation service provider but one that can improve on bringing in more innovation from across industries or geographic markets.
- **Inconsistent resource management:** Although reference clients are generally satisfied with NTT DATA's service quality and support, at times they have expressed challenges in securing the key resources due to turnovers or bookings in multiple engagements. Other clients commented that NTT DATA can improve its consultants' subject matter expertise, project management skills and communication skills with clients.
- **Business consulting:** NTT DATA continues to invest in business consulting capabilities by aligning domain and industry expertise from its digital practices with resources from the data and intelligence practice. However, reference clients cited that there is still room for NTT DATA to improve. NTT DATA scored below the group average on some key business consulting capabilities such as business acumen, business process transformation, and business change management.

PwC

[PwC](#) is a Leader. It has an outcome-driven consultative approach, strong D&A and AI capabilities, broad market coverage and highly satisfied clients.

D&A is organized in PwC's Data and Analytics & AI practice.

The following PwC numbers are Gartner estimates:

- *D&A full-time equivalents:* More than 25,400 worldwide, of which there are 7,200 AI professionals; the FTE geographic breakdown is North America (39%), Latin America (3%), EMEA (38%) and APAC, including Japan (20%).
- *D&A service revenue:* \$5.1 billion; the geographic breakdown is North America (42%), Latin America (1%), EMEA (39%) and APAC, including Japan (18%).
- *Top five industries by D&A service revenue:* Banking, retail and consumer products, industrial machinery and components, healthcare providers, and high tech.
- *Top five software partners by D&A service revenue:* Microsoft, SAP, Cloudera, Informatica and open-source software.
- *Revenue breakdown of D&A services:*
 - 66% from project-based services
 - 22% from multiyear managed services
 - 12% from other D&A-related services

PwC differentiates by embedding D&A and AI across its organization and uses the business, experience and technology (BXT) approach, integrated solutions and assets to help clients operationalize their D&A and AI investments. It also combines competencies, IP and technologies across business domains, industries and ecosystem to drive innovation and scalable client value proposition.

Strengths

- **Holistic D&A and AI strategy:** PwC has a holistic strategy to embed D&A and AI to drive business outcomes for its own organization and clients. The strategy includes five pillars: platforms; integrated solutions with embedded AI; go-to-market teams with domain and industry expertise; the BXT delivery approach; and operational excellence. PwC is also building D&A- and AI-enabled accelerators, solutions and training talents in its global cross-line of service (xLOS). These solutions and capabilities can be leveraged in the various lines of service — including Advisory, Tax, Assurance and Internal Firm Services — through PwC Labs and the Workbench.
- **Integrated solution offerings:** PwC is embedding D&A and AI into its integrated solution offerings (ISOs) that combine strategy, technology and delivery options. These ISOs span seven domains (marketing; sales and service transformation; operation transformation; corporate function transformation; digital and technology innovation; risk and regulatory; and enterprise strategy and deals) and five industries (financial services; technology, media and telecommunications; healthcare; consumer markets; and insurance).
- **Client collaboration:** Reference clients often commented that PwC is a collaborative and strategic partner in their D&A initiatives. PwC consultants also have a strong business understanding of client issues, along with technical and D&A expertise to implement the solutions. PwC scored above the group average on business process transformation, design-led approach, industry and infrastructure service expertise.

Cautions

- **Inconsistent D&A project quality:** Although PwC scored high on overall client experience, some reference clients noted inconsistencies in its D&A project quality. For instance, some clients said the vendor could improve on ease of integration between the D&A solution and other systems, maintenance of the D&A solution, locating issues of the D&A solution, and explainability of the algorithms. PwC rated below the group average for quality of completed D&A project.
- **Cost of service:** PwC is not the best option for clients that focus on cost-efficient services, with some reference clients citing its premium market pricing as a challenge; others commented that it could improve on price and contracting practices.
- **Managed service mind share:** PwC has a strong focus on consulting-led, project-based D&A service engagement and is aggressively developing its asset-based managed service business. However, its managed service business has relatively less mind share among end-user organizations compared with other providers in this Magic Quadrant.

TCS

Tata Consultancy Services ([TCS](#)) is a Leader with a strong focus on industry-specific, asset-based services and supporting frameworks. D&A is organized in the vendor's Analytics and Insights service line.

The following numbers are Gartner estimates:

- *D&A full-time equivalents:* 36,000+ worldwide; the geographic breakdown is North America (9%), Latin America (2%), EMEA (9%) and APAC (80%).
- *D&A service revenue:* \$3.8 billion; the geographic breakdown by revenue is North America (51%), Latin America (2%), EMEA (32%) and APAC (15%).
- *Top five industries by D&A service revenue:* Banking, financial services and insurance; retail and consumer packaged goods; technology and services; life sciences and healthcare; and manufacturing.

- *Top five software partners by D&A service revenue:* IBM, Oracle, Informatica, SAP and Microsoft.
- *Revenue breakdown of D&A services:*
 - 60% from project-based services
 - 33% from multiyear managed services
 - 7% from other D&A-related services (platform license, as-a-service product)

TCS has demonstrated a good D&A vision, focusing on delivering business outcomes for its customers, with a strong hands-on leadership team supported by a rich asset base.

Strengths

- **Digital business transformation:** TCS has developed its Business 4.0 framework to help customers on their digital transformation journey. It does this by delivering D&A solutions supplemented by AI and engineering resources. Combined with industry knowledge and technology partnerships from its co-innovation network, TCS contextualizes the delivery for its customers' ecosystem.
- **Data foundation:** The TCS vision is for its customers to spend more time on insights generation and less time on developing the required data foundation. It enables this via the use of accelerators like DATOM (Data and Analytics Target Operating Model), DAEzMo (data landscape modernization) and Decision Fabric (business process automation). The vendor's rich set of enablers — both horizontal AI/ML accelerators and industry-specific models — support technology landscape modernization and the potential of real-time decision making.
- **Customers experience:** Reference customers see TCS as a trusted vendor and appreciate its quality of service. TCS is recognized for its value in the total cost of ownership for contracted services, as well as for its expertise in providing D&A governance services.

Cautions

- **Offshore-centric sourcing model:** TCS operates an offshore-centric sourcing model with at least 80% of its D&A workforce based in India. Some reference customers rated TCS low on geographic capability, citing difficulties in managing D&A projects needing centralized delivery and a better mix of nearshore and/or onshore resource availability.
- **Traditional pricing models:** Although TCS is rated well by its reference customers for overall contracting practices and total cost of contracted services, most of its engagements are contracted through traditional "time and materials" or "fixed price" licensing models. Reference customers want the vendor to invest more in the alternative pricing models that are becoming popular in this market (e.g., outcome-based or pay-per-use subscription service).
- **Design-led approach:** Some TCS reference customers indicated that they would like to see the vendor be more proactive in recommending new ideas. They also scored the company lower for its design-led approaches. TCS has recently opened "Pace Ports" in New York and Tokyo, which are regional hubs for innovation and idea generation. A further rollout could potentially address this concern fully.

Tech Mahindra

[Tech Mahindra](#) is a Niche Player known for its technology implementations. D&A is organized in the vendor's Data and Analytics practice.

The following are Gartner estimates:

- *D&A full-time equivalents:* 8,240 worldwide; the geographic breakdown is North America (8%), Latin America (0.5%), EMEA (3.5%), APAC (85%) and ANZ (3%).

- *D&A service revenue:* \$600 million; the geographic breakdown is North America (56%), Latin America (2%), EMEA (16%), APAC (13%), ANZ (11%) and Japan (2%).
- *Top five industries by D&A service revenue:* Telecom, banking, insurance, life sciences and manufacturing.
- *Top five software partners by D&A service revenue:* Teradata, Informatica, Qlik, Oracle and IBM.
- *Revenue breakdown of D&A services:*
 - 37% from project-based services
 - 56% from multiyear managed services
 - 7% from other D&A-related services (platform license, as-a-service product)

Tech Mahindra is recognized for its digital technology implementation services, complemented with long-standing client relationships.

Strengths

- **Improved customer focus:** Tech Mahindra has shifted its focus onto end-to-end service offerings and solutions across industry verticals, primarily in telecom, retail, manufacturing, banking, financial services and logistics. Supported in part through various acquisitions like The BIO Agency, HCI Group, Comviva, and Target Group, the vendor has also set up strategic alliances in the D&A market with software vendors and other D&A service providers.
- **Cost-effective through automation:** Tech Mahindra builds on its heritage as an offshore services provider by increasing its efforts in the area of delivery automation. It leverages its IP offerings like PRISM, TACTiX, iDecisions, and InfoWise to increase operational efficiencies and business agility through automation.
- **Expanded geographic capability:** Tech Mahindra has expanded its D&A presence in multiple geographies — including APAC (Vietnam, Indonesia), EMEA (Nordic, Israel) and Latin America (Brazil) — with a focus on small and midsize companies. It has also increased its customer engagement through advisory boards and technology partnerships with combined roadshows.

Cautions

- **Offshore-centric model:** Tech Mahindra operates an offshore-centric sourcing model with over 80% of its D&A workforce based in India. This can be a challenge for customers that are looking for a more balanced mix of nearshore and/or onshore resources.
- **Project resourcing:** Multiple reference customers voiced concerns about the competency levels of Tech Mahindra staff. Some felt the vendor faces challenges in retaining subject matter experts, as well as replacing those that move on.
- **AI/data science skills:** Although Tech Mahindra continues to upskill its workforce in AI and data science, its capabilities in these areas are not as strong as those of some competitors in this Magic Quadrant. Reference clients scored Tech Mahindra below the group average for its AI/data science expertise.

Wipro

[Wipro](#) is a Challenger. It leads digital transformation for its clients with its process-led transformation approach through insight-driven use cases and a strong partner ecosystem. D&A is organized in the vendor's Data, Analytics & AI (DAAI) practice. DAAI offers insights transformation (business transformation, advanced analytics, AI and visualization) and data transformation (cloud migration, cloud platform management, data engineering and platform engineering) solutions to its clients. The following Wipro numbers are Gartner estimates:

- *D&A full-time equivalents:* 23,400+ worldwide across a number of specific roles, such as industry specialist, technology specialist and data scientist.
- *D&A service revenue:* \$1.97 billion; the geographic breakdown is North America (60%), EMEA (25%), APAC (10%) and rest of the world (5%).
- *Top five industries by D&A service revenue:* Banking, financial services and insurance; manufacturing and technology; consumer products and retail; healthcare and life sciences; and energy and utilities.
- *Top five software partners by D&A service revenue:* Microsoft, AWS, Informatica, Teradata and IBM.
- *Revenue breakdown of D&A services:*
 - 60% from project-based services
 - 40% from multiyear managed services

Wipro differentiates through its diverse partner ecosystem, which offers value to clients through resources, accelerators and other asset-based services. Wipro's crowdsourcing platform Topcoder is a unique model to solve business problems, and offers data science, design, development and algorithm optimization through a center of excellence model.

Strengths

- **Metadata management:** Wipro prioritizes metadata tracking, lineage, sharing and analysis to ensure transparency and trust. For example, through its ETHICA framework and Helios projects, it enables business and IT users to leverage both technical and business metadata for explainable, ethical and bias-free AI usage. Wipro has developed Semantic Data Hub (SDH) — an industry taxonomy/ontology-based solution that uses active metadata to deliver a semantic knowledge graph for business consumption. Wipro also provides semantic solutions through its partners such as Cambridge Semantics, TigerGraph and Microsoft Azure Cosmos DB.
- **DataOps:** Wipro has made strategic investments in various DataOps frameworks to further facilitate an iterative, agile and collaborative approach to D&A. It leverages its proprietary RAPID Ops (Release Application Platform for Industrialized DevOps) for integration of open-source frameworks for testing, orchestration, monitoring, configuration, QA, tracking and deployment. Wipro enables a more agile data engineering platform for solution delivery and reduced time to insight. It also partners with DataOps enablement providers such as DataKitchen and Unravel.
- **Partner ecosystem:** Wipro maintains a comprehensive D&A partner ecosystem through strategic partnerships, acquisitions, investments and alliances. The vendor collaborates with several top research institutes and academia and has invested in crowdsourced skills development, training and problem-solving projects. Wipro has a strong ISV technology partner base with a comprehensive list of vendors. It has further strengthened key alliances with popular cloud infrastructure providers such as AWS (by opening a co-innovation center), Microsoft Azure and Google Cloud Platform (to accelerate digital transformation with its own Data Discovery Platform).

Cautions

- **Onshore resources:** Although reference customers were generally pleased with Wipro's overall D&A service quality and support, some commented that its consultants' domain knowledge, project management and communication skills at client onshore engagements could improve.
- **Traditional engagement models:** Some clients cite unpredictable billing, longer project turnaround times and traditional pricing/engagement models as top reasons for not partnering with Wipro in competitive situations. Wipro must invest in and evangelize modern licensing approaches — such as outcome-based and value-oriented models — to address this challenge.

- **Data governance:** Wipro needs to showcase a better connection between its comprehensive data, AI and analytics governance frameworks and its clients' actual D&A use cases and business outcomes. This is reflected in reference customers scoring the vendor low for D&A governance services.

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

BearingPoint and EXL have been added as they have met all inclusion criteria set for this Magic Quadrant.

Dropped

Teradata did not make the software inclusion criteria. The providers in this Magic Quadrant are expected 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.

Inclusion and Exclusion Criteria

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

- Their current and potential market impact and presence
- How often they appeared on client shortlists
- The degree to which they were evaluated by respondents to Gartner's primary research surveys
- 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.

We selected the providers included in this Magic Quadrant using the following inclusion criteria:

- **Presence** — Providers must have market presence and had their solutions and services considered or evaluated by Gartner clients for D&A (as expressed during interactions with Gartner).
- **Enterprise** — Have demonstrated that their D&A solutions are in production with clients at enterprise-scale deployments.
- **Projects** — Have analytics capabilities for staffing as well as managing D&A programs across the Gartner Business Analytics Framework.
- **Framework** — Deliver projects that include four of the capabilities (people, processes, platforms, performance) from the Gartner Business Analytics Framework domains (in either isolation or combination). This includes the competencies of decision management capabilities, analytics capabilities and information management (data) capabilities. (For more information on this subject, see "Gartner's Business Analytics Framework.")
- **Customer references** — Submit a minimum of five and a maximum of 10 unique customer references, coming from a variety of major industry segments and major geographic regions.

- **Revenue** — Report D&A service revenue that includes all project-based or managed professional services revenue (direct). D&A service revenue can also be part of a larger portfolio for professional services in other application-related work — for example, CRM, ERP or supply chain management, in either isolation or combination (indirect). Other 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 providers* — Companies that derive more than 90% of their revenue exclusively from D&A consulting and integration services. Pure-play providers are expected to have at least \$300 million in annual D&A revenue.
 - *Full-service providers* — Companies with at least \$500 million in annual D&A professional service revenue, as part of a larger portfolio for all professional services in application-related work (e.g., CRM, ERP or supply chain management, either in isolation or combination).
- **Geography** — 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), *as well as*
 - Additional revenue derived from clients in at least two of the four secondary geographies (APAC, Latin America, MEA and Eastern Europe).
- **Software** — Derive not more than 50% of their revenue from activities related to a single product or 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 customer reference checks, conducted 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, one 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. Below is a nonexhaustive list:

Consultancies

- [BCG](#)
- [McKinsey & Co.](#)

Midsized system integrators

- [LTI](#)
- [Slalom](#)

Pure play D&A providers

- [Bridgei2i](#)
- [Fractal Analytics](#)

Professional services of software vendors

- [Oracle](#)
- [SAP](#)

Business process service provider

- [WNS](#)

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.

Table 1: Ability to Execute Evaluation Criteria

Enlarge Table

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

Source: Gartner (February 2020)

Completeness of Vision

The Completeness of Vision dimension evaluates the service provider's strategic vision to deliver what's necessary for clients to execute. Completeness of Vision includes the service provider's depth of knowledge of the markets, the direction of key market trends and the customers it serves. The service provider's scope of vision and the mind share it has achieved with potential buyers are important. Factors analyzed include the service provider's commitment to its D&A practices, funding and allocation of resources and skills building, and how it positions itself to address future industry scenarios through investments in R&D, methodologies, alliances and partnerships. Service providers are rated on their strategies for exploiting market forces to create opportunities for themselves and their clients. Ultimately, they are judged on their ability to capitalize on their vision.

Table 2: Completeness of Vision Evaluation Criteria

Enlarge Table

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

Source: Gartner (February 2020)

Quadrant Descriptions

Leaders

Leaders provide offerings that meet demand in D&A services, as well as 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 levels of the Gartner Business Analytics Framework. However, Leaders may fail to meet the specific needs of more-specialized segments (e.g., 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 from 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 infrastructures, 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 20 providers in this evaluation create solutions that often combine software and professional services. 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. In fact, there is a deliberate strategy by service providers to offer data management platforms and analytics products as on-premises or as-a-service solutions.

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 ranking 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

Chief data officers (CDOs) are tasked at an executive level to make their organizations more data driven. For this role, three typical categories of activities have emerged:

- Create value by exploiting data assets.
- Govern data to ensure it is used and shared in a trusted way.
- Build an integrated data foundation at an enterprise level.

Simultaneously, the use of D&A has become pervasive, and domain data and analytics leaders drive organizational efficiencies and transform business processes using D&A. Meanwhile, data and analytics leaders who are positioned in (central) IT find themselves ill-aligned to these emerging business D&A initiatives across the organization. Combined, all data and analytics leaders need to guide their respective organizations toward a different way of continuous decision making. In order to be successful in this effort, they need to complement their own integrated D&A capabilities with those of an external service provider.

However, the market for D&A services is in flux. Below we list the key characteristics of the rapidly developing D&A services market of which data and analytics leaders must be aware.

Business Value and Monetization Opportunities Drive D&A Initiatives

In the customer survey for this Magic Quadrant, reference clients (n = 168) were asked to list their key factors for choosing one service provider over another. The top two factors focused on strategic services and business acumen. The first key factor that included a mention of technology was No. 6 (AI and data science skills). When asked what the most important reason was for not selecting a service provider, the top two responses were price and lack of business understanding. Lack of technical ability was at No. 7. It is clear, therefore, that data and analytics leaders are aligning their initiatives with the business perspective, as they realize that business domain expertise is an essential component for creating useful insights.

Service providers are shifting from just offering generic — often technology-focused — D&A services toward delivering services and solutions that address business buyers' contexts and

business processes. They have developed offerings that focus on business process, domain-specific data (sources), and data management and analytical methods. However, many service providers still struggle to build up the required business acumen, business process transformation skills, and strategy and advisory skills. Often, they find it difficult to show the actual business benefits of the solutions to their clients. As one of their clients commented: “Doing three data lake implementations in retail does not make you a retail expert.” Data and analytics leaders should look for service providers that can combine business understanding with technical expertise and can help measure the business benefits of the D&A services.

Another way to generate measurable benefits from D&A is to monetize it externally. Organizations can create new revenue streams; for example, by selling data (sets) or algorithms to other — often noncompetitive — enterprises. Many service providers have responded by developing marketplaces where clients can share and monetize their data. These service providers have also developed additional services on top of this platform; for example, around removing personally identifiable information (PII). Clients that want to monetize data together with their service provider should address IP/ownership and potential regulatory or reputational issues early on, and work with their legal counsel.

Asset-Based Services

“Asset-based services” refer to the provider’s effectiveness in using IP assets to augment existing insight and expertise for particular vertical industries or business domains to provide analytics insight to address complex problems. These assets may include embedded AI and ML technologies in D&A platforms, applications, tools, accelerators or algorithms to improve the decision-making process and accuracy of the business outcomes. The assets can be used to augment consulting, implementation and/or managed service capabilities and performance.

The vendors in this Magic Quadrant continue to increase their efforts to provide asset-based services, whereby they augment their consultants and resources with preconfigured platforms, applications, solutions, frameworks, templates, libraries of visualization, and algorithms. Their goal is to help scale the business, improving time to solution and accuracy of the business outcomes for their clients. Besides embedding them in their services, vendors can also exploit these assets in different ways; for example, by licensing or white-labeling them to their clients or partners.

Artificial Intelligence

Over the past year, artificial intelligence (AI) has become mainstream for external service providers. Many of them have taken AI and applied it (over)enthusiastically to their services and solutions. More often than not, they have been positioning themselves as AI vendors, including the associated marketing and messaging. This has led to some confusion and even misunderstanding with buyers, as AI means different things to different people in different contexts. It has also led to inflated expectations about the value of AI, as many vendors claim to have new AI solutions, enable productivity improvement with AI, create AI-enabled revenue streams, and so on.

Only a few vendors have been able to clearly explain what type of AI they are using (taxonomy) and what business value it has created for their clients. These vendors have been able to move away from a predominantly technology-driven case study by showing the actual outcomes that AI has enabled.

In order to prevent being blindsided by the current “AI washing” from vendors, data and analytics leaders should strengthen their understanding of AI and improve their own AI skills and techniques.

Changing Business and Operating Models

Many service providers are pivoting into new business models by becoming “servware” companies (see “Take Advantage of the Disruptive Convergence of Analytic Services and Software”). They are combining professional services, product/software development and management (including AI capabilities) in their core business. Some are developing marketplaces for data products, algorithms

and solutions together with their ecosystem partners. Other service providers are embedding D&A in all their practices to increase speed and agility in their operating models. For example, D&A centers of excellence, consultants and assets will work together with domain and industry experts in cross-lines of businesses such as finance, operation, human resources, application and infrastructure services.

As the complexity of business requirements, D&A and other technology continues to increase, clients are requiring more help from service providers to implement, manage and provide advisory services for their D&A and digital initiatives. Therefore, service providers must expand their range of diverse competencies, which is driving them to develop new business models and operating models in addition to new solutions and engagement approaches to support client expectations. Evaluation of service providers is becoming more difficult as the number and types of providers increase. Selection criteria will extend from a provider's capabilities and solutions to include synergy or alignment of new business and operating models.

Design Thinking

Design thinking is the service provider's ability to design and implement D&A solutions that can effectively drive D&A consumption throughout the client's organization and make the impact sustainable. Design thinking requires multidisciplinary competencies of creative design, innovation, analytics, security and technology integration, and may require the provider to adopt "digital agency" capabilities to extend its technology integration capabilities.

Enhancing the customer and employee experience to drive value and adoption has become a source for future growth of organizations that are using digital technologies, including D&A. Doing so depends on the creativity and innovation of people, rather than technology alone. Design thinking requires a collaborative, open and iterative approach and focuses not only on problem solving but also on reaching a goal. Solutions delivered via design thinking will have a better fit with client requirements and may also incorporate many unanticipated or future needs. Many service providers claim to include design thinking in their solutions, but very often they are constrained by the bounds of traditional IT solution development.

Data Foundation

A trusted data foundation is pivotal and the first step in realizing the benefits of analytics/BI, advanced analytics and AI/ML in an organization. In order to foster a data-driven culture or to ensure governance and compliance, data and analytics leaders need to first lay emphasis on renovating their traditional data management infrastructure. They then need to align it with modern data management architectures before they can even think of implementing AI/ML in their D&A programs.

In the past couple of years, five main trends have emerged in data management that can fast track agile data delivery for analytics and operational use cases:

- A more balanced approach between collecting and connecting data
- A distributed approach toward data management
- A massive push to the cloud
- An increase in automation, where augmented data management has taken center stage
- DataOps — a more collaborative form of data management implementation.

Most data and analytics leaders recognize that they need help in preparing for and eventually implementing these five trends within their organizations. The vendors in this Magic Quadrant are expected to provide strategic, implementation and managed services for describing, organizing, integrating, sharing and governing data. The implementation of such a trusted data management architecture comprises various data management disciplines, such as data integration, data

engineering, data quality, metadata management, data governance, data privacy including compliance (like GDPR), master data management, and a logical data warehouse architecture. Some vendors in the Magic Quadrant deliver data management requirements through technology implementation and don't lay enough focus on working on the overall data management strategy. Customers should look for vendors that can provide strategic services, assets, IP and best practices that can deliver data management solutions and architectures.

Data Governance

There is a fair amount of so-called "AI washing" in the market, where vendors have unsupported claims around their AI capabilities. These AI-enabled products and services are often discussed in the context of trust, transparency and ethics, all of which should underpin an organization's effective D&A governance strategy. Some vendors have taken a tactical, even IT-centric approach to D&A governance, for which they have developed discrete frameworks and solutions.

End-user organizations that engage with D&A service providers should first acknowledge that the accountability for achieving business outcomes lies with them, not the service provider. They must understand how the governance capabilities offered by their service provider connect both to their initiative(s) and the wider D&A ecosystem. Clients need to look for vendors that consistently demonstrate how their frameworks and approaches can help address governance strategically across *all* aspects of their ecosystem: data, content, analytics and AI.

Furthermore, these vendors need to address the growing importance of digital ethics generally, not just as a response to AI. It is also important that you establish the role of the service provider during its engagement with you and after it leaves. An initial step you can take is to establish your current level of D&A governance maturity, and then establish a strategic roadmap for its improvement.

Digital ethics are increasingly critical in organizations, but you should be aware that they also apply to your enterprise ecosystem, not just to the work you are doing with AI components in D&A initiatives. Find out if your service provider has a track record in helping organizations establish digital ethics, how they have done this and how they would embed this in your D&A governance environment.

Talent

Despite the shift from labor-based to asset-based services, service providers still need resources — for example, to develop the assets. But the talent gap remains a top challenge for D&A service providers. Many of them face significant challenges in finding and attracting talent. This is especially true for specialty areas like AI, where there is even more competition and young graduates are hired by startups or large tech companies. Some service providers have boldly shifted to a more modern work culture to cater for these millennials.

Although service providers still hire from outside, they also need to come up with a way to build the right mix of data, analytics and AI skills inside their organization. Especially with an aging workforce, they need to focus on upskilling or even reskilling their own consultants. Many vendors in this Magic Quadrant have announced a series of training and/or certification programs to deal with this. Some of them have implemented new delivery teams with cross-functional skills, to cater to the resource shortage.

The transformation of the existing workforce can potentially lead to sourcing issues. Data and analytics leaders should always be involved in the selection process of the consultants that work on their project and initiatives. Make sure you look for relevant experience or skills that fit your use case.

Evidence

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.
- A telephone and web-based survey of reference customers identified by each vendor (minimum of five completed references that generally represented the inclusion criteria per vendor). This captured data on usage patterns (e.g., technology skills or business expertise), levels of satisfaction with major product functionality categories, various provider attributes (e.g., pricing, service delivery) and more. In total, 168 organizations across all major regions provided input on their experiences with their provider's frameworks and services.
- Feedback about services and providers captured during conversations with users of Gartner's client inquiry service. Inquiry analysis and inquiry share estimates were developed by Gartner, based on the volume of inquiries received about this market (these estimates are not representative of the entire market). Between August 2018 and August 2019, analysts across Gartner collectively took more than 9,748 end-user inquiries on D&A services.
- 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 and marketing material.

Note 1 Definition of Data and Analytics Services and Solutions

Data and analytics services are consulting, implementation and managed services for decision, analytics and information capabilities, executed on a technology platform that supports an organization's fact-based decision making. Solutions contain information analysis and information management competencies, with commercial off-the-shelf and proprietary assets. Information analysis solutions focus on use cases and outcomes; information management solutions focus on information infrastructure and governance.

Note 2 Definition of Servware

Servware (or software-defined services) is the convergence of services (data and analytics skills, capabilities expertise, domain content) and software (code) into reusable, configurable building blocks, delivered by a single vendor (service provider) of which the rights can be transferred to a second party (customer).

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.