

Google AI Services Top 10 Report – Excerpt for KPMG

HFS Research author:
Reetika Fleming, Research Director

TOP 10
HFS

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“Google’s portfolio of AI components, such as text-to-speech and computer vision, is a great starting point for a fundamental development layer. What has been missing are combined applications of these technologies to solve specific business challenges for major business functions and industry verticals. This is where service providers have a critical role to play, and they are filling the gaps by building solutions either in collaboration with Google developers or with clients in selected industries that are ready for AI.”

—Reetika Fleming, Research Director

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Introduction, methodology, and definitions

Introduction

- Artificial intelligence (AI) may be a buzzword, but it is undoubtedly also cementing itself as a key change agent in the way enterprises do business. Its capacity to derive deep insights from unstructured data, to learn and improve from its own activity, and to optimize business operations means that despite still being a nascent technology, its value to organizations is clear. Google, a longstanding trailblazer on the AI technology front, is one of the most exciting providers in the burgeoning enterprise AI landscape.
- Google's leadership in developing cutting-edge AI capabilities and setting the industry standard for sophisticated AI is undoubted, but it still faces obstacles to breaking into the enterprise landscape. It's competing against AI vendors with longer backgrounds serving enterprises, and it is still seen as a wild card in some circles. It's further hindered by many enterprises' lingering distrust of the cloud and their reluctance to move their mission-critical operations into this environment, preventing them from accessing Google's predominantly cloud-based AI capabilities. Despite such conservatism, Google is nevertheless delivering tangible value to enterprises with its AI capabilities, most notably in areas like computer vision, natural language processing (NLP), and cognitive agent solutions.
- Critical to Google growing inroads into the enterprise space is the role of service providers. These firms form a crucial bridge between Google's cutting-edge AI technology and enterprises' strategic automation goals. Their robust delivery methodologies, deep domain knowledge of their clients' industries, and proprietary IP are all essential elements in accelerating enterprise adoption of Google AI capabilities. This *HFS Google AI Services Top 10 Report* examines the part service providers are playing in the nascent AI landscape. We assessed and rated the Google AI services capabilities of 14 service providers across a defined series of innovation, execution, and voice of the customer criteria. The report highlights the overall ratings for all 14 participants and the top five leaders for each subcategory.
- This report also includes detailed profiles of each service provider, outlining their overall and sub-category rankings, provider facts, and detailed strengths and weaknesses. References are on occasion made to service providers' broader AI capabilities, but this report's primary focus is on service providers' capabilities specific to Google AI solutions.

Google boasts several key characteristics that are striking a chord with enterprises looking to leverage cloud AI technologies and services, including:

- **Leading AI R&D and breadth of AI offerings.** Google has established a leadership position on the AI technology front, in large part thanks to its access to immense troves of user data gathered through its online platforms and its vast computing power that is unrivalled by most of its peers. These factors have enabled Google to train its algorithms to an astounding level compared to legacy competitors with a smaller online presence. This has also given it the freedom to explore and perfect a wide range of AI technologies, from NLP to computer vision to agent training, allowing it to meet even the most niche of enterprise AI demands. Its heavy investment in R&D and acquisitions like DeepMind create an unparalleled competitive advantage in terms of amassing talent. Google also draws on the creativity of “new blood,” as its open-source frameworks are well-known to university graduates, allowing it to create dynamic, explorative teams in its R&D environment.
- **Ease of development and use.** Google’s AI offerings are made more attractive to clients due to the ease of use they offer in combination with highly sophisticated, complex technologies. Google achieves this through user-friendly elements like pre-trained AI accelerators and cognitive APIs. Such AI solutions lend themselves easily to integration with other technology solutions clients may already have, allowing them to consume its offerings on their own terms. Essentially, Google lets clients have their cake and eat it too by balancing complexity and good UX. Google’s open-source AI frameworks’ flexibility also appeals to clients that don’t want to be locked into more established platform providers that do not invest in open-source technology.
- **Known ability to scale complex AI solutions.** Google may be a relative newcomer in selling AI services to enterprises, but it’s nevertheless not a start-up or niche player and has the resources to deliver AI at massive scale. The power and robustness of the Google Cloud Platform make it easy to scale AI to enterprise volumes, as its AI solutions are almost exclusively cloud-based. Google also offers multi-channel support, which allows its solutions to be plugged into a wide range of client communications channels and widen the number of potential use cases for clients. Moreover, Google has disseminated AI throughout its own large organization, demonstrating that it’s capable of scaling the technology to this level and that it has skin in the game as a direct user.
- **Broad brand appeal.** Google is known as being an AI visionary and for setting the direction of AI R&D and pushing the technology’s frontiers. It’s had many very public AI successes familiar to the public, including Alpha Go, Android, and self-driving cars. This means end customers are already familiar with the brand and its technological prowess and consider Google engineers and researchers as developing best-in-class technology. By associating themselves with Google, enterprises have a chance to learn from its world-class experts and share in the prestige of its brand awareness and image, a powerful incentive for yoking themselves to a relative newcomer.

Google Cloud Platform (GCP): All Google Cloud AI offerings are provided through its proprietary cloud environment, GCP. This enables frictionless updates, easy deployment, and solution scalability for enterprise clients. GCP enables Google to deliver on its objectives of democratizing AI by making it simple to use, fast to implement, and truly scalable. Advantages include secure storage, immense computing power, and integrated AI and data analytics solutions.

Cloud AI solutions

Google's Cloud AI solutions are targeted at enterprises with minimal AI and ML expertise. They are designed to be precision-tailored to highly specific client tasks and processes and are trained to function in very specific contexts. Google and service providers will typically work closely with an enterprise to customize and implement each solution to ensure a perfect fit and solve particular client challenges. Examples of Cloud AI solutions include:

- Cloud job discovery
- Contact center optimization
- Document understanding

Cloud AI building blocks

Google Cloud AI building blocks are a collection of Google's cream-of-the-crop AI models across the AI technology spectrum, which can be conveniently accessed via APIs. API access enables users to customize Google models to suit their requirements and integrate easily with existing client apps. The blocks fall into three main buckets:

- **Vision:** Cloud Video Intelligence, Cloud AutoML Vision, and Cloud Vision
- **Language:** Cloud Natural Language, Cloud AutoML NL, Cloud Translation, and Cloud AutoML Translation
- **Conversation:** Cloud Speech-to-Text, Dialogflow Enterprise, and Cloud Text-to-Speech

Cloud AI Platform

Google's Cloud AI Platform provides cutting-edge ML services, pre-trained ML models, and the option for clients to create customized, scalable ML models. The platform targets clients with deeper ML expertise. It spans the entire data and modelling lifecycle. This comprehensive AI toolkit includes three main components:

- **Data Analytics and ML:** Cloud ML Engine, Cloud Dataflow, Cloud Dataproc, Cloud Dataprep, BigQuery ML, and Google Data Studio
- **ML Accelerators:** Cloud TPU and Cloud GPU allow enterprises to speed up their ML workloads on Google Cloud
- **ML Libraries:** TensorFlow, Kubeflow, Beam, and Spark connect the open-source community with Google AI capabilities

Minimal AI expertise

Deep AI expertise

Service providers covered in this report

accenture

KPMG

Cognizant

TATA
TATA CONSULTANCY SERVICES

Infosys®

wipro

Deloitte.

Atos

HCL

Capgemini

Tech
Mahindra

LTI

NTT DATA

Mphasis
The Next Applied

**EY was excluded from this analysis as it is Google's audit partner and cannot jointly go-to-market with Google.*

Research methodology

The Google AI Services Top 10 report assessed and scored service provider participants across execution, innovation, and voice of the customer criteria. The inputs to this process were detailed RFIs we conducted with several service providers, client feedback from reference checks and HFS network clients, briefings with leaders of Google AI Services and alliance practices within service providers, HFS surveys with 659 Global 2000 enterprises, and publicly available information sources. Specific assessment criteria and weighting include:



33.3%

Ability to execute

- **Depth and breadth of offerings** including capabilities across the HFS AI services value chain, use case identification, and experience with and development of solutions across Google AI technology stack
- **Scale** including deployments, clients, Google AI trained resources and certified talent, and commercial traction and growth
- **Delivery of value** including the ability to drive value through end-to-end process transformation, change management, and governance expertise



33.3%

Innovation capability

- **Google AI strategy and roadmap** including vision and credibility of strategy, integration with broader intelligent automation strategy, and identifiable investments in the Google AI tech stack
- **Focus on business outcomes and process transformation** including the ability to deliver outcomes, models for co-innovation around process transformation, and transformation consulting
- **Technology innovation** including depth and breadth of internal AI-related IP and external partnerships across the Google ecosystem



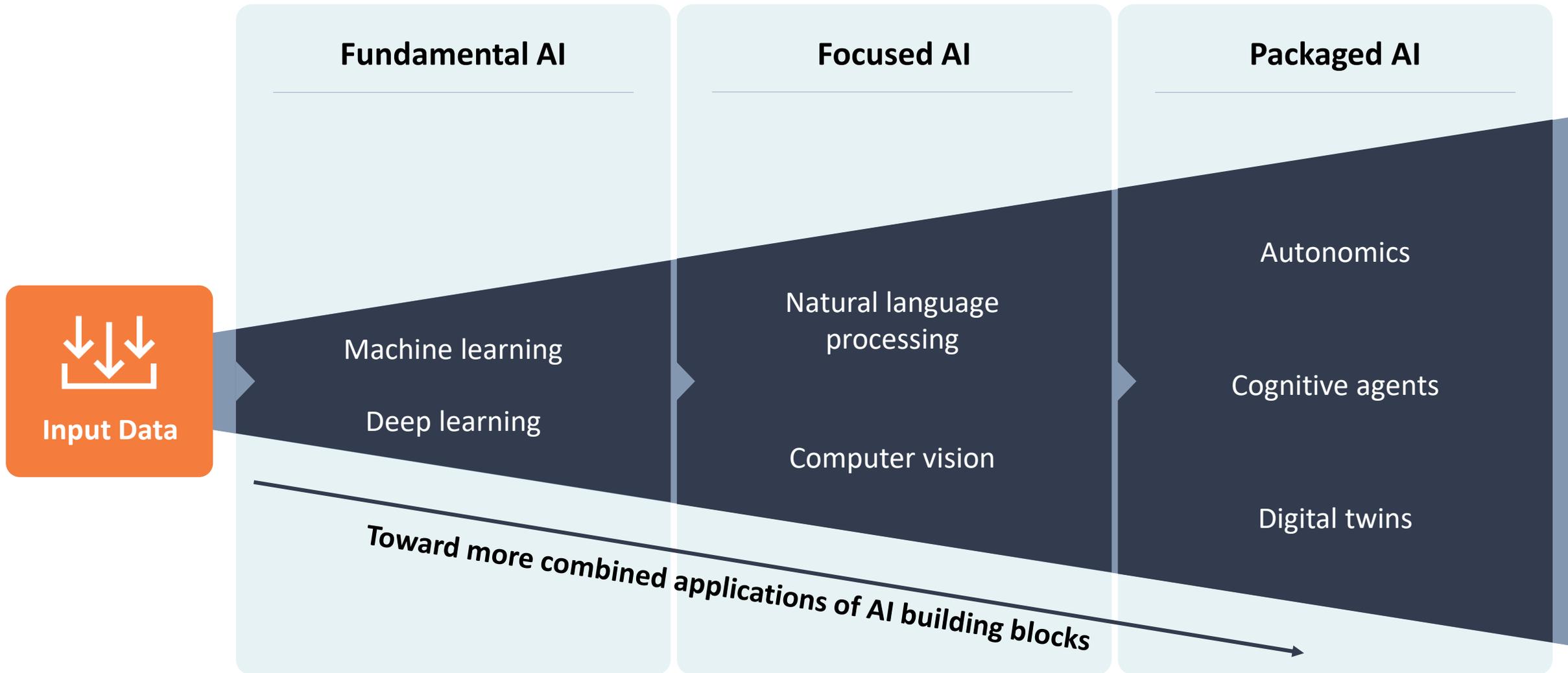
33.3%

Voice of the customer

- **Direct feedback from enterprise clients** via reference checks, surveys, and case studies critiquing provider performance and capabilities

- As the HFS Blueprint Report [*Enterprise Artificial Intelligence \(AI\) Services 2018*](#) outlines, **artificial intelligence (AI)** is many things: It is hyped, it is undefined, it is becoming pervasive, and it is fostering emotional and, at times, heated discussions. However, many of those discussions are more focused on consumer-facing issues such as self-driving cars, drones delivering Amazon purchases, or robotic home helpers. The broader market is not yet recognizing the nearer-term impact of AI on B2B and Enterprise operations. AI aims to automate intelligent activities that humans associate with other human minds through a combination of reasoning, knowledge, planning, learning, natural language processing (communication), and perception (cognitive). There are many subcategories of AI, each suited to execute particular types of tasks, as outlined in the [*HFS Dummies' Guide to Enterprise AI*](#).
- **AI services** is the provision of planning, implementation, management, operations, and optimization services in support of enterprise utilization of AI software, processes, and resources to achieve digital transformation and defined business outcomes.

The building blocks of AI *(illustrative)*



The HFS AI services value chain

Plan

- Advisory on autonomies, cognitive computing, and AI
- Workshops on IA vendor landscape and implications
- Automation opportunity assessment
- Business case development for automation deployment
- Operating model evaluation
- Automation roadmap
- Compliance and risk assessment
- Security implications
- HR and talent management strategy
- Governance policy
- Rollout strategy

Implement

- Program management for process automation
- Process automation and customization
- Solution and technical design
- Process recording, mapping, and updating
- Data extraction from heterogeneous systems
- Leverage repository of pre-built components and utilities
- Predictive analytics
- Specialist development modules
- Enterprise systems integration

Manage

- Governance management
- Maintenance of automated processes
- Optimization of BPO contracts and SSC delivery
- Upgrade support
- IA help desk
- Ongoing integration
- Support and maintenance
- Testing and QA
- New release and upgrade coordination
- Training and certification
- Acceptance testing
- Change management

Operate

- Infrastructure management
- Application management
- IT help desk management
- BPO
- (Ro)Bot-as-a-Service
- Real time analytics
- Identify any required changes in service delivery or process to account for changing business requirements (e.g., M&A, divestment, new investments in IT)
- Mandatory regulatory adjustment ramification management and resolution

Optimize

- New feature value identification and benefit analysis
- Ongoing adds and upgrades, migrations, and consolidation
- Integration of big data analytics, and insights
- Best practice understanding, documentation, and end-user adoption, content creation, and curation
- User community participation

Executive summary

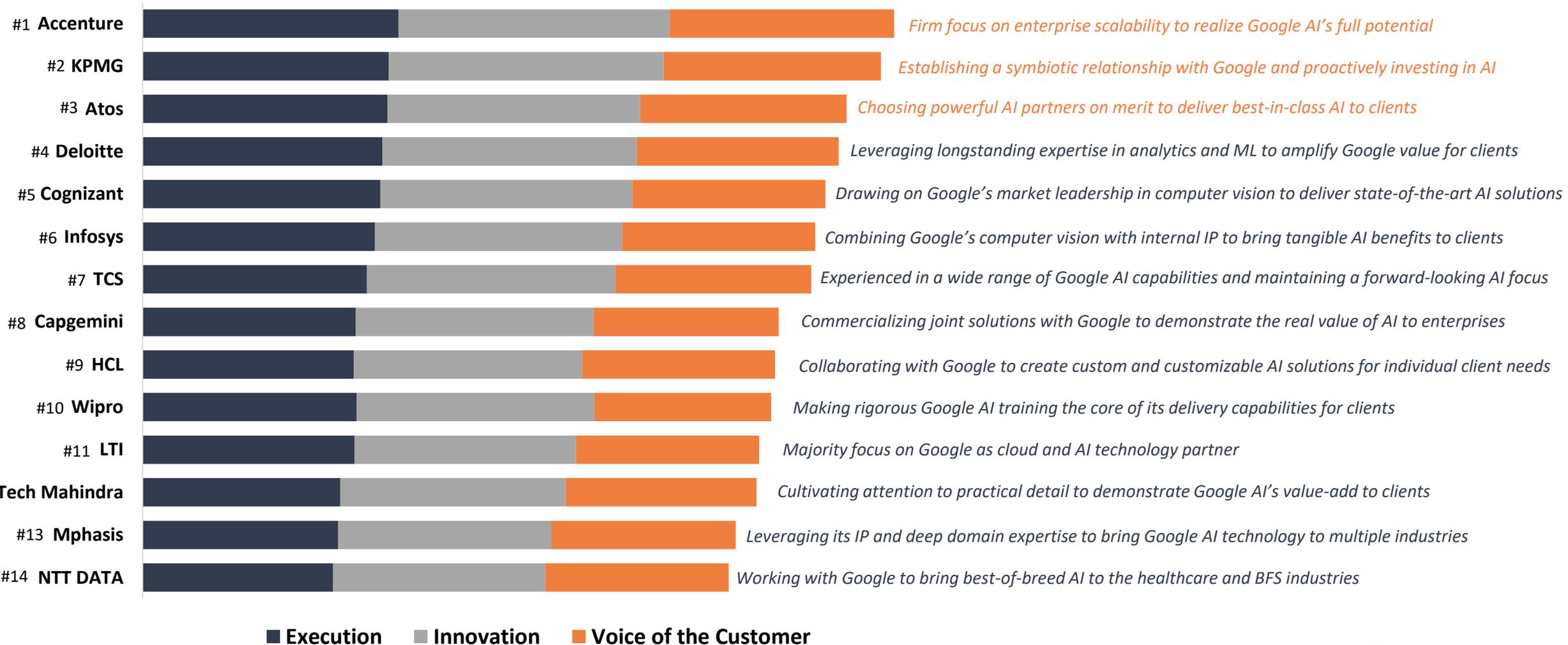
- **Google, the undisputable AI R&D powerhouse.** “Google is a big name in AI!” a client explained as a response to why they selected the technology partner. Many enterprise clients are convinced of Google’s superiority when it comes to pioneering AI technology R&D, first for its own use and then offering companies a slice of its data-led AI prowess. Google is uniquely playing in the AI marketplace across software, cloud data services, and hardware, and its R&D efforts have earned the respect of its clients.
- **Google is playing catch-up in AI partner alliance development, and some early favorites are emerging.** Google has a longer route to market than competitors such as Microsoft or IBM when it comes to enterprise AI. It has historically not been as B2B-oriented, but sensing the opportunity to serve enterprises, the tech company has rapidly been developing its corporate policies and capabilities to position itself for enterprise AI. A significant part of this effort is partner alliance development, and Google has spent the last two years developing deeper relationships with various SIs, consulting houses, and AI boutiques with technology, regional, and vertical specialties. Most companies in our analysis use Google’s AI technology to underpin solutions for clients. But developing formal alliances benefits both service providers and Google in many ways, and, ultimately, clients reap the rewards of the closer collaboration. Two notable alliance partnerships that are leading this fast emerging market include:
 - **Accenture**—With the establishment of the Accenture Google Cloud Business Group last year, Accenture has put in place a central hub for co-innovating with Google; AI is a top strategic priority. The service provider has already opened joint Google AI Labs in San Francisco and Dublin to research and showcase potential solutions, particularly for clients in the communications, media, high-tech, BFS, retail, products, and utilities industries.
 - **KPMG**—This consulting leader has “all in” on its partnership with Google, setting up a global Google Innovation Lab dedicated to experimenting and innovating with Google products. The lab both tests and co-builds new Google products and solutions. KPMG and Google have selected the financial services, healthcare, and life sciences industry verticals to co-develop solutions.

Executive summary (page 2 of 2)

- **The overall Top 10 leaders are** Accenture, KPMG, Atos, Deloitte, Cognizant, Infosys, TCS, Capgemini, HCL Technologies, and Wipro. These service providers have demonstrated a leading execution capability for Google AI services, focused on driving innovation in this emerging market in collaboration with Google, and have the voice of the customer shaping their performance in our study.
- **Service providers are proving to be good partners for Google's efforts to bring AI "solutions" to enterprises.** Google's portfolio of AI components such as text-to-speech and computer vision are great starting points as a fundamental development layer. What has been missing are combined applications of these technologies to solve specific business challenges for major business functions and industry verticals (focused and packaged AI solutions from our AI building blocks chart). This is where service providers are starting to fill in the gaps by building solutions either in collaboration with Google developers, or with clients in selected industries.
- **Google's AI technology is pervasive thanks to its love of open source.** Google has decidedly stuck to its guns on having technology components remain open source and free from any threats of vendor lock-in. This is the cornerstone of its innovation engine; driving up adoption through a culture of openness that it is now extending to enterprises for AI development. Products such as TensorFlow and Kubernetes are great examples of how AI technology is incrementally improving through mass accessibility and interoperability.
- **Google Cloud Platform (GCP) adoption is accelerating AI adoption but also limiting on-prem exploration.** Enterprise clients that have selected GCP as a cloud provider are increasingly exploring the data and AI capabilities coming together on the platform. This natural extension is bolstered by the fact that the GCP prioritizes in helping clients build scalable architecture that is necessary for AI. On the flipside, some enterprises, particularly those in highly regulated industries, are still wary of cloud data storage and are limited in what they can do with Google's AI technology stack that is so oriented toward cloud-based services.
- **Google's notoriously difficult talent certification process is slowing down practice development.** While service providers are committing more and more resources for Google AI training, the tech giant's certification process is particularly complex and lengthy. This is slowing down dedicated practice development versus other cloud AI mega-ISVs.

The HFS Top 10 Google AI service providers results

HFS Top 10 Google AI services 2019



Source: HFS Research 2019

HFS Top 5 Google AI service providers by individual assessment criteria

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HFS Ranking	Ability to execute			Innovation capability			Voice of the customer
	Depth and breadth of Google AI service offerings	Scale	Delivery of value	Google AI strategy and roadmap	Focus on business outcomes and process transformation	Technology innovation	
#1		accenture	accenture		accenture		accenture
#2	accenture			accenture		accenture	
#3							
#4							
#5							

Source: HFS Research 2018

Google AI service provider profiles

KPMG: establishing a symbiotic relationship with Google and proactively investing in new technologies to bring the highest standard of AI to clients

Dimension	Rank	Strengths	Development opportunities
HFS Top 10 position	2	<ul style="list-style-type: none"> • Clear division of responsibilities according to strengths. KPMG and Google have established a thriving working relationship predicated on recognizing each others' strengths and expertise. Whereas KPMG sees business transformation as the core of its offering, Google is heavily data and AI centric, and the two strategies are allowed to closely complement each other. This means KPMG can kickstart complex AI solutions for clients, while Google can accelerate sales. This recognition of niches makes for sound collaboration and smooth delivery. • Strategically combining internal IP with Google capabilities. Stemming from the clear-cut division of responsibilities discussed above, KPMG has become apt at recognizing when leveraging its internal IP or Google's capabilities is the right call to deliver best results for a client. KPMG has proven judicious in knowing when to make use of its own Ignite platform, or deferring to ready-made Google AI offerings, like its pre-trained AI accelerators. Even more proactively, KPMG has also been known to build custom solutions for a client when none of its own or Google's existing offerings quite fit the bill. All this demonstrates a willingness to adapt dramatically to perfectly meet client needs. • Robust and practical joint GTM. Despite the newness of the KPMG-Google partnership, they have already launched multiple joint solutions. KPMG invests heavily in ensuring that its internal IP meshes well with Google's capabilities to maintain a coherent go-to-market (GTM) strategy, for instance by re-platforming its solutions to be Google-specific. Moreover, the partners jointly tackle strategic accounts in some regions and bring projects to each other. • Staying ahead of the curve on AI. While recognizing Google's superior technical expertise when it comes to AI, KPMG doesn't take the back seat when it comes to R&D and investment. KPMG is lauded by partners and clients alike for not only bringing current AI technologies to the table for customers, but for strategically investing and partnering to stay ahead of changing client needs. This active involvement means KPMG has placed itself in a position to influence how new technologies are developed and ensure they're in tune with its clients' needs. 	<ul style="list-style-type: none"> • Finding ways to be agile despite the bureaucracy that comes with being an auditing firm. KPMG member firms operate in 153 countries, which can slow down GTM initiatives with Google. Its auditor status also means it's prohibited from working with some technology firms, limiting its potential partner ecosystem. Planning for such hurdles and developing a clearer coordination plan should be a central point in KPMG's Google strategy going forward.
Ability to execute			
Depth and breadth of offerings	1		
Scale	6		
Delivery	2		
Innovation capability		Key clients and practice details <ul style="list-style-type: none"> • KPMG and Google jointly focus on the UK and US markets and on the financial services and healthcare and life sciences verticals as joint growth opportunities. • KPMG's Google adoption is spearheaded by "The Lighthouse," which is KPMG's Data, Analytics and Artificial Intelligence CoE. It also has Google-trained and -certified staff in its CIO Advisory practice, Digital Enablement group, and the KPMG Global Services Center. • As of July 2018, KPMG's global firms had 92 individuals trained in Google Cloud Architect and Data Engineer roles, with 58 of those fully certified, across three countries, with steady monthly growth. It has also trained and certified over 100 resources (Google Certifications) in the past six months alone. • KPMG has established a global Google Innovation Lab dedicated to experimenting and innovating with Google products. The lab both tests and co-builds new Google products. 	Client case study highlights <p>KPMG has delivered several Google projects and POCs for mostly FS clients in 2018, including:</p> <ul style="list-style-type: none"> • Document classification. For a US-based FS client, KPMG built a document automation tool based on Google AI technology that extracts, parses, and manages information from unstructured data to automate and improve processing efficiency. This automation enables the client to manage large volumes of customer inquiries. This solution is now live. • Query resolution. For another FS client, KPMG piloted a cognitive assistant intended for use by customers to query information using a Google Home device, to speed up query resolution times and boost convenience for customers.
Google AI strategy and roadmap	1		
Focus on business outcomes and process transformation	2		
Technology innovation	1		
Voice of the customer	2		

About the author



Reetika Fleming | Research Director

Reetika Fleming is Research Director, Insurance, Smart Analytics & AI at HFS Research. She studies the broad use of data and analytics within enterprises, with a new research focus on machine learning and AI techniques to improve business decision making. Her research extends into defining future business operations for property and casualty, life and annuities and reinsurance companies.

reetika.fleming@hfsresearch.com
[@ReetikaFleming](#)



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