Gartner

Magic Quadrant for Custom Software Development Services, Worldwide

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Initiatives: IT Services and Solutions; CIO Leadership of Innovation, Disruptive Trends and Emerging Practices; Software Engineering Technologies

> This Magic Quadrant evaluates providers' capabilities in custom software development to support digital transformations and building new products. Sourcing, procurement and vendor management leaders can use this research to identify and select potential providers.

This Magic Quadrant is related to other research:

View All Magic Quadrants and Critical Capabilities

Strategic Planning Assumptions

Through 2023, demand for IT digital transformation skills will be at least 20% higher than the experienced supply available, forcing creative talent acquisition/management solutions.

Through 2023, 75% of organizations will customize agile practices to match product and team contexts, increasing application delivery cadence.

Market Definition/Description

Gartner defines the market for custom software development (CSD) services as development and iteration of custom applications and software products specifically for an organization to satisfy its unique business needs. This Magic Quadrant evaluates the worldwide capabilities of 18 providers in the CSD market. These capabilities include:

- Business requirements gathering and coding the application from inception, or building it on a platform as a service (PaaS), or assembling it from existing web services or other reusable pieces of code.

- Integration of the developed application with other systems within the enterprise or with external partner systems.

- Incident resolution and support at Level 2/Level 3 (L2/L3), correction of defects in the software, and refactoring of technical debt for the developed software as it moves into production.

- The use of agile/DevOps in diversified, inclusive and multidisciplinary teams.

This Magic Quadrant excludes:

- All activities related to implementing and maintaining enterprise commercial off-the-shelf application suites (e.g., SAP, Oracle, Workday, Salesforce).

- Ongoing application management of legacy applications.

- All business process outsourcing (BPO)-related activities.

- Any product revenue, such as the resale of software licenses and providers' own or third-party products.

- Any physical (on-premises and cloud) compute assets associated with revenue.

- Advisory consulting on business strategy and technical processes such as agile or DevOps transformation.

Services which are marketed as "software product engineering" or "digital product development" are likely to be good examples of the category Gartner defines as "custom software development services."

A more detailed analysis of the included providers' capabilities, with scoring based on use cases, is available in Critical Capabilities for Custom Software Development Services, Worldwide.

About the Vendor Profiles

Each vendor profile includes a summary of key characteristics of that provider's practice, including growth, geography and client size. It also reviews each provider's strengths and cautions regarding CSD services and emphasizes the areas where the providers are strong and the areas that need improvement.

Participating providers were asked to provide a percentage breakdown of revenue derived from clients of different sizes by number of employees (January 2021 through December 2021).

Gartner has chosen to include information on each provider's practice according to the following areas:

- **Introduction:** This outlines the type and scope of services that service providers are mainly focused on.

- **Growth:** The providers in this Magic Quadrant are estimated to have grown CSD services revenue, as a group, 22% year over year (YoY). Their ability to grow solidly offers an indication of providers' investment, focus and vision in the CSD practice, and their ability to take advantage of opportunities.

- **Client geography:** A breakdown of where each provider's revenue comes from, indicating the regions where the provider is strongest and has the largest number of clients. It is worth noting that the majority of all client revenue is generated in North America and Europe.

- **Industry:** Some providers are industry-agnostic, some are laser-focused on only a few industries, and some are more focused on a set of industries but work with clients in multiple industries. This area serves as an indication of the industries that are more prominent (based on the number of clients and percentage of revenue) for providers, and the industries in which providers have experience. However, a focus on a particular industry does not always mean that other industries are excluded from coverage.

- **Client size:** Participating providers were asked to provide a percentage breakdown of revenue derived from clients of different sizes by number of employees. This information was used to determine the size of the organization that is the provider's "sweet spot." The three segments are: small organizations, with up to 999 employees; small and midsize organizations, from 1,000 to 10,000 employees; and large organizations of more than 10,000 employees.

- **Custom software development focus:** This looks at the proportion of the overall application services business that is dedicated to CSD services.

Note that additional information on suitability for specific use cases, delivery capacity, resources and capabilities — such as for software engineering approaches, technical architecture and cloud, design (user and customer experience), business acumen, artificial intelligence/machine learning (AI/ML) expertise, API and integration expertise, analytics and BI expertise, multiexperience development, quality engineering and talent operations — can be found in the companion Critical Capabilities for Custom Software Development Services, Worldwide. It is strongly recommended that these two resources be used together to get the best understanding of provider reach, capability and suitability.

Many capable providers were not assessed as part of our analysis due to not meeting this Magic Quadrant's inclusion criteria and methodology (see the Inclusion and Exclusion Criteria section). Thus, noteworthy providers that did not meet all inclusion criteria are presented in the Honorable Mentions section. Some of these may even be a better fit for specific custom software development services engagements, depending on the size and complexity of the engagement, geography, industry and other factors. Clients are advised to speak with a Gartner analyst to narrow down a shortlist of best-fit service providers covered in this Magic Quadrant, and to discuss providers not covered here. Clients should also check the referenceable customers of the providers and customer references on Gartner's Peer Insights platform.

Magic Quadrant

Figure 1: Magic Quadrant for Custom Software Development Services, Worldwide
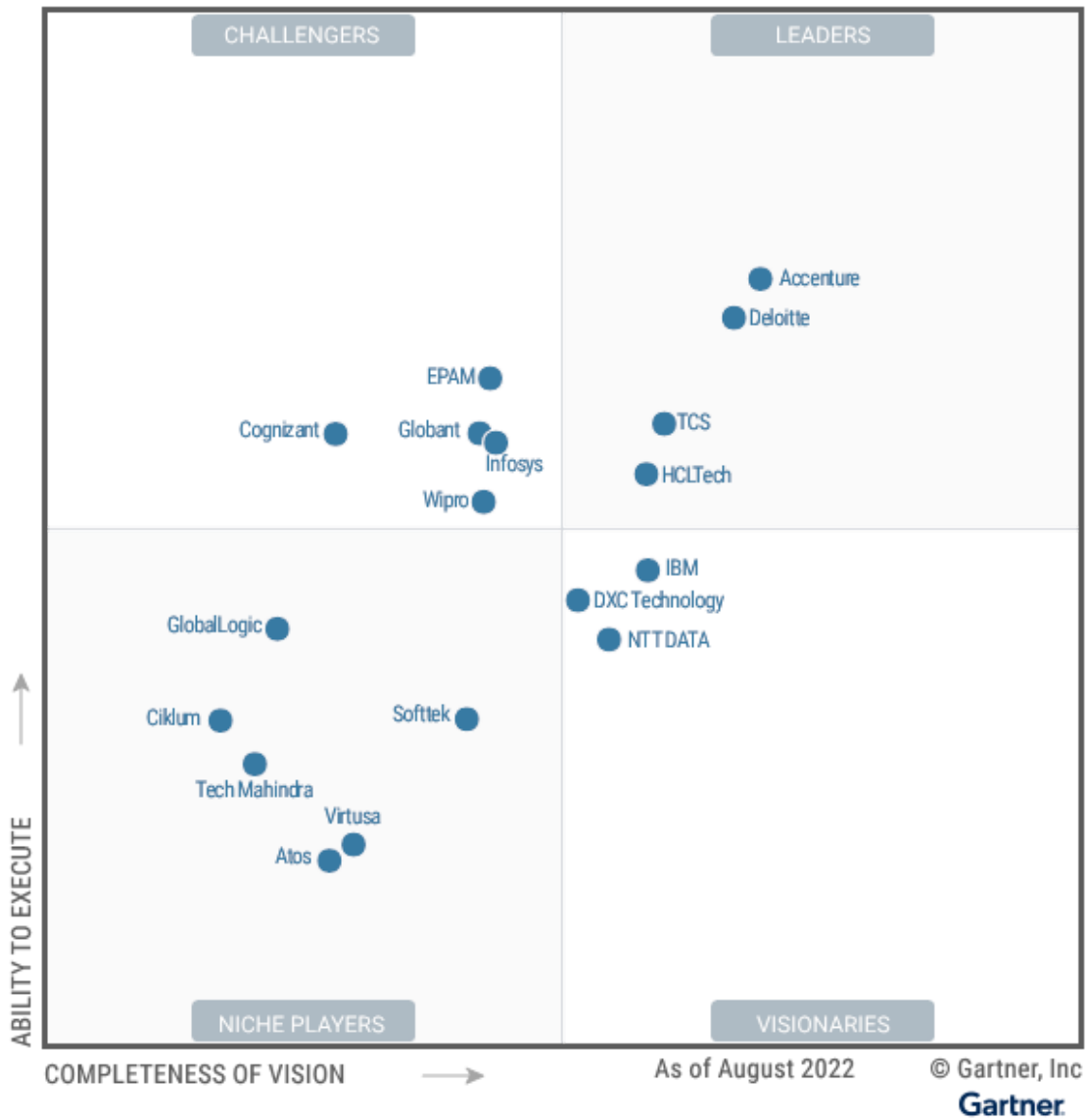
Source: Gartner (November 2022)

Vendor Strengths and Cautions

Accenture

Accenture is a Leader in this Magic Quadrant. Headquartered in Ireland, it is a full service provider and Gartner estimates CSD services revenue growth of 17% YoY through December 2021. Of this CSD services revenue, 90% comes from large clients and 10% from midsize clients. Accenture's CSD services revenue breakdown is 39% from North America (NA), 2% from Latin America (LATAM), 39% from EMEA and 20% from Asia/Pacific (APAC), including Japan. The top five industries in terms of its clients are retail, banking, consumer products, telecommunications and public sector. Accenture is focused on expanding its portfolio of CSD services through acquisitions, partnerships and investment in talent development based on its cloud-first strategy.

Strengths

- **Extensive investment in engineering services**: Accenture has made considerable investment to grow its software engineering practice. It leverages several platforms, assets and modern engineering principles to deliver at scale. It uses design thinking and a set of proprietary tools to develop custom software with speed and efficiency.

- **Strategic partner ecosystem**: Accenture has established a powerful alliance of over 185 ecosystem partners to bring deep technology expertise to its clients and become a "one-stop shop." It has strengthened its relationships with established business groups such as AWS, Microsoft, Google, Alibaba, IBM (Red Hat) and VMware (Tanzu), and benefits from solution collaboration with vFunction, MongoDB, Micro Focus, Tricentis and Pega, to name a few. It has pre-agreed commercial models and integrated architecture with these partners.

- **Focus on talent and reskilling:** Accenture is investing in its software engineering practice through acquisitions such as Imaginea and Olikka, and reskilling and training its workforce to provide a broad range of multidisciplinary skills to its clients. It has invested $900 million in L&D and $1.1 billion in R&D to develop assets, platforms and industry solutions.

Cautions

- **Limited certified agile/DevOps engineers**: Although Accenture continues to invest in this area, it has a low proportion of certified consultants versus its peers in DevOps. Clients should ensure that resources offered have the needed certifications to support deliverables.

- **Higher pricing and contracting rigidity:** While Accenture's overall client feedback is good, its pricing is higher and contracts less flexible than those of other vendors evaluated. Clients engaging with the provider should be prepared to negotiate with market knowledge and put additional time in their sourcing cycle.

- **Not ideal for nontransformational work:** Accenture uses its large global practice to deliver complex programs and is not the best fit for clients looking for nontransformational work.

Atos

Atos is a Niche Player in this Magic Quadrant. Headquartered in France, it is a full service provider and Gartner estimates CSD services revenue growth of 4% YoY. Of this revenue, 62% comes from large clients, 26% from midsize and 12% from small clients. Atos' CSD services revenue breakdown is 7% from NA, 2% from LATAM, 87% from EMEA and 4% from APAC. The top five industries in terms of its clients are public sector, utilities and energy, banking, industrial machinery and healthcare providers. Atos' focus is to deliver end-to-end solutions together with its clients — from portfolio management to development and hosting — covering agile/DevOps, custom software engineering, master data management, and application modernization. Atos announced a split into two companies after the Magic Quadrant data gathering was complete. Gartner is monitoring the timing of transition and will update research if appropriate.

Strengths
- **Invested in accelerators:** Atos has invested in the development of a digital software services framework (DSSF), which contains accelerators in the areas of cloud, data engineering and analytics, test automation and security. Furthermore, it has also developed industry-specific platform accelerators for financial services and insurance, resources and services, and a product suite for public sector and defense.

- **Value-based pricing:** Atos is willing to have fees at risk, with a pricing model (performance and rewarding) based on business performance indicators, performance of teams, and productivity and quality indicators. Clients interested in exploring different commercial models (output and outcome based) will find alignment with Atos' approach.

- **Strong European presence:** Atos has a well-established EMEA client base in its selected industries, with local cultural compatibility. A combination of internally developed capabilities and acquisitions has enabled Atos to win sizable projects in its core industries in Europe.

Cautions

- **Slow CSD services growth this period**: Compared with its peers in this Magic Quadrant, which have shown double-digit growth, Atos' revenue and full-time equivalent (FTE) growth in CSD have been slow. Clients should validate the implementation experience of the resources allocated to them.

- **Resource consistency:** Even though Atos has a high number of resources certified in different CSD technologies, some client feedback noted resourcing concerns. Clients looking for multidisciplinary business-IT teams should ensure the resources offered are suitably experienced and are complementary to the clients' team members.

- **Limited geographic presence**: Atos has provided services through delivery centers located throughout the world. However, its presence outside Europe is limited (Atos generates roughly 87% of its CSD services revenue in Europe). Clients needing non-European coverage must validate that Atos' proposed resourcing plan will meet their project requirements.

Ciklum

Ciklum is a Niche Player in this Magic Quadrant. Headquartered in the U.K., Ciklum is a pure-play company and Gartner estimates CSD services revenue growth of 23% YoY. Of this revenue, 22% comes from large clients, 22% from midsize and 56% from small clients. Ciklum's CSD services revenue breakdown is 9% from NA and 91% from EMEA. The top four industries in terms of revenue are high tech, media, retail and banking. Ciklum is focused on product engineering work with agile, product-focused clients to build digital products, platforms and data architecture.

Strengths

- **Positive feedback from existing customers**: Ciklum's customers indicate that the provider has been able to scale teams and solutions to meet their business needs. Ciklum also demonstrated its ability to enhance existing offerings of engineering and innovative technologies by leveraging subject matter experts from its base.

- **Competent delivery and focused execution:** Although Ciklum has a small resources pool compared with other service providers in this research, it effectively leverages it to deliver solutions for specific vertical industries, as mentioned above. Ciklum is concentrated on developing the product and customer experience around its strengths of data, analytics, AI, automation and low code.

- **Growing offering:** Ciklum has grown well via acquisitions and has scaled by developing existing and new partnerships to fuel its development plan for better support of its customers. Ciklum's revenue and FTE growth are higher than its fellow competitors in the Niche Player quadrant.

Cautions

- **Not for all customers:** Ciklum is a niche provider and is not a good fit for the public sector, large fixed-price engagements or nontransformational work. Its strategy is limited to a more conservative business model. Clients engaging with Ciklum must ensure the scope of work requirements compare well with the provider's use case expertise.

- **Geographic footprint and resources:** Ciklum is focused on Europe, with some work in NA and a small delivery team in APAC. It is less viable for clients requiring international operations or deployments. Ciklum's staff turnover for the 12-month period ending 31 December 2021 was above the average of its evaluated peers, which supports some clients' concerns regarding availability of talent.

- **Concentrated on traditional CSD services:** Ciklum has a low number of resources certified in mobile stack (Android, Swift, Objective-C, React Native) and is not yet able to produce notable IPs, nor offer enterprise service bus (ESB) system integration. Ciklum has established operations but is riding on a more traditional software engineering-led approach, i.e., clients need to be part of the active management of the engagement. Clients needing nontraditional CSD services should ensure the certification and capability of resources assigned.

Cognizant

Cognizant is a Challenger in this Magic Quadrant. Headquartered in the U.S., it is a full service provider and Gartner estimates CSD services revenue growth of 19% YoY. Of this revenue, 80% comes from large clients, 16% from midsize and 4% from small clients. Cognizant's CSD services revenue breakdown is 72% from NA, 22% from EMEA and 6% from APAC. The top five industries in terms of its clients are banking, insurance, aerospace and defense, life science, and retail. Cognizant is targeting a full journey of organizational maturity and delivery of value through product-thinking-led methodologies, presenting itself as a differentiating partner in custom software development.

Strengths

- **Mature methodologies and progressive design concepts:** Cognizant has well-established methodologies to help clients define and apply design thinking, and enable Scrum delivery. Part of its consolidation efforts include assisting customers with designing product team structure, formulating iterative product development strategies, and embedding security best practices in different enterprise sizes and complexities.

- **Good collaboration and strong accountability:** Cognizant has positive reports in customer experience, with customers noting a collaborative, accountable and supportive organization. It has received positive feedback with strong retention from its large customer base.

- **Strong technical execution:** Cognizant has been recognized by its customers for offering strong technical execution with its DevOps, cloud and data strategy. Its clients also report that Cognizant's technical execution is strong for digital products, and they recognize its platforms approach and matured transformation process. Cognizant is ideal for large transformational programs.

Cautions

- **Slower to bring innovation:** Cognizant has been slower to capture innovation from enterprises it works with. Clients engaging with the provider should seek case studies of their experience in particular industries to access the lessons from past transformation programs.

- **Challenges in retaining talent:** Although attrition has been rising in the talent-constrained IT market, Cognizant has experienced higher attrition than its peers in this research, validated by reference clients who cited as a concern the availability of talent and quality of resources. Although Cognizant is investing in its talent development strategy to retain and grow its workforce, clients should ensure there is sufficient knowledge documentation that will minimize impact.

- **Not ideal for enterprises with rigid delivery processes:** Cognizant supports various methodologies for building digital products. However, customers not able to change their software delivery methodologies or improve delivery maturity may not find it a good fit.

Deloitte

Deloitte is a Leader in this Magic Quadrant. Comprising multiple member firms headquartered in different regions, it is a full service provider and Gartner estimates CSD services revenue growth of 25% YoY. For this CSD services revenue, 90% comes from large clients and 10% from midsize clients. Deloitte's CSD services revenue breakdown is 52% from NA, 4% from LATAM, 23% from EMEA and 21% from APAC. The top five industries in terms of its clients are public sector, banking, high tech, healthcare and automotive. Deloitte is focused on increasing presence in new geographies, delivering forward-thinking solutions and creating immersive client experiences.

Strengths

- **Global scale and expertise:** Deloitte has a large global engineering workforce with modern engineering technical skills and industry-specific expertise. To support co-innovation, Deloitte has acquired HashedIn (cloud-native and software engineering and AI capabilities), NTC (media supply chain) and Dextra Technologies (software engineering), and has partnered with startups, hyperscalers and academia.

- **Large ecosystem and assets:** Deloitte has invested in a comprehensive range of partnerships to expand its custom software development portfolio. It has developed many industry-specific assets and platforms (Converge by Deloitte) to support rapid service delivery. Its high percentage of certifications in cloud, agile, DevOps, AI/ML, API and integration services enables it to provide deep technical expertise to its clients.

- **Partnering with clients to deliver business value:** Deloitte clients appreciate the quality of engineers and dedicated project leadership for service delivery. They refer to Deloitte as a true partner and are impressed with its ability to use technology and domain expertise to drive business outcomes leveraging experience from other clients.

Cautions

- **Not suitable for client-led, micromanaged engagements:** Deloitte's engineering services work well for clients with high complexity and transformation-focused engagements. Clients seeking a staff augmentation model or nontransformational work may not find it to be the right fit.

- **Enterprise agile frameworks:** Deloitte's focus on enterprise agile frameworks such as SAFe and LeSS is not as pronounced as other providers included in this Magic Quadrant. Clients looking for implementations with SAFe and LeSS should confirm Deloitte's capability for this effort.

- **Premium pricing:** Deloitte is increasingly offering alternative pricing models to its customers, but is usually viewed as a premium-priced provider when compared with competition. While customers appreciate its ability to bring industry expertise and transformation focus, they do mention that Deloitte is not the lowest cost provider to work with.

DXC Technology

DXC Technology (DXC) is a Visionary in this Magic Quadrant. Headquartered in the U.S., it is a full service provider and Gartner estimates CSD services revenue growth of 12% YoY. DXC declined to share its revenue percentages by client size, but its regional reporting of CSD services revenue is 31% from NA, 2% from LATAM, 50% from EMEA and 17% from APAC. The top five industries in terms of its clients are banking and capital markets, automotive, public sector, high tech and telecommunications. DXC's focus is to help clients use technology to build and transform their digital core, transform their operations, and accelerate and sustain their revenue growth.

Strengths

- **Broad use of agile/DevOps delivery:** DXC's DevCloud and historical use of DevSecOps tools and methods, plus increased leverage of subsidiary Luxoft's engineering power, have produced consistent results. Many clients report positively on its process use and ability to adapt to SAFe or other hybrid methods as needed. DXC can scale in all areas of development according to client needs.

- **Global coverage:** DXC's global footprint makes it an attractive option for larger multinationals and global enterprise clients looking for nearshore and offshore options, as well as a breadth of industry expertise. DXC has a larger number of hubs than most providers in this cohort, with over 20 hubs and centers on every continent covering delivery, regional and leveraged services.

- **Resilient delivery model:** Despite the Russian invasion of Ukraine (a major hub for its subsidiary, Luxoft), DXC's ability to maintain services in the region has been admirable. DXC's clients cited its flexibility and quality deliverables. They appreciate its flexibility to quickly adapt to their agile and SAFe processes and high-quality results.

Cautions

- **Insufficient focus on business outcomes**: Due to its strong engineering practice, clients find it challenging to refocus DXC Technology on the business outcomes of client initiatives. This is reflected in the lower percentage of deals contracted on performance against SLAs or outcomes.

- **Lower certified resources**: Compared with other providers in this Magic Quadrant, DXC has a lower percentage of certified experience design and API and integration FTEs, and has invested less in the reskilling of its resources than similar-sized CSD service providers. Clients engaging with DXC should ensure the resources offered meet the successful delivery requirements.

- **Challenge in retaining top talent**: As with other providers in this Magic Quadrant, DXC has experienced attrition, which has impacted delivery timelines or pricing for some clients. Clients engaging with DXC should validate the availability and experience of the resources proposed and have an agreed mitigation plan for high attrition.

EPAM

EPAM is a Challenger in this Magic Quadrant. Headquartered in the U.S., it is a full service provider and Gartner estimates CSD services revenue growth of 41% YoY. Of this revenue, 80% comes from large clients and 20% from midsize. EPAM's CSD services revenue breakdown is 59% from NA, 38% from EMEA, and less than 3% from APAC and LATAM. The top five industries in terms of its clients are banking, consumer products, high tech, media, and life sciences. Its focus is on accelerating organizations to become product-centric and platform businesses using digital capabilities as a differentiator.

Strengths

- **Solid expansions with investments**: EPAM has invested significantly in product engineering, technology services, product development services, platform engineering and orchestration. This growth supports its consulting and business acceleration services with a platform- and product-centric approach.

- **Implementation and execution at scale**: EPAM has established execution frameworks to support large organizations with product-centric thinking by bringing together its operating model, certified personnel, processes and tools. EPAM has demonstrated its ability to work with many vertical industries and has sufficient maturity to scale from those operations and engagements.

- **Comprehensive offerings to enable changes**: EPAM is able to offer full-stack and comprehensive offerings that benefit from its recent merger and acquisition activities. These sit nicely along with its existing portfolio of products and services, strengthening its business consulting capabilities and investments in its ecosystem-focused approach for its customers.

Cautions

- **Limited geography:** Even though EPAM operates in more than 50 countries, it is very focused on Europe and North America, with a small presence in APAC and LATAM. It is therefore less viable for clients requiring extensive APAC or LATAM operations or guidance.

- **Impact on talent workforce**: EPAM's Eastern Europe operations have been impacted by workforce attritions due to the global talent shortage and Russian invasion of Ukraine. However, it is actively redeploying its resources and investing its talent development strategy to recruit, train and develop staff. Despite the relocation, its client base has continued to grow and expand. Clients engaging with EPAM should validate the delivery locations and continued availability of key individuals allocated to their project.

- **Scalability and new markets**: Despite EPAM being one of the top providers in capturing verticals, it is more conservative in working with new industries and markets. Although EPAM is expanding into new markets via acquisitions such as Optiva Media and Emakina, clients should inquire about the experience of EPAM's resources offered to ensure they can bring industry expertise and new perspectives for a successful transformation.

GlobalLogic

GlobalLogic is a Niche Player in this Magic Quadrant. Headquartered in the U.S. as a Hitachi Group company, GlobalLogic is a pure-play company and Gartner estimates CSD services revenue growth of 41% YoY. Of this revenue, 49% comes from large clients, 27% from midsize and 24% from small clients. GlobalLogic's CSD services revenue breakdown is 63% from NA, 2% from LATAM, 33% from EMEA, and 2% from APAC. The top five industries in terms of its clients are high tech, life sciences, automotive, telecommunications, and banking. GlobalLogic is focused on helping clients design and build innovative products and platforms by integrating experience design, complex engineering and data expertise.

Strengths

- **Solid product and offering vision:** GlobalLogic is effective at showcasing accelerators like OpenNgine for DevOps and microservices, which supports AWS, Microsoft Azure and Google Cloud Platform. It also demonstrates success with proprietary tools such as DataDog and New Relic for ongoing product support and enhancements.

- **Progressive delivery model:** GlobalLogic reacted quickly to COVID-19, realizing market opportunity and adjusting and accelerating its product and delivery approach to address client challenges. GlobalLogic's commitment to Scaled Agile and SAFe enables it to deliver custom solutions as well as mentor clients in how to maintain and sustain both during and after iterative product deliveries.

- **Focused development practice:** Clients looking for prototype engineering with scale and design-led agile delivery, including options to maintain platform infrastructure after execution, could find a good fit with GlobalLogic. Since its acquisition by Hitachi, GlobalLogic is positioned in a group of companies that can execute digital transformation journeys for clients at scale. GlobalLogic has a higher percentage of revenue from new clients than most providers in this Magic Quadrant.

Cautions

- **Limited business-problem-solving capabilities:** GlobalLogic has accelerators involving AI/ML, but some clients found that it did not proactively propose designs and solutions to address business challenges, or advance client objectives beyond initial scope.

- **Understanding of business requirements and client expectations:** Some clients found GlobalLogic's ability to work seamlessly from design to execution lacked cross-team communication. Some clients also found its design choices flawed due to lack of understanding of the product or misunderstanding their business requirements. Clients should ensure the requirements, outcomes and deliverables are clearly defined and signed off.

- **Limited ongoing support:** Although GlobalLogic delivers products and custom solutions to clients, that handover to its management group can be disjointed. Application maintenance is comparatively limited within GlobalLogic's business model, so clients should take care to contract for knowledge transfer and smooth transition to operations processes.

Globant

Globant is a Challenger in this Magic Quadrant. Headquartered in Luxembourg, Globant is a pure-play company and Gartner estimates CSD services revenue growth of 59% YoY. For this CSD services revenue, 68% comes from large clients, 14% from midsize and 18% from small clients. Globant's CSD services revenue breakdown is 64% from NA, 22% from LATAM, 12% from EMEA and 2% from APAC. The top five industries in terms of its clients are high tech, telecommunications, healthcare, banking, and professional services. Globant is focused on building a strong talent workforce, autonomous culture and being a customer-centric organization.

Strengths

- **Digital native company:** Globant gets all of its revenue from CSD and is one of the fastest-growing software engineering companies. It delivers using a hybrid delivery model with multidisciplinary teams distributed throughout the world, and a wide range of modern technologies with a focus on speedy deployments, automation and process optimization. Globant is also focused on creating long-term partnerships with clients and cross-pollinating with different business models and studios.

- **Continued investment in growing the practice:** Globant continues to grow rapidly — 30% compound annual growth rate (CAGR) in the last seven years — relative to other providers in this Magic Quadrant. It has both organic and inorganic growth and has made 15 acquisitions to expand technology capabilities and grow in Asia and Europe. It added 7,000 resources (45%) to its global workforce in just one year.

- **Strategic partner:** Many of Globant's clients cited its ability to work as a strategic partner and operate with a co-ownership mindset. They appreciate its ability to provide skilled resources and retain them over multiple years to maintain subject matter expertise.

Cautions

- **Lack of small client focus:** Globant does 68% of its custom development work with large enterprises and 14% with midsize companies. Its limited focus on small enterprises means that these clients might not find Globant to be a good fit for their needs.

- **Limited industry capability:** Although Globant has made some acquisitions (WAE and Bluecap) to strengthen its strategic consulting capabilities, it lags behind other providers in industry and consulting expertise. Clients should ensure the provider has done projects in their desired industry and have experienced resources who can bring the lessons from past projects. Clients with a high demand for industry expertise may not find a good fit with Globant.

- **Above average pricing:** Globant tends to have good client feedback overall, but the areas of premium pricing and senior resource availability were cited by some clients as a concern.

HCLTech

HCLTech (formerly HCL Technologies) is a Leader in this Magic Quadrant. Headquartered in India, it is a full service provider and Gartner estimates CSD services revenue growth of 20% YoY. Of this revenue, 72% comes from large clients, 26% from midsize and 2% from small clients. HCLTech's CSD services revenue breakdown is 57% from NA, 1% from LATAM, 30% from EMEA and 12% from APAC. The top five industries in terms of its clients are high tech, banking, life sciences, insurance, and travel and transportation. HCLTech is focused on helping clients in their digital journey and accelerating their continuous product-centric and data-driven approach.

Strengths

- **Consistent iterative delivery model:** HCLTech's approach to CSD delivery combines composable business architectures and data-driven enterprise expertise with a solid people strategy and efficient use of automation where needed. Client feedback consistently relays that HCLTech-developed solutions have achieved expected benefits, enabling them to move from legacy delivery to more agile and DevOps models, and improve "time to monetization."

- **Solid approach to business transformation:** HCLTech has realized the client's need for revenue growth and not simply efficiency or cost reduction. It has embedded a total experience philosophy and end-to-end product vision into its delivery model, and helps clients focus on and drive accelerated business transformation, utilizing proprietary solutions (e.g., Platform-X, CARE platform and Cloud Bridge).

- **Strong use of innovative tools and techniques:** In addition to its Innovation as a Service offering, HCLTech supports some client initiatives for transforming to a composable business. HCLTech leverages its Industry 4.0 digital consulting services to align with C-suite desired processes, applications, products and platforms based on a continuous product-centric approach.

Cautions

- **Limited industries capability:** In industries with which it is familiar, HCLTech works and collaborates well with clients and third-party teams. Clients whose verticals are not listed as focus areas for HCLTech should ensure objectives and outcomes are clearly documented, and employ delivery incentives and penalties to either ensure success or mitigate/compensate for failures.

- **Resource availability:** As with all providers in this research, attrition has been and is expected to be a challenge for HCLTech. Clients looking for on-premises delivery and named resources should consider key personnel or attrition-focused SLAs for roles deemed critical to product execution success, and require risk mitigation processes to address loss of critical roles.

- **Lack of redesign and reengineering capability:** HCLTech's transformation focus is on business information and it lacks capabilities where reengineering a business process and redesigning to transform is needed. Clients embarking on major business process transformation should ensure that HCLTech understands their business operational issues and desired business outcomes, and can demonstrate capability through past case studies.

IBM

IBM is a Visionary in this Magic Quadrant. Headquartered in the U.S., it is a full service provider and Gartner estimates CSD services revenue growth of 9% YoY. Of this revenue, 100% comes from large clients. IBM's CSD services revenue breakdown is 40% from NA, 2% from LATAM, 26% from EMEA and 32% from APAC. The top five industries in terms of its clients are banking, insurance, public sector, automotive, and travel and transportation. Its focus is to deliver business value and customer experiences that require integration of domain and industry knowledge with technology via hybrid cloud services.

Strengths

- **Deep industry experience:** IBM's long-standing client relationships provide it with the ability to recognize and deliver its clients' requirements. Its consultants have deep experience in aligning an organization's business goals with the capabilities and enhancements needed within IT to obtain the expected business objectives. IBM Consulting, through its Institute for Business Value (IBV), consistently studies industry segments.

- **Continued investment in research:** IBM has continually invested in its partnership with Red Hat and SaaS acquisitions to mitigate the risks of clients' transformation journeys. As a result, IBM offers co-development of cloud-native applications, open-source architectures, hybrid cloud workbench, automatic backups of cloud resources and AI.

- **Focused automation expertise and assets:** IBM's automated suite of tools, accelerators and DevOps principles improve time to market. It uses automated assets such as cloud advisory tools and candidate microservices advisors to reduce discovery time in combination with co-creation and design thinking principles. IBM also leverages its experience in cultural transformation (agile and DevOps) to support clients in the development of new target operating models for custom software.

Cautions

- **Mainly focused on large or complex programs:** All of IBM's CSD services revenue comes from large enterprises. While small clients are not excluded from IBM's intended market, traditionally very little of its revenue comes from this category, because IBM focuses on business transformation engagements. Thus small enterprises may not find IBM to be a good fit.

- **Limited fees at risk:** IBM is increasingly offering alternative pricing models to customers; however, the majority of engagements do not have fees at risk in case of provider's nonperformance. Clients looking for business-outcome-based pricing models, where the service provider is accountable for outcomes, might not find IBM a suitable player.

- **Lower levels of resource certification:** Although IBM continues to invest in this area, its percentage of certifications for agile engineering — for example, Scaled Agile (SAFe), Scrum, Kubernetes and cybersecurity — is below the peer average. Clients engaging with IBM should validate that certified resources are offered for their requirements.

Infosys

Infosys is a Challenger in this Magic Quadrant. Headquartered in India, it is a full service provider and Gartner estimates CSD services revenue growth of 18% YoY. For this CSD services revenue, 72% comes from large clients, 25% from midsize and 3% from small clients. Infosys' CSD services revenue breakdown is 66% from NA, 20% from EMEA and 14% from APAC. The top five industries in terms of its clients are professional services, banking, retail, insurance, and high tech. Infosys is focused on expanding its design capabilities, niche partnerships and labs to co-innovate with its clients.

Strengths

- **Product-centric development**: Infosys has invested in a sizable workforce, which is focused on CSD to lead large and complex programs for its clients. It provides engineering services using product-centric development, enterprise agile and distributed agile methods. This is supported by its large team of agile coaches, Scrum Masters, SAFe practitioners and DevOps engineers for service delivery.

- **Expanding capabilities**: Infosys leverages several assets and platforms (such as LEAP, Infosys Applied AI and Infosys Live Enterprise Suite) to offer product engineering services. It has also expanded its offering through several acquisitions (for example, WONGDOODY, Carter Digital, Kaleidoscope, Blue Acorn iCi) and has won several awards for DevOps cloud projects and DevOps automation projects.

- **Different types of engagement models**: Infosys offers a variety of engagement models to its clients based on their unique requirements, such as pod as a service, studio as a service, gain sharing and a business-outcome-based commercial model. It has delivered several successful executions using these outcome-based models. Clients should consider these models when engaging with the provider.

Cautions

- **Limited global coverage**: Infosys has most of its resources located in Asia/Pacific and North America. It has a much smaller presence in other regions such as LATAM and Eastern Europe relative to other providers in this Magic Quadrant. Clients looking for nearshore delivery needs in these markets may find a better fit with other providers.

- **Lack of small client focus**: Infosys is heavily focused on procuring large and extra-large deals (72% of its CSD works with large companies). Small enterprises might not find Infosys a good fit for their needs.

- **Resource quality concerns:** Although Infosys focuses on hiring new resources and training them, some clients cited availability of talent and quality of resources as causes for concern. Clients engaging with Infosys should review resource planning to gain a better understanding of resources (in terms of skills and experience) offered or delivered.

NTT DATA

NTT DATA is a Visionary in this Magic Quadrant. Headquartered in Japan, it is a full service provider and Gartner estimates CSD services revenue growth of 5% YoY. Of this revenue, 76% comes from large clients, 22% from midsize and 2% from small clients. NTT DATA's CSD services revenue breakdown is 19% from NA, 3% from LATAM, 17% from EMEA and 61% from APAC. The top five industries in terms of its clients are financial services and banking, insurance, public sector, manufacturing, and telecom. NTT DATA is focused on bringing its local market knowledge via partnerships and acquisitions, and developing experience-driven products to fit clients that want to transition away from traditional software projects.

Strengths

- **Commitment to innovation:** NTT DATA introduces innovation to its customers through increasing IPs such as low-code or no-code and software engineering automation. Its technology focus areas include cloud, cybersecurity, data and intelligence, enterprise applications, and application development.

- **Growing offerings via partnerships:** NTT DATA is securing partnerships to strengthen its sales pipeline, customer journey orchestration, innovation and CSD capabilities. It is also accelerating its offerings via acquisitions to extend resources (nearshore extensions) and support clients' digitization needs on top of its application development and modernization offering.

- **Client-centric approach:** NTT DATA demonstrates its ability to be client-centric through minimum viable product techniques, and by helping enterprises start with small customer journeys, trials and lessons. It is then flexible to scale to bigger transformations with continuous improvements.

Cautions

- **Limited outcome-based deals:** NTT DATA generates more than 55% of its revenue from large engagements. However, a very low percentage of these deals are outcome-based. Clients looking for pricing models where the service provider is accountable for outcomes might not find NTT DATA a suitable player.

- **Lower vertical presence with smaller industries**: NTT DATA is integrating its offerings to apply the knowledge and industry expertise from other verticals. Smaller customers are seeking NTT DATA to create more synergies from other complex engagements. Organizations interested in exploring new digital business models and architectures should carefully evaluate how NTT DATA's expertise applies to their industry when considering them for transformation projects.

- **Certification needs improvement**: Compared with other providers in this Magic Quadrant, NTT DATA has a lower percentage of certified resources, namely in SAFe, multiexperience development, data science and AI, and quality engineering. It has invested less in reskilling its resources than similar-sized CSD service providers. Clients engaging with the provider should ensure the resources offered meet their experience and skills requirements.

Softtek

Softtek is a Niche Player in this Magic Quadrant. Headquartered in Mexico, Softtek is a pure-play company and Gartner estimates CSD services revenue growth of 10% YoY. Of this revenue, 76% comes from large clients, 22% from midsize and 2% from small clients. Softtek's regional reporting of CSD services revenue is 40% from NA, 32% from LATAM, 27% from EMEA, and 1% from APAC. The top five industries in terms of its clients are consumer products, high tech, industrial machinery, oil and gas, and banking. Softtek's aim is to collaborate effectively with clients to rapidly produce software and digital solutions that create economic value and improve competitiveness.

Strengths

- **Strong development offering**: Hyperautomation is a first step in Softtek's CSD offering strategy, incorporating lean UX, DesignOps and Kanban principles into its ideation, build and run process. Combined with its use of Digital Enablers for Growth (DIEGO) for digital governance, its lean portfolio management strategy contains all of the tools (such as EverythingOps) needed for a solid and efficient delivery model and ongoing service vision.

- **Expanding capabilities and coverage**: Softtek has experienced solid growth by almost doubling its client base from 2020 to 2021. It has a higher percentage of revenue from new clients than its evaluated peers and is adding new industries to its portfolio. Softtek leverages its digital products and proprietary tools in areas such as automation, business process optimization, code generators and cognitive test automation (for example, its FRIDA platform). Softtek uses these tools to identify and capture value creation opportunities for its clients based on shared scenarios.

- **Client engagement model:** Softtek's commitment to collaborate with clients to produce digital solutions that create economic value is realized in its performance-based execution. Its integrated and embedded IP supports client aspirations of DevSecOps migrations. Softtek's accelerator platform for speed to value is attractive, as is its flexibility in contracting and resourcing, which is less flexible in similar midsize providers.

Cautions

- **Limited global coverage:** Softtek's main operations are in the Americas, with just over a quarter of its FTEs in Europe. Although Softtek is expanding its CSD coverage in APAC, clients looking for a diverse and deep set of development teams should check the time zones of their business stakeholders if intense real-time collaboration is needed in that region.

- **Over-promotion of nearshore value:** Softtek heavily promotes "nearshore at scale" (it has one of the highest percentages of nearshore services in this cohort), which is attractive to clients in the Americas and Europe. However, large global enterprises looking for the benefits of offshore delivery — i.e., lower development costs found in APAC — may be discouraged by Softtek's limited location offering.

- **Limited outcome-based pricing models:** Softtek's revenue growth has been consistent. However, it is still just under half of the CSD services revenue growth average of competitors in this Magic Quadrant. Contracting with Softtek is mainly based on traditional time and materials (T&M) or fixed price per sprint models, and does not reflect the outcome-based or revenue-at-risk vehicles that clients are beginning to move toward.

TCS

TCS is a Leader in this Magic Quadrant. Headquartered in India, TCS is a full service provider and Gartner estimates CSD services revenue growth of 20% YoY. Of this revenue, 83% comes from large clients, 14% from midsize and 3% from small clients. TCS' CSD services revenue breakdown is 50% from NA, 2% from LATAM, 34% from EMEA and 14% from APAC. The top five industries in terms of its clients are banking, insurance, retail, telecommunications, and high tech. TCS is focused on playing a strategic role in its clients' product transformation and innovation agenda, supporting organizations accelerating business value with cloud, software product engineering and design services.

Strengths

- **Strong set of tools and accelerators:** TCS has a suite of integrated assets such as data and API marketplaces, an AI cognitive workbench, its Cloudonomy platform and research in next-generation technologies. Its rich set of enablers, including industry-specific solutions, reduce effort and delivery risk of new CSD initiatives.

- **Investment in talent development:** TCS lays special emphasis on talent upskilling. It provides a strong culture of continuous learning, proactive talent planning and hiring experienced resources and fresh talent using university partnerships. TCS has made significant investment in technical certifications and has one of the lowest attrition rates of evaluated providers, thus lending agility to its workforce.

- **Ecosystem approach to innovation:** TCS' investments in its innovation hubs (Pace Port centers) serve to accelerate its clients' digital transformation. Its innovation labs and studios provide value through collaborative research from provider partners, academia, startups and research organizations. TCS also effectively utilizes its various industry COE services to help clients understand where they can take further advantage of implemented systems or platforms.

Cautions

- **Dependence on remote resources:** As TCS moves to strategic partner for product transformation and innovation, clients will need staff to be increasingly close to their business and region (real-time collaboration). While TCS has been expanding its global network of application delivery centers and labs, the percentage of FTEs working from nearshore is significantly below the average of its evaluated peers. Clients in North America and Europe may struggle to develop client intimacy with TCS.

- **Limited coverage of the SMB market:** TCS indicated that 97% of its CSD services revenue comes from large and midsize enterprises. It may therefore not be the best fit for SMB clients.

- **Limited fees at risk:** TCS is increasingly offering alternative pricing models to customers. However, only a very few of its deals actually use this structure (fees at risk). Clients looking for business-outcome-based pricing models, where the service provider is accountable for outcomes, might not find TCS a suitable player.

Tech Mahindra

Tech Mahindra is a Niche Player in this Magic Quadrant. Headquartered in India, it is a full service provider and Gartner estimates CSD services revenue growth of 9% YoY. Of this revenue, 2% comes from midsize and 98% from small clients. Tech Mahindra's CSD services revenue breakdown is 57% from NA, 1% from LATAM, 23% from EMEA and 19% from APAC. The top five industries in terms of its clients are retail, banking, consumer products, telecommunications, and public sector. Tech Mahindra's focus is to enable scalable capabilities for solving clients' specific business problems through its hyper-converging digital transformation themes.

Strengths

- **Strong organizational commitment to custom development methods**: Tech Mahindra has invested heavily in its new digital framework (DigitALL) to help clients drive holistic transformation. This framework is built around design thinking, innovation and change management. It utilizes the provider's other philosophies of ideation, product design and rapid prototyping (NXT.NOW), an agile operating model, automation, and cloud-native engineering (Intelligent Core) to reduce deployment time to production.

- **Flexible ongoing operations**: Even with high attrition in the IT services industry overall, Tech Mahindra's approach to work from home and delivery from any shore helps it to execute with limited business disruption. Its change management strategy, which utilizes orchestration fitment, focuses on reducing cost and improving reliability.

- **Client-centric approach**: Some clients cited Tech Mahindra's ability to proactively offer alternative solutions to help meet business goals. Some clients also cited good collaboration and technical expertise to challenge potential trouble areas or design ideas, and offer mitigating solutions or different approaches altogether.

Cautions

- **Balance of technology versus business transformation focus**: At times, Tech Mahindra can focus more on the technology than relaying a comprehensive understanding of a business challenge. While its depth of tools and accelerators is deep in some verticals, it can be challenged when building client confidence in understanding the end-to-end business objectives and goals.

- **Lack of consulting capability:** Tech Mahindra has limited capability to deliver industry-specific consulting. Large organizations looking for industry practices or interested in exploring new digital architectures should carefully evaluate Tech Mahindra's industry experience for a successful transformation.

- **High percentage of junior resources:** For CSD, Tech Mahindra utilizes resources with fewer than two years' experience at a much higher volume than peers in this research. Some clients have relayed that their product owners need to be more involved in supervisory oversight of these junior developer efforts, which can detract from time spent on strategic product planning or decision making.

Virtusa

Virtusa is a Niche Player in this Magic Quadrant. Headquartered in the U.S., Virtusa is a pure-play company and Gartner estimates CSD services revenue growth of 13% YoY. Of this revenue, 82% comes from large clients and 18% from midsize clients. Virtusa's CSD services revenue breakdown is 71% from NA, 20% from EMEA, and 9% from APAC. The top five industries in terms of its clients are banking, high tech, healthcare, insurance, and life sciences. Virtusa's focus is to drive efficiency and speed in delivering digital transformation services through unique ways of working, industry and engineering assets, and engineering excellence.

Strengths

- **Digital engineering tools and industry assets:** Virtusa has a suite of assets and processes embedded in the Digital Transformation Studio (DTS). It offers engineering tools (CI/CD and gamified dashboards) and industry assets (AI model, cloud-native middleware and API toolkit). Virtusa is investing in newer technologies such as blockchain, AI/ML, Web3, IoT, edge computing and 5G. Virtusa is a good fit for clients looking to leverage its suite of proprietary tools and accelerators mainly to drive process improvements and productivity gains.

- **Strong digital engineering expertise:** Virtusa delivers software quickly and reduces technical debt while experimenting with new technologies. It has specialized multidisciplinary agile teams using output-based engagement models based on delivery efficiency and productivity factors. Clients mentioned that Virtusa helped them move up the curve in agile and played key "coaching" roles.

- **Software engineering model**: Virtusa's unique way of organizing delivery teams as feature teams helps deliver quality solutions. Its agile execution model is based on a pod-assembly-led approach for higher engineering quality, leaving a very low footprint of technical debt. Virtusa leverages a global asset repository (vHub) that supports global, regional and feature teams, enabling high reuse of patterns across the organization.

Cautions

- **Targeted industry focus**: Virtusa's customers are concentrated in several sectors. Currently, its focus is on banking and financial services, high tech, telecommunications, insurance and healthcare providers, and life sciences. Virtusa may not be a good fit for clients outside of these industries. Clients from other industries should perform due diligence on its capabilities when considering Virtusa.

- **Coverage limited to the U.S. and Europe**: Virtusa was acquired by Baring Private Equity Asia (BPEA) in February 2021. Its ability to invest in a broad ecosystem and grow geographic coverage is yet to be seen. However, Virtusa states that it is investing in strategic delivery center expansions across Canada, Eastern Europe and LATAM.

- **Resource availability**: Virtusa's staff turnover was above the average of its evaluated peers. In addition, FTE growth was lower than the average of the service providers in this research. While Virtusa is actively developing upskilling programs to promote employee career growth and reduce attrition, clients should ensure that they are getting experienced resources allocated to the project and that there is a good risk mitigation plan for knowledge transfer and replacing resources.

Wipro

Wipro is a Challenger in this Magic Quadrant. Headquartered in India, Wipro is a full service provider and Gartner estimates CSD services revenue growth of 41% YoY. Of this revenue, 100% comes from large clients. Wipro's CSD services revenue breakdown is 59% from NA, 2% from LATAM, 29% from EMEA, and 10% from APAC. The top five industries in terms of its clients are consumer products, mill products, high tech, telecommunications, and banking. Wipro's aim is to deliver end-to-end integrated services through a multidisciplinary, agile approach, ensuring delivery ownership and accountability, and co-innovation via gain share models.

Strengths

- **Cloud platform development**: Wipro's new multicloud platform offers management and migration capabilities, a microservices assessment framework, an enterprise service bus (ESB) to microservice migration framework, and operational database migration from on-premises to cloud. These capabilities are enabled by Wipro's High Performance Composable Enterprises (HPCE) framework.

- **Agile/DevSecOps ways of working**: Wipro has a proprietary framework that incorporates a mix of Scrum and extreme programming (XP) for teams and adopts SAFe/Nexus/Spotify models for scaling. Wipro developed an Agile Anywhere framework that allows teams to collaborate and execute seamlessly on the product backlog and value stream management.

- **Partnerships and acquisitions**: Wipro has invested in a comprehensive range of acquisitions to expand its CSD portfolio. It has acquired Capco (digital, consulting and technology services to financial institutions), Ampion (cybersecurity, DevOps and quality engineering), Edgile (cybersecurity), Eximius Design (engineering services with expertise in semiconductor, software and systems design), PARI (industrial automation and robotic automation) and Encore Theme (trade finance solutions).

Cautions

- **Overly India-centric delivery**: Currently, over 78% of Wipro's resources are based in APAC. While Wipro plans to continue its growth and expansion into other countries, clients should validate the availability and capability of its resources outside APAC, especially if global enterprise transformations require nearshore presence (intense real-time collaboration).

- **Low certification in cybersecurity and automation of software deployment**: Wipro has a high number of consultants certified in agile/DevOps and continues to invest in these technical areas. However, compared with other providers in this research, Wipro has a low percentage of consultants certified in open-source systems for automating software deployment, operating containerized applications and cybersecurity.

- **Limited coverage of the SMB market**: Wipro indicated that 100% of its CSD services revenue comes from clients with more than 10,000 employees. Thus it may not be the best fit for SMB clients.

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

This is the first Magic Quadrant to be issued for this market. All providers included in this report are being evaluated for the first time.

Dropped

This is the first Magic Quadrant to be issued for this market. All providers included in this report are being evaluated for the first time.

Inclusion and Exclusion Criteria

The criteria for inclusion of service providers in this Magic Quadrant are based on a combination of quantitative and qualitative measures.

Quantitative Criteria:

Service providers included in this Magic Quadrant **must satisfy two of the following three** criteria:

- For pure-play companies (that derive more or equal to 70% of their revenue exclusively from CSD services) — A minimum of $175 million annual worldwide revenue during the period of January 2021 through December 2021 for CSD services.

- For full-service providers — A minimum of $1,000 million annual worldwide revenue during the period of January 2021 through December 2021 for CSD services.

- Revenue from a minimum of two of five geographies (North America, EMEA, APAC, Japan and Latin America) for CSD services.

Qualitative Criteria:

- Overall market interest in, and visibility of, the service provider as determined by serious consideration for selection from enterprise clients.

- Gartner analysts' interactions with enterprise buyers, which reveal interest in specific CSD service providers.

- Demonstrable capability to consistently invest in methodology, frameworks and processes related to CSD and investments in resource development.

Honorable Mentions

The criteria for inclusion of service providers in this Magic Quadrant are based on a combination of quantitative and qualitative measures, as noted in the Inclusion and Exclusion Criteria section. Below are several noteworthy providers that did not meet all inclusion criteria but could be appropriate for clients, contingent on requirements. The following is a nonexhaustive list:

- **3Pillar Global** is a product development partner headquartered in the U.S. with operations in eight countries. The firm delivers short- and long-term value via tailored cross-functional product development teams, including specialized product strategy and management, user experience (UX) design, and software.

- **AgileThought** is a service provider based in Irving, Texas, U.S. with nearshore capabilities in LATAM. It leverages next-generation technologies to create competitive differentiation and strong customer experiences for its clients. It provides agile-first delivery for a variety of industries, with expertise across application development and deployment, data analytics, cloud services, UX design and automation.

- **Brillio** is a global technology services company based in New Jersey, U.S. Brillio is focused on the implementation of digital technologies. It helps clients accelerate their business by leveraging its expertise in agile engineering to bring human-centric products to market at speed.

- **CI&T** is an IT and software engineering company with expertise within the automotive, high tech, financial, insurance, manufacturing, media, retail, life sciences and healthcare industries. The company is headquartered in Campinas, Brazil and has a global presence of digital professionals in strategy, data science, design and engineering with operations throughout the U.S., Canada, Europe, Asia, Australia and LATAM.

- **Endava**, headquartered in the U.K. and listed on the NYSE, provides technology strategy and engineering services to assist clients in their journey from idea generation to development and deployment of products, platforms and solutions. The company serves clients from locations in Australia, North America, Singapore and Western Europe, in addition to nearshore delivery centers in Central Europe and LATAM.

- **Mindtree** is a multinational IT services company, headquartered in Bangalore, India. It has more than 37,400 professionals across 24 countries and is a part of the Larsen & Toubro (L&T) Group. It enables enterprises across industries to drive competitive advantage and customer experiences by harnessing digital and cloud technologies.

- **Mphasis** is a multinational technology services company based in Bangalore, India. It provides applications outsourcing services, as well as architecture guidance, application development and integration, and application management services. Its service transformation approach helps clients "shrink the core" through the application of digital technologies.

- **Ness Digital Engineering** is a portfolio company of The Rohatyn Group and is headquartered in New Jersey, U.S. It provides digital transformation services, from advisory through engineering, for product and platform modernization to help businesses accelerate innovation and growth.

- **SoftServe** was founded in Lviv, Ukraine and is headquartered in Texas, U.S. It specializes in consultancy services and software development. SoftServe provides services in the fields of big data, IoT, cloud computing, DevOps, e-commerce, computer security and experience design, with expertise across healthcare, retail, energy and financial services.

- **UST** is a global digital transformation solutions provider, headquartered in California, U.S. It offers end-to-end IT services and solutions and has over 30,000 employees in 30 countries. It leverages its own set of accelerators for product development, including the use of low-code platforms to transform products while improving maintainability.

Evaluation Criteria

Gartner evaluates service providers on their Ability to Execute and their Completeness of Vision, as per the definitions below. When the two sets of criteria are evaluated together, the resulting analysis provides a view of how well a provider performs a spectrum of services compared with its peers, and how well it is positioned for the future.

For more information on Gartner's Magic Quadrant research methodology, refer to our Research Methodologies on the Gartner website.

Ability to Execute

Gartner analysts evaluate providers on the quality and efficacy of the processes, systems, methods or procedures that enable IT provider performance to be competitive, efficient and effective, and to positively impact revenue, retention and reputation within Gartner's view of the market.

Solution/Service: The provider's ability to execute rapid iterative software engineering methods to ensure that the delivered software is useful and valuable. This includes current service capabilities, quality, feature set, skills, etc. The subcriteria includes the following:

- Client feedback on the provider's demonstration of agile/DevOps behaviors (not just observance of agile/DevOps processes)

- Extent of agile/DevOps certifications held within the organization

- Proportion of employees who hold such certifications

- Use of multidisciplinary fusion teams

Overall Viability: Viability includes an assessment of the organization's overall financial health, as well as the financial and practical success of the custom software development (CSD) business unit. This criterion also includes the ability of the organization to focus its offering on CSD practice and to continue to evolve and maintain custom-developed software in the long term. The subcriteria include the following:

- Business metrics for the CSD practice such as profitability, utilization, cash flow and funding.

- For providers that choose not to share their business performance, a convincing approach to demonstrate to clients that their business is healthy and viable.

Sales Execution/Pricing: The provider's ability to effectively understand the business problem, and develop a clear proposal offering a creative solution and attractive pricing. This criterion also includes the provider's track record in sustaining organic growth through a mixture of repeat business from existing customers and winning new customers. The subcriteria include the following:

- Organic constant-currency revenue growth over more than 12 months

- Repeat business percentage

- Growth in billable delivery resources over a period of 12 months

Market Responsiveness/Track Record: This evaluation criterion was not included in the Ability to Execute for this Magic Quadrant. It refers to a provider's ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, client needs evolve and market dynamics change.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message in order to influence the market, promote the brand, increase awareness of capabilities and establish a positive identification in the minds of customers. This "mind share" can be driven by a combination of thought leadership, referral relationship building and sales activities. The subcriteria include the following:

- Demonstrable branding and thought leadership activity presenting benefit delivery

Customer Experience: The ability of the provider to deliver working software that delights customers and has a positive impact on their business. This includes the ability to understand the client's business goals, their ability to forecast accurately and deliver as promised, the steps they take when problems are found, the usability, reliability and responsiveness of the software they deliver, and the client's overall perception of a provider's contribution to a successful project. The subcriteria include the following:

- Client feedback on the experience working with the provider and whether the provider's work achieved the outcomes the client was aiming for.

Operations: The ability of the organization to attract and retain talent, thus building a capable and motivated workforce. Factors include quality of the delivery organizational structure, work location strategies, reputation in the industry as an employer, recruitment, training and personal development programmes, creation of diverse and inclusive work environments, and management of attrition. The subcriteria include the following:

- Approach to on-site, onshore, nearshore, offshore and work-from-home delivery

- Recruitment, training and attrition of personnel

- Attrition rates

- Glassdoor ratings

- Standards and certifications (e.g., ISO, Capability Maturity Model Integration (CMMI) Level 5)

Table 1: Ability to Execute Evaluation Criteria

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

Source: Gartner (November 2022)

Completeness of Vision

Gartner analysts evaluate providers on their ability to convincingly articulate logical statements. This includes current and future market direction, innovation, customer needs and competitive forces and how well they map to Gartner's view of the market.

Market Understanding: This evaluation criterion was not included in the Completeness of Vision for this Magic Quadrant. It refers to the provider's ability to understand buyers' needs and to translate that understanding into products and services.

Marketing Strategy: Clear and distinctive messaging consistently communicated to account managers, customer programs and positioning statements. The subcriteria include the following:

- Growth strategy

- Targeted investments to increase presence in new geographies and industries

Sales Strategy: A sound strategy for selling that uses the appropriate networks including marketing, service and communication. The subcriteria include the following:

- Strategies for selling services including incentive plans for adding new clients and growing existing clients

- Account management:

    - Structure, roles and locations

    - Proportion of time between new business development versus delivery/escalations

- Strategy for growth within new clients

- Sales and marketing strategy for acquiring new clients

Offering (Product) Strategy: A provider's vision to deliver a service which develops software using iterative software engineering methods with frequent business feedback and rapid time to value. The subcriteria includes the following:

- Understanding, capabilities and IP for agile software development

- Understanding, capabilities and IP for DevOps ways of working

- Understanding, capabilities and IP for product-centric teams

- Understanding, capabilities and IP for design thinking

- Methods to ensure the security of the software developed for clients

Business Model: A provider's approach to risk and its attitude toward business models which accept risk in pursuit of client satisfaction, profit and growth. The subcriteria include the following:

- Demonstration of significant revenue streams for CSD, which go beyond charging for effort (use of alternative pricing models)

- Demonstration of willingness to make significant provider dependent on the impact and business outcomes of the software developed

- A clearly visible service line and organization to deliver CSD services and a strategy for how this entity collaborates with other parts of the business to offer clients an end-to-end solution

Vertical/Industry Strategy: The capability to provide development team members or intellectual property specific to a client's industry, and therefore bring to the project a depth of understanding of terminology and business processes. The subcriteria include the following:

- Consultants/engineers with experience, training and domain knowledge of a specific industry sector

- Intellectual property (IP) specific to the client's industry

Innovation: A provider's innovative use of technology such as APIs, data and analytics, artificial intelligence (AI), cloud and multiexperience. The subcriteria include the following:

- Capabilities and experience with APIs, API management tools and integration technologies

- Capabilities and experience with data analytics and business intelligence

- Capabilities and experience with AI and machine learning technologies

- Capabilities and experience with technical architecture and cloud

- Capabilities and experience with multiexperience development

Strategies to drive innovation initiatives include:

- Investing in startups, software partners and research communities

Geographic Strategy: The provider's strategy to use a global delivery model to collaborate in the same time zone as its clients, while protecting a client's IP and data. The subcriteria include the following:

- Consultants/engineers who have a close cultural fit to client's team and are located in the same city, country or at least similar time zone as the provider's target sales strategy.

- Effective use of technology to enable clients and consultants/engineers to collaborate when not colocated.

- Approaches to remote and distributed software engineering teams, which enables collaboration while ensuring clients' IP and data are kept secure (especially when consultants/engineers are working from home).

Table 2: Completeness of Vision Evaluation Criteria

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

Source: Gartner (November 2022)

Quadrant Descriptions

Leaders

Leaders are performing well today, gaining traction and mind share in the market. They have a clear vision of market direction and are actively building competencies to sustain their leadership position in the market.

Challengers

Challengers execute well today for the portfolio of work selected, but they have a less well-defined view of the market's direction than Leaders do. Consequently, they may be tomorrow's Leaders, or they may not be aggressive and proactive enough in preparing for the future.

Visionaries

Visionaries articulate important market trends and directions. However, they may not be in a position to fully deliver and consistently execute on that vision. They may need to improve their service delivery.

Niche Players

Niche Players focus on a particular segment of the market, such as a particular industry, size of client, functional area (for example, human capital management or supply chain) or geography. Their Ability to Execute is limited to those areas of focus. Their ability to innovate may be affected by their narrow focus.

Many of the providers in this segment received positive client feedback, and many can be considered to be leading players within their niche market focus.

Context

This Magic Quadrant addresses the CSD service capabilities of providers that meet Gartner's criteria for inclusion. It is a new Magic Quadrant that replaces Market Guide for Agile and DevOps Custom Software Development Services.

This Magic Quadrant evaluates 18 providers. It is a point-in-time analysis, with the status of all provider profiles reflected as of August 2022. Quantitative data collected was for a 12-month period ending 31 December 2021. As part of the research, the analyst team generated over 800 separate data points that collectively determined the placement of the dots on the Magic Quadrant.

When considering custom software development, clients are advised not to simply select service providers in the Leaders quadrant. A provider may appear in a particular quadrant based on Gartner's extensive analysis across the full-service life cycle in many industries and other criteria. However, for any given deal, a client company's selection criteria will be narrower and more specific. Consequently, providers in the Challengers, Visionaries or Niche Players quadrants may prove to be more appropriate for the engagement. A more detailed analysis of the service providers' capabilities, with scoring based on use cases, is available in Critical Capabilities for Custom Software Development Services.

Additionally, because the inclusion criteria in the Magic Quadrant result in the analysis of a subset of providers in the CSD services market, clients should not disqualify any potential competitors simply because they do not appear in this research. Other IT service providers not evaluated in this Magic Quadrant may present better alternatives for your business requirements. Consider using a sweet-spot analysis to ensure you have an optimum basis and evaluation criteria to down-select the most suitable providers (see Use Smart Filtering to Accelerate Outsourcing Service Provider Evaluation and Selection). A Gartner analyst can help with a shortlist of the most suitable candidates based on client requirements.

Market Overview

The increase in investment for digital business has pushed demand for digital talent far more than the available supply. Gartner sees a significant crunch of digital talent to deliver digital initiatives. Most of the service providers in this research reported high attrition rates (18% average) in a tough labor market. For the 18 service providers evaluated, there are almost 998,000 resources engaged in custom software development (CSD) projects with an average FTE growth of 20% and the following regional FTE split: 47% in APAC, 27% in EMEA, 12% in NA, 11% in LATAM and 3% in Japan.

The revenue from CSD services for the 18 providers featured in this Magic Quadrant was $60.8 billion for the period of January 2021 to December 2021. Of this revenue, 22% came from new clients. For the full system providers in this analysis, it was reported that an average of 29% of total IT services revenue came from CSD service engagements. For pure-play companies, CSD services represented 97% of the total IT services. These providers also had a slightly higher percentage of FTE growth than the average presented above. Pure-play service providers reported an average revenue growth of 29% with the following regional revenue split: 48% in NA, 38% in EMEA, 3% in APAC, 11% in LATAM and 0% in Japan.

The most common pricing models were time and materials, which represented 41% of the total revenue, followed by fixed price per sprint (22%), fixed price with revenue at risk (13%) and business outcome (5%).

Sixty-nine percent of the CSD revenue was related to large organizations, 15% to midsize organizations and 16% to small clients. The top industries for CSD services were banking and financial services (20%), high tech (9%), telecommunications (6%), insurance (6%), public sector (5%) and retail (5%) representing a total of 51% of the overall revenue.

In terms of resource experience, 6% of the providers' FTEs have more than 15 years' experience, 14% between 10 and 15 years' experience, 25% between 5 and 10 years' experience, 26% between 2 and 5 years' experience, and 29% have less than 2 years' experience.

Most of the featured providers are focused on providing CSD services using delivery and innovation centers in different regions of the world. In terms of global delivery model and geographical split, 9% of the consultants provided services from onshore, 15% from onshore (remote), 23% from nearshore and 53% from offshore locations. Providers have further invested in innovation to provide reusable industry assets and preconfigured and automation tools to accelerate delivery of CSD engagements.

Technical architecture and cloud, data science, artificial intelligence/machine learning (AI/ML), analytics and business intelligence, and quality engineering are the technical areas where service providers have invested more in terms of external certifications, while data privacy and cybersecurity are the areas with less proportion of certified resources.

This Magic Quadrant assesses the relative positioning of the providers in delivering CSD services. In the companion Critical Capabilities research, specific use cases have been identified so that the performance in each area can be judged. The three use cases are:

- **Unique user experience:** This use case focuses on the provider's ability to build software that will be used not by the buyer's employees, but by the buyer's customers. Examples include developing dynamic websites, personalization of content and promotions, smartphone apps, tablet applications, interactive voice and text responses. This use case is common in consumer-facing industries such as retail, financial services and entertainment. Businesses in these verticals seek to differentiate themselves through the digital experience they offer their customers. Providing a unique customer experience requires custom-made software.

- **Unique operational processes:** This use case focuses on the provider's ability to develop software that operates or automates business processes, which only exist at the buyer. These processes increase the effectiveness of the business. The new processes improve operating efficiencies by streamlining the regular operations of a business and increase productivity by eliminating the variability of human and systematic error. Providers may bring specialization in industry verticals and their regulatory environment. Examples include payment processing providers to process millions of transactions a day, and telecommunications — operational support systems that provision new customers and manage networks and government agencies.

- **Unique products:** This use case focuses on the provider's ability to build or develop a new product or service that the buyer will sell, which has differentiating features, to increase revenue and alternative channels for growth. These are driven by demand from consumers and require a good understanding of the market and competitors. These services may require specialization in specific technologies, such as industrial Internet of Things (IIoT), augmented reality/virtual reality (AR/VR), AI/ML or embedded systems. These services would require rapid prototyping, experimentation, hypothesis-based development and close collaboration with clients to create a product implementation roadmap. Examples include infotainment systems in the automotive sector and digital platforms in entertainment, media and gaming sectors.

This Magic Quadrant is based on data collected for a 12-month period ending 31 December 2021. We believe this research provides an accurate picture of the current market, even with the ongoing Russian invasion of Ukraine. IT service providers in the impacted region report they are taking specific actions to minimize risks to their services. However, Gartner recommends that clients engaging with service providers that have delivery operations in the impacted region should validate the experience and continued availability of key individuals allocated to their projects. Gartner is continually monitoring this market and the situation in Ukraine, and will update this research as warranted based on new developments.

Acronym Key and Glossary Terms

Pure-play company	A company that derives more or equal to 70% of its revenue exclusively from custom software development services

Evidence

Evaluation in this Magic Quadrant is informed by:

- Gartner client interactions — Gartner inquiries between user organization clients and sourcing, procurement and vendor management analysts on service providers relating to CSD services over 12 months (January 2021 through December 2021).

- Gartner client interactions.

- Primary research — Feedback from 103 Peer Insight submissions.

- Primary research — Feedback from 134 customer reference surveys.

- Primary research — A 60-minute vendor briefing from each participating service provider addressing capability proof points of each evaluation criterion in the Magic Quadrant.

- Secondary research — Press releases and publicly available information, including company websites and financial reports.

- Other Gartner analysts — Peer review by 20 Gartner analysts. Their views and comments were considered. In addition, this research was reviewed at internal research community sessions.

- Gartner Peer Insights and inquiries — Gartner's analysis in this Magic Quadrant is also based on customer responses, Gartner Peer Insights reviews (at the time of writing) and inquiry interactions. We considered reviews from Gartner Peer Insights posted from January 2022 through June 2022.

In addition, this document was presented and defended at the 7 July 2022 Technology and Service Providers and IT Leaders Services Market Research Community meeting.

Note 1: Industries

This Magic Quadrant addresses the capabilities of the included providers in the following 27 industries:

- Aerospace and defense

- Agriculture

- Automotive

- Banking

- Chemicals

- Consumer products

- Defense and security

- Engineering, construction and operations

- Healthcare (providers)

- High tech

- Higher education and research

- Industrial machinery and components

- Insurance

- Life sciences

- Media

- Mill products

- Mining

- Not for profit

- Oil and gas

- Professional services

- Public sector

- Retail

- Sports and entertainment

- Telecommunications

- Travel and transportation

- Utilities and energy

- Wholesale distribution

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.

Recommended by the Authors

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How Markets and Vendors Are Evaluated in Gartner Magic Quadrants

Use Smart Filtering to Accelerate Outsourcing Service Provider Evaluation and Selection

IT Services Strategic Sourcing Guide

Table 1: Ability to Execute Evaluation Criteria

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

Source: Gartner (November 2022)

Table 2: Completeness of Vision Evaluation Criteria

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

Source: Gartner (November 2022)