

Next-Gen ADM Services

A research report comparing provider strengths,
challenges and competitive differentiators

Customized report courtesy of:

Infosys®



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Report Author: Michael Dortch

Hurdles slow but do not stop ADM's continuing evolution

Multiple factors combined in the past year to slow the continuing evolution of application development and maintenance (ADM) for service providers and for their clients in the U.S. and elsewhere around the world.

- The COVID-19 pandemic continued to affect companies of all sizes and types.
- The Great Resignation made and continues to make talented, experienced technologists scarcer and more expensive.
- Shifting workstyles and workplaces, especially the explosive growth of remote work, continue to challenge many companies.

- The Russo-Ukrainian War affected people and companies in that region, forcing migrations and movement of company teams and facilities to Poland and other regions.

Ironically, while many client projects and service provider moves were accelerated by the COVID-19 pandemic, the above factors have also had an influence on the evolution of IT and ADM. **In the U.S., inflation and recession worries have contributed to layoffs, hiring freezes, curtailed spending and investments, and other impediments to growth and progress** among IT companies and within many of their clients' core industries.

Despite these challenges, however, ADM evolution continues, albeit more slowly than in recent years. Service providers and clients alike continue to adopt and expand Agile, DevOps and DevSecOps methodologies and initiatives. Service providers continue to create solutions

ADM evolution
continues, albeit more
slowly than in
recent years.



intended to help clients align their IT and business efforts and goals more closely. Client companies continue to pursue and expand their efforts for digital transformation and improved customer and user experiences. The demand for more “Amazon-like” experiences continues to grow, especially by younger “digital natives” and others frustrated by complex, opaque IT-powered business tools.

The current slowdown means that it may take an additional 12 to 18 months or longer for the results of evolution and transformation efforts among service providers and users to become fully evident. However, the progress toward more cloud-native, digital-first, automation-enabled, AI-enhanced ADM solutions and efforts continues. This is driving greater business and technological agility for user companies and sustained growth for the Leaders identified in this study.

Among providers that are Contenders, Market Challengers and Product Challengers, things are less clear. Many of these companies are evolving their ADM strategies in pursuit of more and larger client contracts. Some are actively pursuing clients and talent from similarly positioned competitors. Others appear to be courting acquisition by larger players or coping with and explaining the results of actual, anticipated or rumored acquisition or recent divestiture. Here, too, larger events have slowed momentum, which will likely delay the ultimate results of activities in motion now.

All of this has had mixed effects on the three facets of application outsourcing covered in this study—application development, application management and application testing. Imperatives for each facet include the following.

Application development imperatives:

- Development and business models are rapidly evolving by leveraging open ecosystems and architectures based on application programming interfaces (APIs) and microservices.
- Service providers and their clients continue moving from project-based to product-based development and thinking. Most providers are also augmenting their technological strengths with industry and academic partnerships, investments in emerging niche players, significant recruitment, training, reskilling and upskilling efforts, deepening business domain knowledge or combinations of these.
- Enterprises are moving from experimenting with low-code/no-code platforms to deploying applications

built with them. **Providers are working with IT teams and low-code/no-code “citizen developers” to ensure their applications stay within enterprise “guard rails” in terms of cybersecurity, interoperability and manageability.**

- **Security across entire value chains continues to be a primary concern for service providers and their clients.** Both providers and their clients are actively pursuing initiatives intended to build security into every phase of ADM, from ideation and development through deployment and retirement. Compliance with privacy protection regulations and standards that are growing in number and complexity in the U.S. and elsewhere is a related continuing challenge.



Application management imperatives:

- DevOps continues to evolve and expand to embrace DevSecOps for better security, BizDevOps for higher IT-business alignment, and AIOps for more intelligent, proactive automation and operational excellence. In addition, agile thinking is expanding beyond development to embrace application management and even business operations.
- **Service providers continue to augment local workforces and delivery centers with growing and evolving virtual and remote delivery models. This is occurring even as their clients continue to develop effective strategies for supporting more remote and hybrid workstyles.**
- Providers continue to support increasingly hybrid and diverse client landscapes, with a focus on APIs;

microservices; modular, composable tools and elements; and platforms. These are direct descendants of and augmentations to the “everything-as-a-service” model. This is driven by more flexible contracts and commitments of suppliers, including the willingness of some to base their compensation on the success of their initiatives. Other contributors include the evolution and expansion of service-level agreements (SLAs, now sometimes called XLAs for experience-level agreements), better integration of business and IT performance goals and metrics, and a greater focus on measurably improving user satisfaction.

- Clients continue to strive for reduced application management and maintenance costs by adopting AIOps, continuous testing, intelligent automation, application self-healing and zero-defect strategies.

- Many, if not most, clients are now pursuing multicloud strategies to avoid vendor lock-in and to broaden their solution choices. In response, some service providers are evolving their application management strategies to include the curation and orchestration of tools and resources, from themselves, the client and multiple other external sources.

Quality assurance and continuous testing space imperatives:

- **The market is moving toward a zero-test model, in which testing is less a separate activity and more an integrated part of all aspects of ADM.** Continuous, highly automated, end-to-end testing, supported by AI and machine learning, will increase and, in some cases, supersede the “shift right” and “shift left” trends that are already evident among providers and clients.
- In parallel with the rest of the industry, quality assurance and continuous testing are increasingly moving to the cloud. This will help accelerate the delivery of testing as a service and the integration of testing with other aspects of ADM.
- The continuing growth of quality engineering (QE) initiatives among providers and clients continues, expanding beyond traditional testing and quality assurance methodologies. QE now embraces AI, big data and analytics, blockchain, IoT, machine learning, resiliency of technology and business infrastructures, and test advisory and QE transformation initiatives.
- As providers seek to forge closer client relationships by developing deeper business domain knowledge, the




Executive Summary

demand for specialized testing talent is increasing. However, testing solutions enabled by AI, automation, big data and analytics, and machine learning may soon be able to meet at least some of this demand.

The market is moving toward a zero-test model



 Provider Positioning

	Agile Application Development Outsourcing	Agile Application Development Projects	Application Managed Services	Application Quality Assurance	Continuous Testing Specialists
a1qa	Not In	Not In	Not In	Contender	Not In
Accenture	Leader	Not In	Leader	Leader	Not In
Aspire Systems	Not In	Contender	Not In	Not In	Not In
Atos	Product Challenger	Product Challenger	Product Challenger	Not In	Product Challenger
Birlasoft	Not In	Leader	Contender	Not In	Leader
Capgemini	Leader	Not In	Leader	Leader	Not In
Cigniti	Not In	Not In	Not In	Not In	Leader
Coforge	Not In	Leader	Product Challenger	Not In	Market Challenger
Cognizant	Leader	Not In	Leader	Leader	Not In
Concentrix	Not In	Market Challenger	Contender	Not In	Contender



Provider Positioning

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	Agile Application Development Outsourcing	Agile Application Development Projects	Application Managed Services	Application Quality Assurance	Continuous Testing Specialists
Cybage	Not In	Product Challenger	Contender	Not In	Product Challenger
Deloitte	Contender	Not In	Not In	Contender	Not In
DXC Technology	Market Challenger	Not In	Leader	Product Challenger	Market Challenger
Fujitsu	Not In	Not In	Not In	Product Challenger	Not In
HCL	Leader	Not In	Leader	Leader	Not In
Hexaware	Not In	Product Challenger	Leader	Not In	Leader
IBM	Contender	Not In	Contender	Contender	Not In
Infinite	Not In	Market Challenger	Contender	Product Challenger	Not In
Infosys	Leader	Not In	Leader	Leader	Not In
Innominds	Not In	Contender	Not In	Not In	Not In



Provider Positioning

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	Agile Application Development Outsourcing	Agile Application Development Projects	Application Managed Services	Application Quality Assurance	Continuous Testing Specialists
ITC Infotech	Not In	Product Challenger	Not In	Not In	Product Challenger
Kyndryl	Product Challenger	Not In	Product Challenger	Product Challenger	Not In
LTI	Product Challenger	Not In	Product Challenger	Not In	Leader
Mindtree	Not In	Leader	Product Challenger	Product Challenger	Not In
Mphasis	Contender	Not In	Contender	Contender	Not In
N-iX	Not In	Contender	Not In	Not In	Contender
Persistent Systems	Not In	Leader	Product Challenger	Not In	Product Challenger
QA Consultants	Not In	Not In	Not In	Product Challenger	Contender
Qualitest	Not In	Not In	Not In	Not In	Contender
SLK Group	Contender	Contender	Contender	Contender	Not In



Provider Positioning

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	Agile Application Development Outsourcing	Agile Application Development Projects	Application Managed Services	Application Quality Assurance	Continuous Testing Specialists
Softtek	Product Challenger	Not In	Contender	Product Challenger	Not In
Tavant	Not In	Not In	Not In	Not In	Contender
TCS	Leader	Not In	Leader	Leader	Not In
Tech Mahindra	Market Challenger	Not In	Market Challenger	Not In	Leader
TestingXperts	Not In	Not In	Not In	Not In	Contender
TO THE NEW	Not In	Product Challenger	Not In	Not In	Contender
UST	Not In	Leader	Contender	Not In	Leader
Wipro	Leader	Not In	Leader	Leader	Not In
Yash Technologies	Not In	Product Challenger	Not In	Not In	Not In
Zensar	Not In	Market Challenger	Contender	Not In	Leader



This study focuses on what ISG perceives as most critical in 2022 for **Next-Gen ADM.**



Simplified Illustration Source: ISG 2022

Definition

Leveraging software capabilities to solve business problems and gain enterprise agility is an indispensable requirement for modern application outsourcing contracts. Cost cutting and staff rationalization are no longer enough. Service providers are augmenting their traditional application development and management (ADM) offerings with advanced technologies such as AI in operations, microservices-based development and accelerators such as low-code/no-code solutions. Service providers offer tailor-made roadmaps combining digital, operational and technology goals to meet their clients' objectives. ISG calls such contracts Next-Gen ADM contracts.

This study focuses on the recent developments that have taken place across application development, application management and quality

assurance markets. Simultaneously, ISG is launching the 2022 ISG Provider Lens™ Low-code/No-code Platforms study to offer clients a broader understanding of that application services market.

Service providers are increasingly adopting agile development practices for their service delivery. They offer feature-led, intuitive and interactive digital applications and support frequent updates. Building cloud-native applications has become a de facto service while scoping application modernization projects. Security is becoming integral to application development cycles from the outset and is being included in DevOps and throughout the CI/CD pipeline.

New end-user requirements based on businesses' focus on enhancing customer experience (CX), quick access to information, eliminating data silos and faster decision-making, supported



by technology, shape the application development market. Enterprises seek to adapt to changing requirements by implementing faster release cycles and frequently deploying enhanced application services. A typical ADM service includes consulting, design, custom development, packaged software integration, operations, quality assurance, security services and testing. More service providers have been implementing AI for AIOps functions across all these traditional services, adding innovative and advanced approaches to their application development workbenches.

The ISG Provider Lens™ study offers IT-decision makers:

- Transparency into the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments

- Focus on different markets, including the U.S., the U.K., Brazil, Germany and the Nordics

ISG studies serve as an important decision-making basis for positioning key relationships and go-to-market considerations. ISG advisors and enterprise clients use information from these reports to evaluate their current vendor relationships and potential new engagements.

Scope of the Report

In this ISG Provider Lens™ quadrant study, ISG includes the following five quadrants:

- Agile Application Development Outsourcing
- Agile Application Development Projects
- Application Managed Services

- Application Quality Assurance
- Continuous Testing Specialists.
- This ISG Provider Lens™ study offers IT-decision makers:
 - Transparency on the strengths and weaknesses of relevant service providers
 - A differentiated positioning of providers by segments
- Focus on regional market

Our study serves as the basis for important decision-making in terms of positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

Provider Classifications

The provider position reflects the suitability of service providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, and the corporate structures of customers, and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:



Midmarket: Companies with 100 to 4,999 employees or revenues between \$20 million and \$999 million with central headquarters in the respective country, usually privately owned.

Large Accounts: Multinational companies with more than 5,000 employees or revenue above US\$1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product Challenger, Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

Number of providers in each quadrant: ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).





Provider Classifications: Quadrant Key

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/services and follow a sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.





Agile Application Development Outsourcing

Who Should Read This

This report is relevant to enterprises across multiple industries in the U.S. for evaluating providers that offer agile application development outsourcing services.

In this quadrant report, ISG highlights the current market positioning of providers offering agile application development outsourcing services in the U.S. based on the depth of their service offering and market presence.

Enterprises using applications built around legacy architectures are facing challenges such as unacceptable downtimes, high maintenance requirements, and cost overruns. To stay apace in this highly competitive and dynamic business environment, they are increasingly adopting open ecosystems and next-generation such digital technologies as AI and machine

learning. The need for app functionalities across multiple channels and platforms is pushing enterprises to develop and modernize applications to grow their business value.

Enterprises are also seeking service providers that can address the above-mentioned challenges while delivering large application development engagements on Agile frameworks. This requires a lot of collaboration, not only among the developers, but also between enterprises and service providers.

Enterprises seek service providers with proven track records and abilities to create roadmaps and business cases, along with strong development and relationship/collaboration skills. They prefer service providers that invest in skill upgrades and have technology expertise and deep business and industry knowledge have good chances for such long-term agile application development engagements.

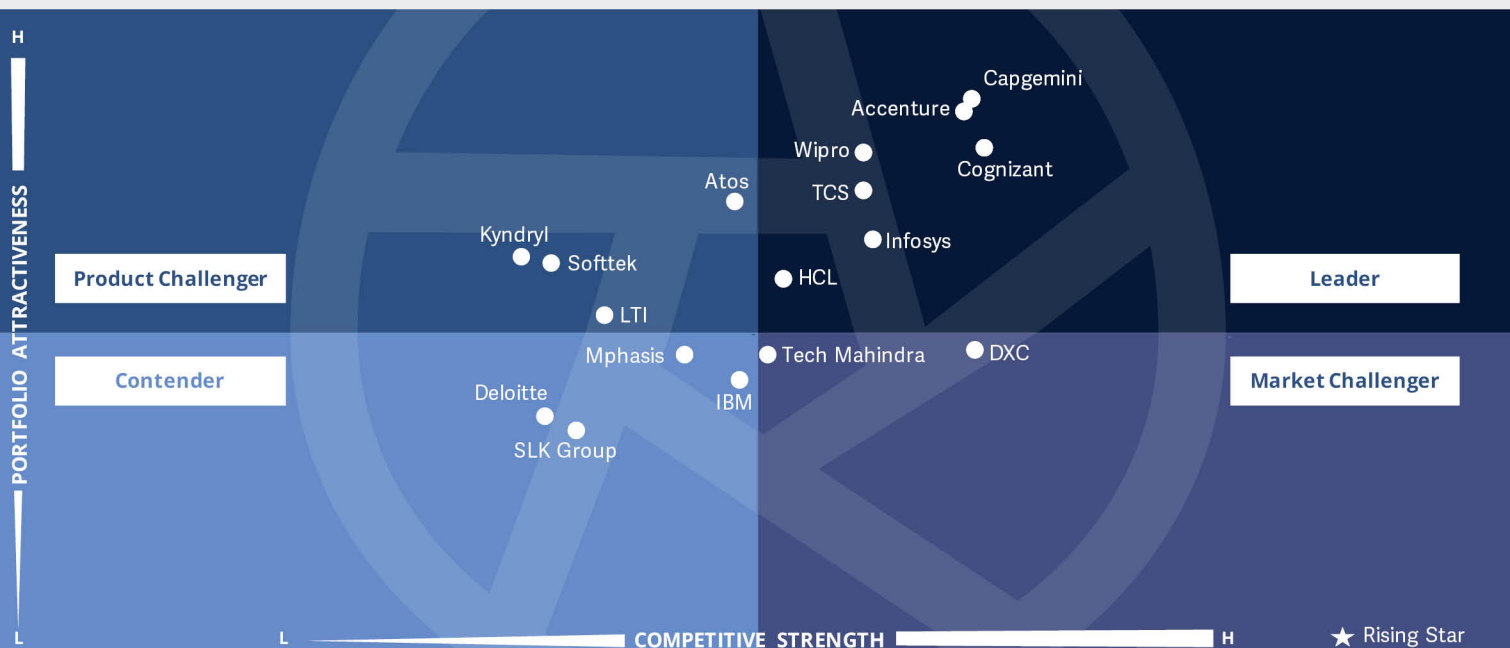


IT and Technology Leaders should read this report to understand the strengths and weaknesses of service providers in their application development and maintenance (ADM) practice and how they integrate the latest technologies and capabilities into their service offerings, to find a competitive edge in the market.



Line-of-business and Industry Leaders should read this report to understand the relative positioning of partners that can help them effectively procure application services for their business or industry and ensure acceptable returns on investment.





This quadrant assesses and compares the abilities of multiple service providers to meet **large-scale, long-term client requirements for Agile development and ADM**. These providers have **expertise in multiple technologies and experience in multiple market verticals**.

Michael Dortch



Agile Application Development Outsourcing

Definition

This quadrant assesses service providers that offer ADM expertise with the use of different technologies, spanning the complete application development landscape and most industry verticals, in outsourcing deals that are based on the delivery capacity for a certain time frame (three- to five-year contracts, renewable). Outsourcing offers ADM capacity regardless of the number and size of projects and programming languages to support in the application portfolios or business units. This assessment evaluates how service providers use project management tools, platform-as-a-service (PaaS), software-as-a-service (SaaS), low-code/no-code platforms or other accelerators to elevate a client's application development capacity.

A typical service provider in this quadrant has extensive consulting expertise and high-end technology partnerships to implement CI/CD pipelines, application testing and DevOps to enable clients to achieve high performance while reducing time to market.

Eligibility Criteria

1. **Should manage more than 20 squads for a single client or be able to scale up to more than 1,000 developers**, working simultaneously, in several projects
2. Should possess the ability to **rapidly scale up or down and add more than 100 developers in a week** to meet the demands of a client, as necessary
3. **Should use a comprehensive tool set** to coordinate resource allocation, portfolio management, backlog prioritization, Agile methods, Waterfall methods, system integration, application modernization, cloud-native application development and other services to optimize the performance of the development teams working simultaneously in a client's environment
4. **Should be certified to transform and deploy agile teams** under frameworks such as Scaled Agile Framework (SAFe®) and Large-Scale Scrum (LeSS)
5. **Should employ certified practitioners** in more than two of the following methodologies: Scrum, Kanban, Extreme Programming (XP), Lean Development and Crystal



6. **Should have established partnerships with development platform providers**, including AWS, Microsoft, Google and IBM, and be able to deploy a development workbench for a new client
7. **Should offer testing services and product development workshops** in areas such as design thinking
8. **Not expected to offer organizational change management**, but this capability can add to a provider's credibility



Agile Application Development Outsourcing

Observations

The Leaders in this quadrant are the same companies as last year, although there has been some minor shifting in competitive positions. Since many, if not most, provider-client relationships within this quadrant are long term, the shifting is mainly due to the expansion of incumbent relationships and partly due to providers taking clients from one another. Some specific application development and modernization projects have been accelerated by the pandemic and the growing need to support remote and hybrid work. However, the overall state of this quadrant is a market segment in which providers are well entrenched with their top-tier customers and able to grow their businesses with combinations of new customer wins and new contracts from current customers. All Leaders are also expanding the focus of their Agile

development efforts beyond IT needs to include the enablement of business agility and value.

From the 40 companies assessed for this study, 17 have qualified for this quadrant, with seven being Leaders.

accenture

Accenture is building upon its proven capabilities in multiple technologies and industries to evolve its approach to ADM. An increasing number of its ADM deals focus on business outcomes and KPIs and depend on multiple IT resources and skills.

Capgemini

Capgemini has sharpened its ADM focus on three priorities: innovation, talent and sustainability. The company also focuses on helping its ADM clients shift their primary emphasis from cost to business value.

cognizant

Cognizant's Cognizant's platform-first approach to ADM integrates its portfolio of intellectual property and proven processes to deliver business-driven application modernization, development and management. The approach also incorporates quality assurance into every stage of ADM, not to eliminate costs or jobs but to sharpen the focus on business value.

HCL

HCL is combining its strength in Agile methodologies with its strong onshore presence to offer a portfolio of digital services, including consulting, data and analytics solutions; Agile development; and ADM. HCL is also focusing its talent recruitment and acquisition efforts more on competency than experience.

Infosys

Infosys has converged its Agile development and DevSecOps talent and experience into an Agile and DevOps framework and a DevSecOps platform. These solutions intend to help enterprises take a product-oriented approach to the delivery of applications and services, for increased agility and improved user experiences.

TCS TATA CONSULTANCY SERVICES

TCS is combining its strengths in product-driven, microservices-based application development, with a sharp focus on hyperscaler partnerships to enable clients to take a multicloud approach to application modernization and digital transformation.



Agile Application Development Outsourcing and Projects



Wipro's ADM approach integrates incumbent client tools with the company's cloud transformation tools, accelerators, other intellectual property and extensive partner ecosystem.





“Infosys continues to win large deals and partner with vendors and academia across the world.”

Michael Dortch

Infosys

Overview

Infosys, headquartered in Bengaluru, India, has more than 314,000 FTEs and 234 global offices. The company has more than 160,000 trained Agile professionals and 50,000 trained DevOps professionals. More than 61 percent of the company’s 2021 revenue of \$16.3 billion was generated by North America.

Strengths

Product-centric Agile DevOps:

Building on its award-winning DevOps practice, Infosys introduced the Enterprise Agile DevOps services portfolio. Supported by the company’s DevSecOps Platform, these offerings are designed to help clients scale Agile and DevOps across multiple environments, increase customer centricity and focus on innovation and business outcomes.

Growing talent and experience:

Infosys has announced plans to bring hundreds of new jobs to facilities in the U.S. and Canada and to increase its Canadian workforce to 4,000 people

by 2023. Developers are supported by “phygital” (blended physical and digital) workspaces to enable effective collaboration and timely delivery across multiple geographies.

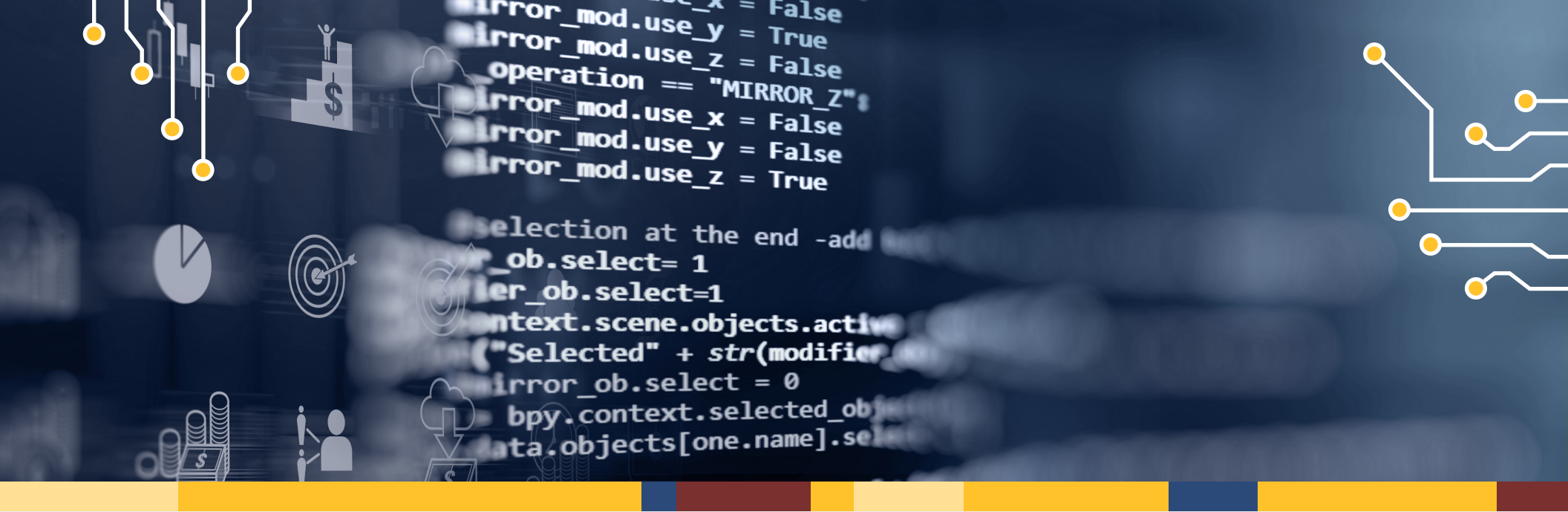
Fostering community and innovation on the cloud:

Infosys is partnering with MIT Technology Review on The Cloud Hub, an online forum intended to support collaboration and education to accelerate enterprise cloud journeys. Infosys also has more than 100 enterprises leveraging its Living Labs innovation-as-a-service offering to explore, implement and scale new Agile and digital opportunities and discover emerging solution providers.

Caution

Enterprises with goals or requirements beyond Agile or DevOps must ensure Infosys has capabilities or partners that can meet those needs.





Agile Application Development Projects

Who Should Read This

This report is relevant to enterprises across industries in the U.S. for evaluating providers that offer services for agile application development projects.

In this quadrant report, ISG highlights the current market positioning of providers that offer agile application development project services in the U.S. based on the depth of their service offering and market presence.

Quick turnaround has become an imperative for enterprises in highly dynamic and fast-paced business and technology environments. Projects spanning less than a year have picked up pace. To achieve business goals and deliver business value quickly, enterprises are ready to adopt advanced digital technologies such as AI, machine learning, and low-code/no-code platforms. To address these challenges,

enterprises prefer service providers with rapid agile development capabilities in new technologies and well-nurtured partnerships. Service providers can increase their chances to be selected as preferred partners by investing in skill development and training.

In the U.S., service providers are expected to demonstrate abilities to scale quickly and to easily integrate next-gen technologies with existing systems. Service providers with proven track records in handling requirements for security, agility, scalability, and integrity are forerunners in the region.



IT and Technology Leaders should read this report to gain a clear understanding of the strengths and weaknesses of service providers in their Agile practices and how they integrate the latest technologies and capabilities into their service offerings, to gain a competitive edge in the market.

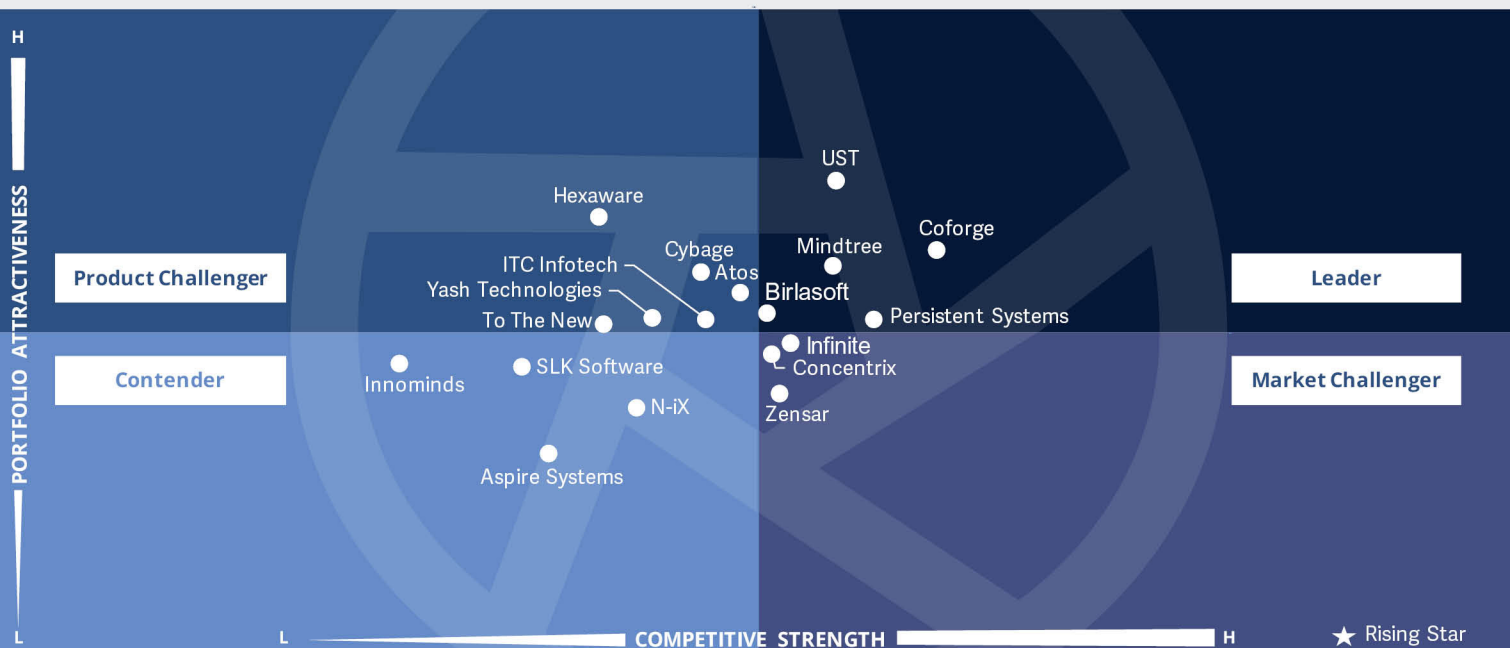


Line-of-business and Industry Leaders should read this report to understand the relative positioning of partners that can help them effectively procure application services for their business or industry and ensure adequate returns on investment.



**Next-Gen ADM Services
Agile Application Development Projects**

U.S. 2022



This quadrant assesses the relative strengths and weaknesses of **Agile application development companies that focus on specific projects**. While all providers included do business internationally, the focus here is on those serving U.S. clients.

Michael Dortch



Agile Application Development Projects

Definition

This quadrant evaluates service providers that offer agile application development in deals that include clear scope definitions for project outcomes, business goals or squad scope with product owners. These service providers add specific knowledge and skills required by squads or projects and can differentiate themselves by offering business expertise or development accelerators.

Typical service providers in this quadrant offer expertise to ensure successful business outcomes for each agile project. Deals can include a fixed number of team members per squad or flexible models measured by application feature delivery or other pricing methods.

Project engagements can vary from small mobile applications to large solution implementations, but typical engagements take less than 18 months

and project costs are less than \$2 million for regions such as Brazil, Germany, the Nordics and the U.K. and below \$5 million for the U.S. Large projects are exceptions and most likely have staggered releases or, in case of continuous delivery, more sprints.

Service providers in this quadrant also have full management responsibility for their delivery teams. Application staff augmentation services are excluded from this quadrant.

Eligibility Criteria

- 1. The commercial business model centers on the provision of squads for client-managed application development units.** Services are typically measured by the number of squad members, user stories delivered, deployment rate/frequency, defect count, time to market and business-related indicators such as shared business outcomes.
- 2. The ability to engage many squads to support a client is considered.** Each squad
- 3. Providers should show specific knowledge and skills required by squads or projects,** such as programming languages, vendor certifications, data analytics, AI, machine learning, low-code/no-code development expertise, system architecture and, optionally, CX design and quality assurance.



- 4. Providers should demonstrate delivery capacity;** they should not be startups or recently established companies. They should also have reference clients and offer case studies to illustrate the digital products delivered and product-oriented delivery (POD).
- 5. Providers should specialize in at least one of the following methodologies:** Scrum, Kanban, XP, Lean Development or Crystal.
- 6. Providers should offer optional quality assurance services and product design workshops** in areas such as design thinking.
- 7. Providers should have talent acquisition programs,** training programs and knowledge management processes and ensure a healthy work environment to retain top talent.
- 8. Providers should differentiate themselves by offering business expertise or development accelerators** in areas such as CRM, CX, e-commerce, ERP, industry-specific functionalities, IoT, supply chain management and virtual reality.



Agile Application Development Projects

Observations

There has been some shifting in this quadrant compared with the last year. The shifting is likely due to the combination of expanded current client relationships and competitors taking clients from one another. This is particularly true among the providers ISG has identified here as Leaders.

In addition, some providers are shifting their strategies away from Agile development projects toward broader and deeper client relationships. This seems especially true among those providers ISG has identified as Leaders and Market Challengers.

All these shifts are taking place against a backdrop of evolving client needs, goals and levels of sophistication with Agile development. This is especially true in the U.S. but is happening at varying levels worldwide.

As more current and prospective clients become more agile with Agile, providers identified here as Contenders and Product Challengers will need to expand their expertise and portfolios and demonstrate the ability to execute for and deliver results to increasingly demanding clients if they want to continue to thrive in this market segment.

They can otherwise expect to be relegated to a niche provider status or acquired. For example, in April of 2021, Coforge, a current Leader, announced its plan to acquire a controlling interest in SLK, which is rated as a Contender.

From the 40 companies assessed for this study, 18 have qualified for this quadrant, with five being Leaders.

Birlasoft

Birlasoft combines a solid set of accelerators, frameworks and other IP with strong partnerships, decades of experience and a sharp focus on several industries.

Coforge

Coforge delivers client applications and innovation built upon a foundation of extensive experience in cloud, process and product engineering. The company does 100 percent of its application and product development using Agile methodologies



Mindtree uses a portfolio of frameworks and platforms with deep business understanding to develop and optimize enterprise applications for all enterprise customers, partners and internal users.

The company combines expertise in application, cloud, data, experience and product engineering with domain, industry, persona and region knowledge.

Persistent Systems

Persistent Systems focuses its application services on Agile development, cloud migration, DevOps, legacy modernization, and support and maintenance. The company combines a strong engineering heritage with modern Agile practices.

UST

UST has more than two decades of experience delivering, modernizing and managing applications to enterprises pursuing digital transformation. The company relies on intelligent automation, transparent collaboration, risk-mitigated transition and flexible delivery to comply with 100 percent of its transition SLAs.





Application Managed Services

Who Should Read This

This report is relevant to enterprises across industries in the U.S. for evaluating providers of application managed services.

In this quadrant report.

ISG highlights the current market positioning of providers of application managed services in the U.S. and the way they address the key challenges faced by enterprise clients in the country.

Increased demand for application modernization, increased automation and great business value is driving the need for application managed services in the U.S. As a result, DevOps, DevSecOps and AIOps have gained significant traction, as enterprises look to reduce application costs and time to market. Meanwhile, developments such as hybrid infrastructures, platform-independent applications, composable

tools and frameworks have raised the complexity level for enterprises. This has increased the need for managed application services. Enterprises in the U.S. are looking for service providers that can provide both L2/L3 support and services around incident management, maintenance, and security. Despite the growth of remote work, many enterprises are still biased toward providers with sufficient local presence for effective in-person collaboration.

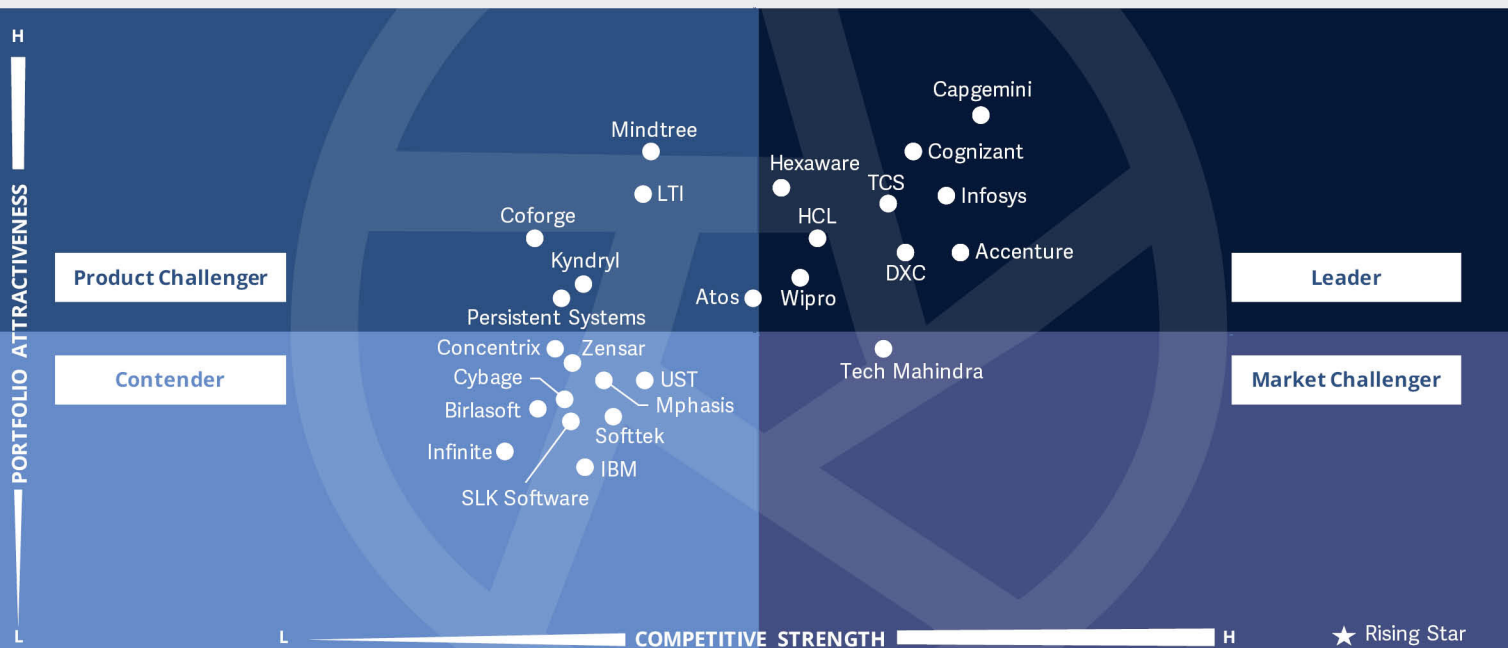


IT and Technology Leaders should read this report to gain a clear understanding of the strengths and weaknesses of providers that offer application maintenance services, and their competency in developing frameworks and tools to deliver effective application management services.



Sourcing and Procurement Managers should read this report to understand the service provider ecosystem for application maintenance services in the U.S. and how various providers compare with each other.





This quadrant assesses the relative **strengths and weaknesses** of service providers that offer comprehensive managed application services. While all providers included do business internationally, the focus here is on those serving U.S. clients.

Michael Dortch



Application Managed Services

Definition

This quadrant assesses service providers that take the responsibility of managing clients' entire application portfolios (applications in production). It does not include niche application specialists. The service scope comprises application support, enhancements, platform upgrades, application security, bug fixing, troubleshooting and the merging of enhancements and development backlogs under Kanban or similar methodologies. Leading service providers in this quadrant offer application monitoring, release management, version control, defect identification, and resolution and database query performance.

Typical service levels include the time taken to resolve an incident or service request, service availability, the defect rate, user satisfaction or Net Promoter Score (NPS) and user experience. Service transition and client onboarding should

include application documentation, service ticket records, knowledge transfer and, optionally, expert transfer/hiring. Ongoing service delivery starts after the transition period ends and often includes quality improvement programs and service knowledge refresh.

Eligibility Criteria

1. **Should demonstrate expertise in deploying and operating service platforms** for team performance monitoring and defect management, including troubleshooting
2. **Should employ vendor-certified experts in packaged e-commerce, ERP, CRM or supply chain management applications** (at least one of these technology platforms)
3. **Must support Microsoft and Oracle technologies, Java programming and relational databases** such as MySQL, Oracle Database, PostgreSQL and SQL Server. Mainframe and other technologies can add to a provider's rating but are not required for inclusion
4. **Should integrate more than two service platforms**, such as Atlassian Jira, SAP Solution Manager and ServiceNow, and service desk tools **and application development platforms** such as AWS, Google Anthos, IBM Rational and Microsoft Azure
5. **Should include a service management platform** to handle application tickets and service requests and track service levels
6. **Service providers using clients' tools should demonstrate**



certifications and expertise
in integrating and managing
commercial-grade platforms

- 7. Should commit to quality improvement programs to reduce incidents that can include** Lean methodologies plus AI and machine learning for analytics (trends and predictions) with incident/service request automation
- 8. Should offer fixed service fees or outcome-based contracts,** providing clients with options; staff augmentation is an exception



Application Managed Services

Observations

The Leaders in this quadrant have experienced some minor competitive position shifts compared with the last year. This reflects both economic and political factors affecting the spend by clients and investments by providers, as well as the competition for talent and clients among competitors. Enterprises seek greater competitive advantages and less complexity from their IT investments, because of which they seek to hand most or all of their application managed services needs to others. This is drawing attention from more service providers in all four categories identified here. Service providers are increasingly challenged to stand out from their competitors, as most, if not all, tout a similar set of client benefits. Leaders with more long-term successful client relationships may have advantages over less-proven providers.

From the 40 companies assessed for this study, 26 have qualified for this quadrant, with nine being Leaders.

accenture

Accenture's approach to managed services intends to help clients deal with factors such as the need for modernization and changing business expectations. The company also helps clients deal with the convergence of roles and tasks previously focused solely on applications or infrastructure driven by cloud migration.

Capgemini

Capgemini combines IP such as Capgemini Cloud Platform with its 50 years of experience in managing thousands of applications for hundreds of clients.

cognizant

Cognizant focuses on a platform-enabled approach to managed services, with a focus on business outcomes and benefits. Its AppLens management platform uses AI and machine learning to extend application lifetimes and reduce maintenance needs and technical debt.

DXC Technology

DXC Technology is using data from a large number of application deployments to guide its strategies and tactics for helping clients simplify, modernize and accelerate their business-critical application infrastructure. The company is also growing its talent base and intellectual property portfolio.

HCL

HCL is combining its strength in Agile methodologies with its strong onshore presence to offer a portfolio of digital services for application management and other ADM-related tasks. HCL is also focusing its talent recruitment and acquisition efforts more on competency than experience.

HEXAWARE

Hexaware focuses on helping clients optimize their spend through automation to maximize their investments in application modernization and digital transformation. The company uses Assist, a platform comprised of multiple tools and Hexaware IP, to help clients transform their processes, technologies and businesses.



Application Managed Services



Infosys employs its Infosys Live Enterprise Application Management Platform to deliver advanced AMS services. The platform is designed to improve user experience, reduce first-call-resolution challenges, automate inefficient manual processes, use AI and machine learning to identify and resolve anomalies and align management and support with business goals.



TCS combines support for location-independent application management with AI and automation features intended to make application management more efficient and focused on business outcomes.



Wipro combines a product-focused platform approach with AIOps, DevSecOps, intelligent automation and site reliability engineering (SRE) functions to deliver effective, efficient and modern application managed services.



Infosys



“Infosys’ technologies/
practices help clients deliver
business-driven application
managed services.”

Michael Dortch

Overview

Infosys, headquartered in Bengaluru, India, has more than 314,000 FTEs and 234 global offices. The company has more than 160,000 trained Agile professionals and 50,000 trained DevOps professionals. More than 61 percent of the company’s 2021 revenue of \$16.3 billion was generated by North America. In the U.S., the company and its Infosys Foundation USA are investing significantly in STEM education and training and reskilling American workers.

Strengths

A platform for optimized services:

The Infosys Live Enterprise Application Management Platform brings AI, application analytics, intelligent automation, machine learning and support for business KPIs to application maintenance, management and support. These features complement those that enable application development and transformation, including support for Agile, DevOps, Kanban and gamification.

Growing local and nearby talent:

Infosys plans to bring hundreds of new jobs to facilities in the U.S. and Canada.

For example, the company intends to increase its Canadian workforce to 4,000 people by 2023. Infosys also uses “phygital” (blended physical and digital) workspaces to support collaboration and timely service delivery across multiple geographies.

Depth and breadth: Infosys has more than 1,700 clients worldwide, has delivered solutions and services for more than 40 years, and operates in more than 50 countries. It has also provided nearly five million days of training to its employees.

Caution

Enterprises considering doing business with Infosys should strive to contractually ensure they get sustained local access to the specific skills, skill levels and resources required for success.





Application Quality Assurance

Who Should Read This

This report is relevant to enterprises across industries in the U.S., for evaluating providers of quality assurance services.

In this quadrant report, ISG highlights the current market positioning of providers of quality assurance services in the U.S., and the way they address the key challenges faced by enterprises in the country.

Enterprises are increasingly moving quality assurance services to the cloud. Demand for quality engineering is also rising, with enterprises moving toward zero-test models and increasing integration of testing in ADM. Adoption of new digital technologies such as AI/machine learning, IoT, analytics, and blockchain is also pushing enterprises to invest in quality assurance measures. To

address the demand, service providers are including these new technologies in their service portfolios. To reduce operational costs for enterprises, they are also actively focusing on increasing the use of automation.



IT and Technology Leaders should read this report to gain a clear understanding of the strengths and weaknesses of quality assurance service providers and how they integrate the latest technologies and capabilities into their service offerings, to gain a competitive edge in the market.



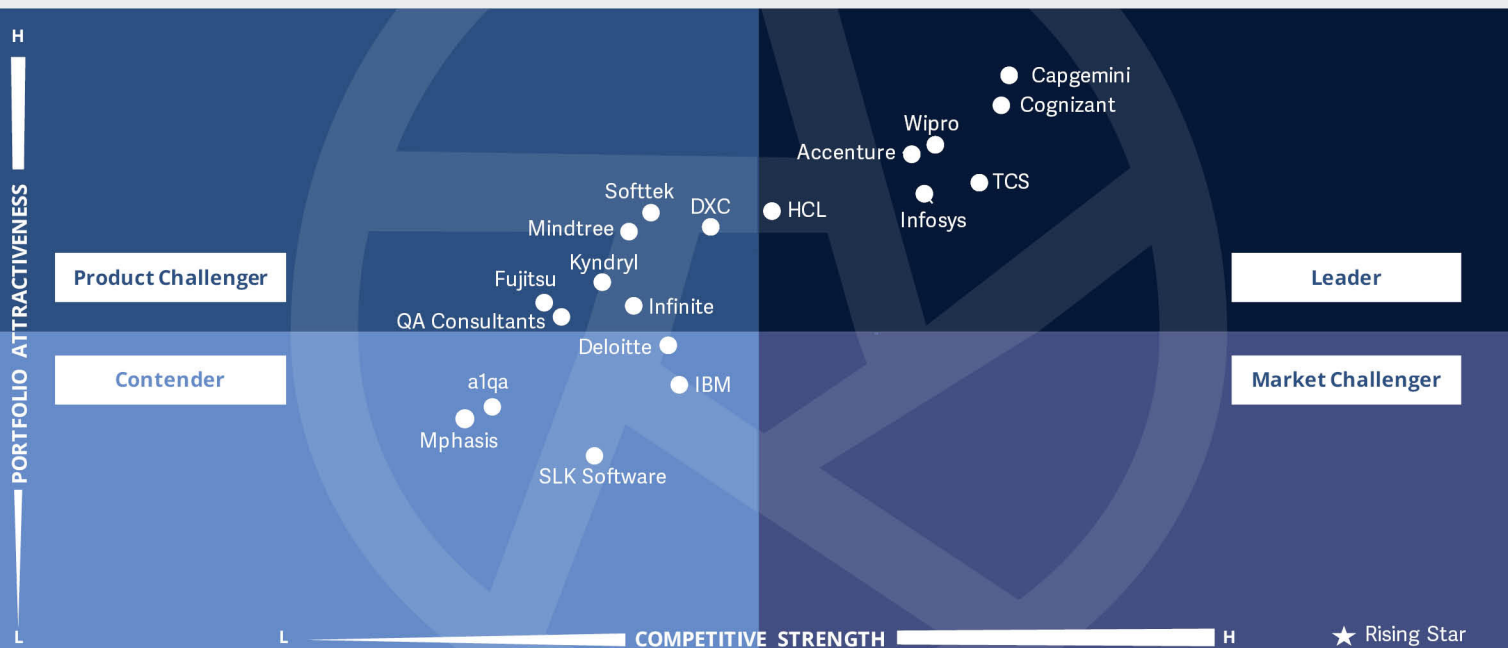
Line-of-business and Industry Leaders should read this report to understand the relative positioning of partners that can help them effectively procure the application quality assurance services for their business or industry and ensure returns on investment.



ISG Provider Lens™
 Next-Gen ADM Services
 Application Quality Assurance

Source: ISG RESEARCH

U.S. 2022



This quadrant assesses **the strengths and weaknesses** of service providers focused on application quality assurance. Some providers offer quality assurance as an element of larger offerings, while others focus primarily or exclusively.

Michael Dortch



Application Quality Assurance

Definition

This quadrant assesses service providers that offer comprehensive quality assurance programs, including assessments, design, implementation and quality assurance managed services. Service deliverables include setting methods for effort estimation, project planning, documentation, sprint execution timelines, criteria for a product to be deemed complete and testing strategies to identify bugs or defects in a product.

Service providers in this quadrant can design processes to attain the desired product or service quality at project and business levels, ideally covering a client's complete application portfolio. They leverage quality frameworks to support application code quality improvements, infrastructure resiliency, digital testing, security and quality assurance artifacts, products and vendor tools.

This quadrant also assesses how a provider leverages production logs to extract insights for improved application quality and performance, and how the provider integrates application performance management tools with AI and machine learning over monitoring data to predict the quality of new applications.

Eligibility Criteria

1. **Should offer a centralized quality assurance unit** that lays down quality standards for clients' projects
2. **Should maintain a comprehensive technical quality assurance framework**, which includes planning, implementation, monitoring, review and improvements
3. **Should maintain a consulting team focused on analyzing business demands** and securing development and delivery according to business requirements
4. **Should use technology to perform analytics over logs and use AI for continuous improvement in results**; ideally, the tool set includes analytics over logs of applications running in production
5. **Should provide differentiation with proprietary tools and accelerators** for faster time to market
6. **Should leverage vendor partnerships** for quality monitoring, application performance tools and testing tools
7. **Should offer training and education for developers, testers and operators** to develop a quality excellence mindset and ensure that the overall product or service meets the desired quality, both technically as in supporting the affected business processes and functional requirements



Application Quality Assurance

Observations

Application quality assurance is evolving, and the progress of that evolution is reflected in the shifting of positions among service providers highlighted in this study. Among service providers, those identified by ISG as Leaders are the same as in the last year's study, although their positioning has changed. However, all the Leaders share a common characteristic: application quality assurance is part of a much larger portfolio of services and solutions. The other providers represent a mix of companies with offerings beyond quality assurance and pure-play companies focused on quality assurance primarily or exclusively.

Among both Leaders and client companies, quality assurance is morphing from something often addressed after applications are built and delivered to an element of every part of the application development and delivery lifecycle.

Cybersecurity and application testing are experiencing similar changes, as more enterprises become more reliant on more applications to do business. Quality assurance is also undergoing this "shift left," as enterprises and service providers alike seek to accelerate application delivery and modernization to keep pace with changing business needs and goals.

From the 40 companies assessed for this study, 19 have qualified for this quadrant, with seven being Leaders.

accenture

Accenture focuses on helping clients optimize both the costs and quality of their applications. The goals of this approach include greater business efficiency, better customer and user experiences and more available funding for modernization and transformation.



Capgemini focuses on helping clients optimize both the costs and quality of their applications. The goals of this approach include greater business efficiency, better customer and user experiences and more available funding for modernization and transformation.



Cognizant incorporates quality assurance into every phase of its ADM solutions portfolio. The goals are to reduce or eliminate application debt and maintenance costs and to ensure every application works well, meets business needs and employs modern technologies.



HCL views quality assurance as a critical element of larger digital assurance strategies that are essential to enterprises increasingly reliant on digital technologies. The company offers managed quality services and a suite of enterprise application testing services.



Infosys offers several solutions focused on quality assurance. The company's goal is to ease and speed testing and quality assurance for its clients by providing both end-to-end testing options and access to a wealth of experience-based knowledge.



Application Quality Assurance



TCS sees quality assurance as a way for enterprises to minimize risks and protect their brands while pursuing other business goals. TCS Assurance Services combines technologies with managed testing services to enable consistently high application quality levels and lower quality-related costs.



Wipro sees quality assurance as a critical element of its High Performance software engineering for Composable Enterprises (HPCE) approach to modernization and transformation. HPCE incorporates shift-left and shift-right quality and security practices to provide a comprehensive, intelligent quality ecosystem for enterprises and their applications.





“Infosys takes a platform-based approach to quality assurance and other application managed services.”

Michael Dortch

Infosys

Overview

Infosys, headquartered in Bengaluru, India, has more than 314,000 FTEs and 234 global offices. The company has more than 160,000 trained Agile professionals and 50,000 trained DevOps professionals. More than 61 percent of the company's 2021 revenue of \$16.3 billion was generated by North America. In the U.S., the company and its Infosys Foundation USA are investing significantly in STEM education and training and reskilling American workers.

Strengths

A platform for quality assurance: The Infosys Quality Assurance Workbench incorporates an AI-powered, internally developed ML platform. It supports Agile, DevOps and Waterfall models and scripted and script-less automation across multiple technologies. It includes data mining and analytics. It complements Infosys Live Enterprise Application Management Platform and leverages AI, application analytics, intelligent automation, ML and support for business KPIs to enable application maintenance and management and quality assurance.

Growing local talent: Infosys plans to bring many new jobs to facilities in the U.S. and Canada. For example, it intends to increase its Canadian workforce to 4,000 people by 2023. It also uses hybrid “phygital” workspaces to support collaboration and timely service delivery across regions.

Depth and breadth: Infosys has over 1,700 clients worldwide, has delivered solutions for more than 40 years, and operates in over 50 countries. It has provided nearly five million days of training to its employees globally and has expertise and experience in application managed services, including quality assurance.

Caution

Enterprises considering doing business with Infosys should strive to contractually ensure they get sustained local access to the specific skills, skill levels and resources required for success.





Continuous Testing Specialists

Continuous Testing Specialists

Who Should Read This

This report is relevant to enterprises across industries in the U.S., for evaluating providers of continuous testing services.

In this quadrant report, ISG highlights the current market positioning of providers of continuous testing services in the U.S., and the way they address the key challenges faced by enterprises in the country.

Fast-paced, highly competitive business environments drive enterprises to look for ways to shorten software and application development cycles. Reduced time to market and increased operational efficiencies lead to higher business value. Enterprises are also increasingly integrating testing into the development process, which will further reduce development time and costs. Increased

inclusion of Agile methodologies and DevOps/DevSecOps practices will also boost the demand for testing services. Service providers that can offer continuous testing integrated with application development and operations, along with proven expertise, domain knowledge and specialized skills, will be most preferred as testing partners by enterprises in the U.S.



IT and Technology Leaders should read this report to gain a clear understanding of the strengths and weaknesses of continuous testing service providers and how they integrate the latest technologies and capabilities into their service offerings, to gain and deliver competitive advantage in the market.



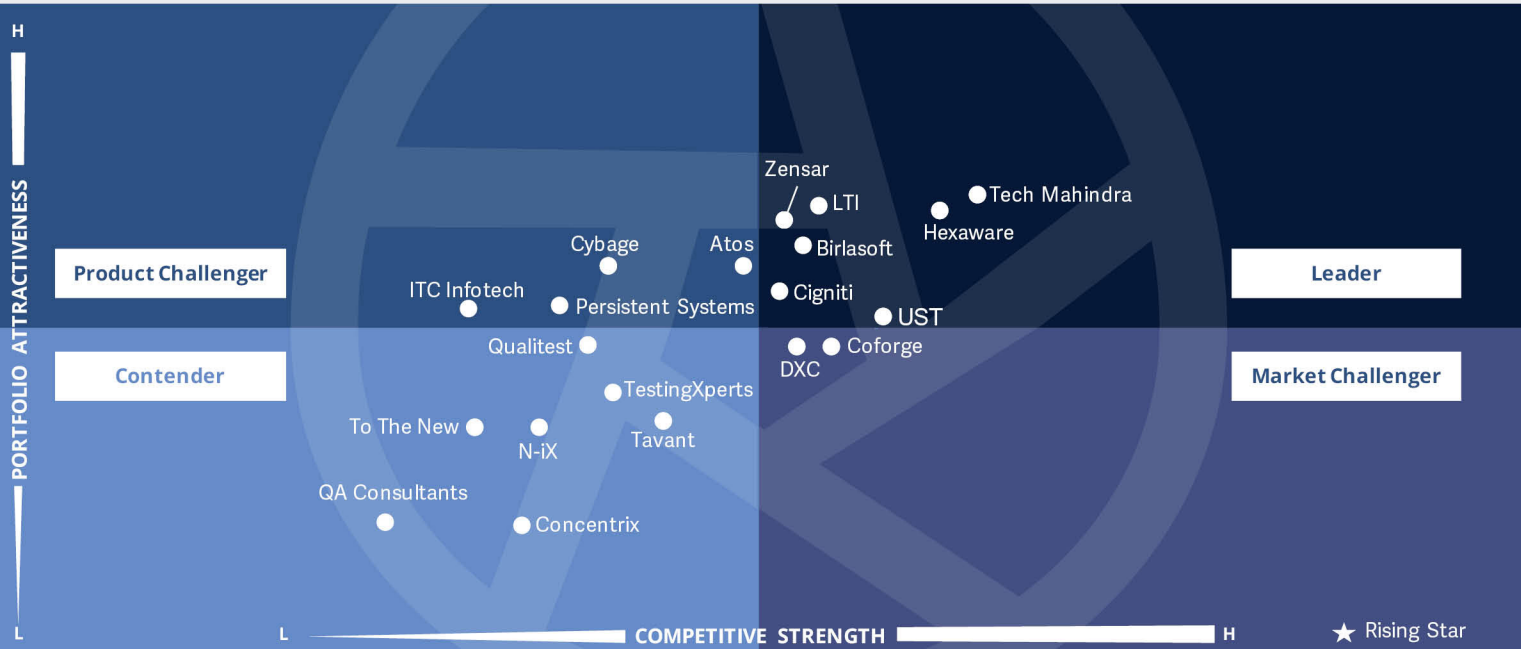
Line-of-business and Industry Leaders should read this report to understand the relative positioning of partners that can help them effectively procure effective continuous testing services for their business or industry and ensure adequate returns on investment.



ISG Provider Lens™
 Next-Gen ADM Services
 Continuous Testing Specialists

Source: ISG RESEARCH

U.S. 2022



This quadrant assesses the strengths and weaknesses of service providers focused on continuous testing services. Some providers offer such services as an element of larger portfolios, while others focus on continuous testing primarily or exclusively.

Michael Dortch



Continuous Testing Specialists

Definition

This quadrant assesses providers of automated testing services. These providers develop the testing strategy, scope, methods and scripts before automation and test execution. They have the skills to deploy automation and execute testing cycles and produce the necessary evidence to support compliance auditing.

Continuous application testing focuses on delivering quality in tandem with the speed of Agile development. In terms of technology, it encompasses various aspects of automated testing, such as shift-left and end-to-end automation across testing phases, in every phase of the continuous delivery process. This discipline goes beyond automation-based testing in terms of people and processes; it accomplishes better collaboration between the quality assurance and

development teams in sprint cycles, besides feature- driven testing and responsiveness to changes

Eligibility Criteria

1. Should engage qualified professionals for test-driven development (TDD), behavior-driven development (BDD) and other approaches
2. Should handle large-scale testing and continuous integration demands of complex systems such as ERP and e-commerce with many test cases
3. Portfolio should include unit testing, system testing, regression testing, compliance testing, performance/ load testing, user acceptance testing and smoke testing
4. Should offer consulting services
5. Should offer continuous services including testing data and test coverage assessments, automated testing enablement across many continuous integration pipelines, and managing testing artifacts for the significant reutilization of such artifacts
6. Should replicate testing practices and use automated testing for multiple projects

that include test automation implementation, which can be integrated with the client's development and DevOps tools, and help clients optimize their continuous testing performance to reduce the testing time



Continuous Testing Specialists

Observations

Continuous testing is evolving, in many ways in parallel with application-related services such as quality assurance. The progress of that evolution is reflected in the shifting of positions among service providers highlighted in this study. Despite those shifts, all the Leaders share a common characteristic: continuous testing is part of a much larger portfolio of services and solutions. The other providers represent a mix of companies with offerings beyond continuous testing and pure-play companies primarily or exclusively focused on continuous testing.

Among both Leaders and client companies, continuous testing is morphing from something often addressed after applications are built and delivered to an element of every part of the application development

and delivery lifecycle. Cybersecurity and application quality assurance are experiencing similar changes, as more enterprises become more reliant on more applications to do business. Continuous testing is also undergoing this “shift left,” as enterprises and service providers alike seek to accelerate application delivery and modernization to keep pace with changing business needs and goals.

From the 40 companies assessed for this study, 20 have qualified for this quadrant, with seven being Leaders.

Birlasoft

Birlasoft offers clients a range of testing services that span legacy and modern applications, data, business resiliency, and other resources and features, along with the modernization of testing tools and methodologies.

Cigniti

Cigniti is expanding its focus beyond testing to focus on digital engineering and assurance. The company has centers of excellence devoted to automation; application performance; test data management and other functions; and testing labs devoted to IoT, medical and mobile devices and robotics. Cigniti is also expanding its nearshore delivery capabilities for U.S.-based clients.



Hexaware takes an “automation first” approach to testing. It offers a multichannel test automation platform and an automated test reporting solution.



LTI offers multiple testing and assurance solutions, including assurance and quality engineering services for digital transformation and enterprise assurance services.



Tech Mahindra has an extensive portfolio of testing offerings, including AI-powered test automation, test design automation, and test data and environment management. These are built with organic IP, partner solutions and client resources.



Continuous Testing Specialists

UST

UST offers NoSkript™, a platform for application certification and testing and digital engineering support. It is a cloud-native platform that incorporates AI algorithms and multi-layered analytics.

Zensar

Zensar offers the Digital Assurance Platform (DAP), which uses AI, analytics and machine learning to provide intelligent, automated test case identification, functional testing, performance testing and other functions.





Appendix

The ISG Provider Lens™ 2022 – Next-Gen ADM Services research study analyzes the relevant software vendors/service providers in the global market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

Lead Author:

Michael Dortch, Paul Goodman, Pedro L Bicudo Maschio, Oliver Nickels

Editors:

Research Analysts:

Maharshi Pandya

Data Analyst:

Project Manager:

Abhishek Rammurthy

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The research and analysis presented in this report includes research from the ISG Provider Lens™ program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of October 2022, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars (\$US) unless noted.

The study was divided into the following steps:

1. Definition of Next-Gen ADM Services market
2. Use of questionnaire-based surveys of service providers/vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities & use cases
4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
5. Use of Star of Excellence CX-Data
6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
7. Use of the following key evaluation criteria:
 - * Strategy & vision
 - * Tech Innovation
 - * Brand awareness and presence in the market
 - * Sales and partner landscape
 - * Breadth and depth of portfolio of services offered
 - * CX and Recommendation



Author & Editor Biographies

Lead Author



Michael Dortch
Consulting Lead Analyst

As an IT industry analyst, consultant, journalist and marketer, Michael Dortch has been translating “bits and bytes” into “dollars and sense” for four decades. Most recently, Michael served as Senior Content Strategist at Huawei Technologies USA. Previously, he was senior content development manager at Ivanti, senior product marketing manager for cybersecurity at LANDESK, director of marketing at Intréis (acquired by ServiceNow) and a senior product marketing manager at ServiceNow.

Michael has also been a senior analyst at Aberdeen Group, Robert Frances Group, Constellation Research and Yankee Group. His technical areas of focus have ranged from telecommunications to cloud computing, cyber security and enterprise IT management.

In 1990, Michael authored “The ABCs of Local Area Networks,” a book published internationally in three languages by Sybex, Inc.

Lead Author



Oliver Nickels
Lead Analyst

In addition to his deep technical and business knowledge, Mr. Nickels brings to ISG’s projects and analysis a wealth of experience from over 25 years as a senior analyst, management consultant and startup entrepreneur. His areas of focus include organizational transformation through digital and AI-based technologies, next-generation application development, the Internet of Things, and the digital customer journey. He works as freelance consultant to help ISG customers

with specific issues related to digital transformation. Previously, Mr. Nickels spent many years in various national and international roles at a leading global IT company. Mr. Nickels teaches artificial intelligence and the metaverse at the Universities of Tübingen and Konstanz. Mr. Nickels holds a degree in computer science from the University of Bremen.



Author & Editor Biographies

Lead Author



Pedro L B Maschio
Distinguished Analyst and Executive Advisor

Pedro L B Maschio brings extensive experience in research of the Americas and SEMEA (Southern Europe Middle East and Africa) markets. With more than 30 years of experience in sourcing, he has developed vendor assessments plus contract restructuring, services scope and IT benchmarking programs for diverse vertical markets in the Americas and Asia Pacific. Before

joining ISG, Pedro was a partner of TGT Consult and managing vice president at Gartner Inc., responsible for the consulting business in APAC and Latin America.

Lead Author



Paul Goodman
Lead Author

Mr. Goodman has supported clients in all industries and is a recognized authority in implementing IT process improvement and cost optimization initiatives and in Software Metrics. He has presented at international industry conferences on these subjects.

Mr. Goodman has worked with many of the industry leaders in the field including the Software Engineering Institute, the European Software Process Improvement Foundation and the International Standards Organization. Until April 2019

Mr Goodman was a Vice President with Gartner Consulting and the Deputy Global Lead for the Applications Practice. Additionally, he was the Solution Lead for Application Performance Management Programmes within the Applications Practice of Gartner Consulting. Application Performance Measurement Programmes incorporates the Fast Function Point Analysis methodology. Mr. Goodman was previously the Gartner Consulting capability lead for ITIL and process improvement in Europe and has over 37 years' experience in IT management and consulting.



Author & Editor Biographies



Research Specialist

Maharshi Pandya
Research Specialist

Maharshi Pandya is a Research Specialist at ISG and is responsible for supporting and co-authoring ISG Provider Lens™ studies on Next-Gen ADM Solution & Services, SAP HANA Ecosystem and Analytics Services and Solutions. He supports the lead analysts in the research process and authors the global summary report. Maharshi also develops content from an enterprise perspective and collaborates with advisors and enterprise clients on ad-hoc research assignments as well. Prior to this role, he has been associated with

several syndicated and custom market research firms, in which he has worked on both, secondary and primary interaction centric research projects around market sizing and forecasting, competitive benchmarking, pricing analysis vendor profiles and market share analysis for several industry verticals such as information and communication technology, media and information services, and automotive. His area of expertise includes analytics, application development and maintenance, and enterprise resource planning.



IPL Product Owner

Jan Erik Aase
Partner and Global Head – ISG Provider Lens™

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor.

Now as a partner and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.



*ISG Provider Lens™

The ISG Provider Lens™ Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens™ research, please visit this [webpage](#).

*ISG Research™

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research delivers guidance that helps businesses accelerate growth and create more value.

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*ISG

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 800 clients, including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis.

Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, visit www.isg-one.com.





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REPORT: NEXT-GEN ADM SERVICES