Next-Gen ADM Services

Agile Application Development Outsourcing

A research report comparing provider strengths, challenges and competitive differentiators

Customized report courtesy of: cognizant
DevOps and SRE lead the way for application development and maintenance with AI support

The application development and maintenance (ADM) domain has undergone multiple changes over the last few years. These changes have been fast paced compared to the previous generations of application development. With organizations undergoing digital transformation, speed, cost and agility play a vital role in ADM. Enterprises seek partners that can help them realize the potential of digital innovation. Service providers have embedded this aspect in their digital offerings that are aligned with the most advanced ADM methodologies. The graphic below showcases the periodic changes in the ADM space.

With the advent of new approaches and methodologies, there is a significant shift in the adoption of Agile and DevOps methodologies for application development. Increased emphasis is placed on developing applications aligned to enterprises’ digital journey using Agile and DevOps methods. This engagement enables faster time-to-market, enhanced collaboration and improved quality. It also enables an innovative approach to delivering applications aligned with specific business requirements. With businesses’ economic constraints, cost optimization has become a key focus area. Application maintenance has witnessed the use of technologies, such as automation, analytics and AI, to optimize the entire app maintenance process and reduce human intervention, delivering cost savings that can fuel new initiatives in app development for enterprises. Site reliability engineering (SRE) adoption has contributed to enhanced reliability, predictable operations, performance measurement and qualitative applications development. DevOps and SRE act as balancing factors to deliver a high-quality application.

DevOps enables the disintegration of traditional silos into development and operations to improve the efficiency and reliability of software development and deployment processes. SRE focuses on creating highly scalable and reliable software systems while increasingly emphasizing automation and monitoring.

Generative AI assists developers by generating code and is increasingly in use.
Executive Summary

ADM Evolution over years

Application Development
- Developers worked directly with machine languages and assembly languages to create software - manual coding and programming.

Application Maintenance
- Application maintenance primarily involved manual debugging, fixing defects, and applying patches.

- Client service model with Integrated Development Environments (IDEs) providing tools to aid development.

- Application development focused on business requirements and flexible architecture for code reuse.

- Application development integrates with testing and assessing if the application quality is as expected including DevOps, SRE and low-code, no code apps.

- Intuitive approach to assess and analyze improvements across business processes including use of AI, automation, low-code.

<table>
<thead>
<tr>
<th>Generation</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation 1</td>
<td>Standalone solutions</td>
</tr>
<tr>
<td>1960s-90s</td>
<td></td>
</tr>
<tr>
<td>Generation 2</td>
<td>Client-server Waterfall model</td>
</tr>
<tr>
<td>1990s-2000s</td>
<td></td>
</tr>
<tr>
<td>Generation 3</td>
<td>API, Microservices Agile methods</td>
</tr>
<tr>
<td>2000s-2020s</td>
<td></td>
</tr>
<tr>
<td>Generation 4</td>
<td>DevOps and SRE AI-based ADM</td>
</tr>
<tr>
<td>2020s-Present</td>
<td></td>
</tr>
</tbody>
</table>
Executive Summary

Hence, DevOps and SRE are crucial in optimizing software development, deployment and operations processes. They contribute to the overall efficiency, reliability and success of digital products and services.

The increased adoption of AI and generative AI has a significant impact on the ADM lifecycle. Some of the use cases include the following tools: AI-driven predictive analytics that aids project planning by predicting resource requirements and potential bottlenecks; AI-driven design tools that generate user interfaces, layouts and prototypes based on user requirements and design principles; AI-powered testing tools that automate test case generation, increase test coverage and help quickly detect defects; AI-driven platforms that use AI to monitor and manage application performance, predict and prevent downtime and optimize resource usage; and AI-driven analytics that provides insights into application performance, user interactions and usage patterns, contributing to continuous improvements. Generative AI can assist developers by generating code snippets based on natural language descriptions or completing code lines. While AI has significantly impacted the ADM lifecycle, the generative AI impact is not entirely proven across the use cases. With these changes in the industry, the workforce plans to combine humans and machines. A combination of bots that perform routine tasks and cognitive functions and encompass analytical abilities will assist the human workforce.

In addition to these technical developments, there is an increased focus on establishing global capability centers (GCCs) that support businesses in the U.S. These GCCs are typically established in India, eastern Europe or Latin America. GCCs established in India had a tremendous increase in delivering innovative and cutting-edge applications and products developed in collaboration with service provider partners.

Top trends in ADM segments are listed below.

**Agile application development outsourcing:** The use of AI across application development and business-led, cloud-based application development are two major trends observed in this segment. Enterprises seek application development with an AI component in their contracts. They focus on transforming monolithic applications by incorporating them into cloud architecture. This process requires significant investments in upskilling the existing talent pool. Most application development is driven by enterprises’ digital agendas, with an increased emphasis on delivering application development through Agile, DevOps and SRE aligned with digital product-oriented development (POD) models. Some of the unique contract models being used include experience-level agreements mapped to business imperatives.

**Agile application development projects:** Enterprises focus on CX and plan to emphasize the delivery of exceptional UX. They increasingly embrace Agile methodologies and DevOps practices to accelerate software development and enhance collaboration between development and operations teams. Agile and DevOps enable faster time-to-market, improved quality and increased flexibility in responding to changing business needs.

Enterprises increasingly focus on cloud engagements and infrastructure modernization. They further concentrate on transitioning their applications to cloud-native architectures, leveraging containerization and microservices. This shift allows for greater scalability, resilience and agility in deploying and managing applications.

**Application managed services:** Most enterprises attempt to optimize cost and efficiency in managing applications within their IT landscape. Service providers have devised methodologies and approaches to use technologies such as AI, automation and analytics to deliver tangible benefits to clients. Data-driven approaches deliver better experiences and adhere to the agreed-upon KPIs. As cloud adoption increases, the need to manage cloud applications and optimize infrastructure availability and application performance becomes essential. Service providers align with market expectations and leverage AI — to a certain extent, generative AI — to deliver application managed services to their clients.
Executive Summary

**Application quality assurance:** In today’s rapidly evolving development landscape, organizations face shorter software release cycles, necessitating customized testing solutions and adopting DevOps practices and tools. Service providers’ quality assurance (QA) practices focus on achieving exceptional UX. Providers also emphasize the development of cloud-based automation platforms that leverage AI and ML to address enterprise demands for faster cycles. These testing platforms use codeless, self-healing and predictive test automation to enable a faster and more efficient software delivery. The increased demand for shift-left testing approaches using AI and ML for test automation has helped improve application quality. Using SRE to improve application quality before deployment into the production environment, thus reducing application downtime, is also an emerging trend.

**Continuous testing specialists:** Enterprises focus on leveraging cloud-based testing and ADM services to enhance scalability, flexibility and cost-effectiveness as the adoption of cloud applications increases.

This engagement enables enterprises to simulate real-world scenarios and perform comprehensive testing across different platforms. With the intense pressure to deliver efficient applications, leveraging AI and automation has become a mandate for service providers. This setup enables providers to use AI-powered testing and automation to help clients identify patterns, predict potential defects and optimize test cases. Advanced generative AI techniques are used for AI-led software testing. Firms prioritize security testing and compliance owing to the increasing number of cyber threats and data breaches. They incorporate robust security testing practices, including vulnerability assessments, penetration testing and code analysis.

AI has a significant impact across the ADM lifecycle, reducing the delivery time and improving the quality of applications delivered. As the industry is moving toward reducing the time required for testing, there is increased traction on adopting DevOps and SRE for ADM.
<table>
<thead>
<tr>
<th>Provider Positioning</th>
<th>Agile Application Development Outsourcing</th>
<th>Agile Application Development Projects</th>
<th>Application Managed Services</th>
<th>Application Quality Assurance</th>
<th>Continuous Testing Specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1qa</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>Accenture</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>Apexon</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Leader</td>
</tr>
<tr>
<td>Aspire Systems</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>Birlasoft</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Leader</td>
</tr>
<tr>
<td>Capgemini</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>Cognizant</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Leader</td>
</tr>
<tr>
<td>Coforge</td>
<td>Contender</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Market Challenger</td>
</tr>
<tr>
<td>Cognizant</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>Concentrix</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Not In</td>
<td>Contender</td>
</tr>
</tbody>
</table>
## Provider Positioning

<table>
<thead>
<tr>
<th>Agile Application Development Outsourcing</th>
<th>Agile Application Development Projects</th>
<th>Application Managed Services</th>
<th>Application Quality Assurance</th>
<th>Continuous Testing Specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cybage</td>
<td>Not In</td>
<td>Leader</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>Deloitte</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>DXC Technology</td>
<td>Market Challenger</td>
<td>Not In</td>
<td>Leader</td>
<td>Product Challenger</td>
</tr>
<tr>
<td>e-core</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Not In</td>
</tr>
<tr>
<td>Encora</td>
<td>Not In</td>
<td>Leader</td>
<td>Contender</td>
<td>Product Challenger</td>
</tr>
<tr>
<td>Eviden</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Product Challenger</td>
</tr>
<tr>
<td>HCLTech</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>Hexaware</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Not In</td>
</tr>
<tr>
<td>HTC Global</td>
<td>Not In</td>
<td>Leader</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
</tr>
</tbody>
</table>
Provider Positioning

<table>
<thead>
<tr>
<th></th>
<th>Agile Application Development Outsourcing</th>
<th>Agile Application Development Projects</th>
<th>Application Managed Services</th>
<th>Application Quality Assurance</th>
<th>Continuous Testing Specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>Indium</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>Infinite</td>
<td>Not In</td>
<td>Market Challenger</td>
<td>Contender</td>
<td>Product Challenger</td>
<td>Not In</td>
</tr>
<tr>
<td>Infosys</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>Innominds</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>ITC Infotech</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Not In</td>
<td>Contender</td>
</tr>
<tr>
<td>Iteris</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
</tr>
<tr>
<td>Kyndryl</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Not In</td>
</tr>
<tr>
<td>LTIMindtree</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Leader</td>
<td>Rising Star ★</td>
<td>Not In</td>
</tr>
<tr>
<td>Marlabs</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
</tr>
</tbody>
</table>
### Agile Application Development Outsourcing

<table>
<thead>
<tr>
<th>Provider</th>
<th>Agile Application Development Outsourcing</th>
<th>Agile Application Development Projects</th>
<th>Application Managed Services</th>
<th>Application Quality Assurance</th>
<th>Continuous Testing Specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastek</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
</tr>
<tr>
<td>Mphasis</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>N-iX</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Not In</td>
<td>Contender</td>
</tr>
<tr>
<td>NTT DATA</td>
<td>Contender</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
</tr>
<tr>
<td>Persistent Systems</td>
<td>Contender</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Product Challenger</td>
</tr>
<tr>
<td>QA Consultants</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
</tr>
<tr>
<td>Quinnox</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Rising Star ★</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>SLK Software</td>
<td>Not In</td>
<td>Contender</td>
<td>Contender</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>Softtek</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
<td>Contender</td>
</tr>
</tbody>
</table>
### Provider Positioning

<table>
<thead>
<tr>
<th></th>
<th>Agile Application Development Outsourcing</th>
<th>Agile Application Development Projects</th>
<th>Application Managed Services</th>
<th>Application Quality Assurance</th>
<th>Continuous Testing Specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCS</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>Tech Mahindra</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
</tr>
<tr>
<td>TestingXperts</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Not In</td>
<td>Contender</td>
</tr>
<tr>
<td>Trigent Software</td>
<td>Not In</td>
<td>Product Challenger</td>
<td>Not In</td>
<td>Contender</td>
<td>Not In</td>
</tr>
<tr>
<td>UST</td>
<td>Not In</td>
<td>Leader</td>
<td>Contender</td>
<td>Not In</td>
<td>Leader</td>
</tr>
<tr>
<td>Wipro</td>
<td>Leader</td>
<td>Not In</td>
<td>Leader</td>
<td>Leader</td>
<td>Not In</td>
</tr>
<tr>
<td>Zensar</td>
<td>Not In</td>
<td>Leader</td>
<td>Contender</td>
<td>Not In</td>
<td>Product Challenger</td>
</tr>
</tbody>
</table>
Introduction

Leveraging software capabilities to integrate all business layers, create new data sources and gain enterprise agility is an indispensable requirement for modern application outsourcing.

Next-gen ADM services include consulting, design, custom development, packaged software integration, application management and operations, quality assurance, security services and testing.

Cloud-based computing and the rising demand for automation and AI drive the market for cloud-native application development and give it a new focus. Service providers emphasize Agile methodologies and the continuous, secure delivery and automation of software development processes with DevSecOps.

Tailor-made roadmaps combine digital, operational and technology goals to meet clients’ objectives.

Service providers enable organizations to automate routine tasks and gain deeper insights into their application development processes using AI. This has led to the development of new tools and platforms that incorporate automation and AI capabilities to accelerate development cycles; ensure security, threat detection and vulnerability management; and improve end-user experience; this, in turn, helps deliver intuitive, engaging and personalized applications.

This study focuses on the recent developments that have taken place across the application development, application management and quality assurance markets. Simultaneously, ISG is launching the 2023 ISG Provider Lens™ Next-Gen ADM Solutions - Low-Code/No-Code Development Platforms 2023 study to offer clients a broader understanding of the application solutions market.

Definition

Simplified Illustration; Source: ISG 2023
Scope of the Report

This ISG Provider Lens™ quadrant report covers the following five quadrants for services: Agile Application Development Outsourcing; Agile Application Development Projects; Application Managed Services; Application Quality Assurance; and Continuous Testing Specialists.

The ISG Provider Lens™ Next-Gen ADM Services 2023 study offers the following to businesses and IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments on their competitive strengths and portfolio attractiveness
- Focus on regional market

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

Provider Classifications

The provider position reflects the suitability of IT 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, as well as 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 $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 service providers that ISG believes have 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).
Introduction

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.

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.

**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.

**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.

**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.

**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 a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

**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.

**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.

**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.

**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.

**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.

**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 a follow 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.

**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.

**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.

**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.

**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 a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.
Agile Application Development Outsourcing
Who Should Read This Section

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, 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 offerings and market presence.

Enterprises in the U.S. are investing time and effort in digital transformation. They are focusing on increasing automation using new technologies such as AI and ML to modernize legacy systems. Modernization will bring more autonomy and hyperinnovation to generate higher business value. Enterprises focus on legacy modernization, including rehosting, migration and rearchitecting for the cloud, reflecting the ongoing need to update and modernize the existing systems for greater efficiency and scalability. The emphasis on cloud-based development, microservices and containerization and the adoption of low-code solutions suggest a broader trend of modernizing applications and infrastructure for scalability and agility. These trends drive the demand for Agile app development services in the region.

Agile outsourcing offers resource flexibility, specialized skills, quick app releases, cost reduction by focusing on core functions and shortened time-to-market. As leading tech providers witness high demand, service providers invest in tools, frameworks and accelerators for the ADM lifecycle to satisfy enterprise requirements.

IT professionals should read this report to determine service providers’ strengths and weaknesses in ADM and learn how to integrate cutting-edge technologies for market advantage.

Operations professionals should read this report to understand how service providers can help generate more business value while simplifying business operations and processes.

Business professionals should review this report to understand partner positioning for efficient application service procurement and favorable ROI in their business or industry.
This quadrant assesses service providers that offer ADM expertise using different technologies, spanning the complete application development and management landscape and most industry verticals.

Akhila Harinarayan
Definition

This quadrant assesses service providers that offer ADM expertise with the use of different technologies, spanning the complete application development and management landscape and most industry verticals, in outsourcing deals that are based on the delivery capacity for a specific time frame (three- to five-year contracts, renewable). ADM outsourcing offers capacities, regardless of the number and size of projects and programming languages, to support clients’ application portfolios or business units. It covers large and highly complex application landscapes that can span multiple geographic locations, lines of businesses and organizational entities. One of its roles is to break up silos in both organization and technologies, create unified technology platforms for the application development landscape, and thus allow faster and more innovative go-to-market on a large scale.

This study 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 clients’ application development and management capabilities.

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. Management of more than 20 squads for a single client or being able to scale up to more than 1,000 developers working simultaneously on several projects
2. 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. Comprehensive Application Development Platform that covers resource allocation, portfolio management, backlog prioritization, Agile methods, Waterfall methods, system integration, application modernization, cloud-native application development and other services to optimize development teams
4. Certified to transform and deploy Agile teams under frameworks such as Scaled Agile Framework (SAFe) and Large-Scale Scrum (LeSS)
5. Certified experts in Scrum, Kanban, Lean development or other Agile methodologies
Observations

Two prominent trends have emerged as powerful catalysts for innovation and transformation in application development outsourcing for large enterprises. The first trend involves the pervasive use of AI throughout the development process. Enterprises are not merely considering AI as an option; instead, they consider it as an integral component within their development contracts. This engagement reflects a strategic shift toward harnessing AI’s capabilities to enhance application functionality, UX and efficiency.

The second trend revolves around cloud-based application development driven by business imperatives. Enterprises are strategically migrating from traditional monolithic applications to dynamic cloud architectures. This transformation necessitates substantial investments in upgrading the skills of the existing workforce to navigate the nuances of cloud environments effectively.

Cost optimization has been a major factor for enterprises, and service providers have helped clients through various approaches, including low-code and no-code applications and increased focus on establishing global capability and microcapability centers. Optimizing managed application services to drive savings for new application development initiatives is also an approach service providers undertake to expand their footprint within their client base and across the industry/region. From the 86 companies assessed for this study, 21 qualified for this quadrant, with eight being Leaders.

**Accenture**

Accenture has many tools, frameworks and accelerators that help clients across the ADM lifecycle. The company’s robust understanding of clients’ businesses and industry segments helps it apply these to realize benefits for its clients.

**Capgemini**

Capgemini offers ADMnext, a global, unified approach to apply Agile, DevOps, cloud, API, data platforms and security at an industrial scale in the IT department. This approach entirely embraces the migration toward product-centricity.

**Cognizant**

Cognizant has developed more than 100 IP assets covering hybrid cloud integration, API management and microservices to drive efficiency and enable faster time-to-market.

**Deloitte**

Deloitte combines Agile methods and product mindset to deliver value-driven solutions. With platforms such as DevOps Cloud and innovative tools such as TurboCode, it exemplifies excellence in driving digital transformations and achieving superior business outcomes.

**HCLTech**

HCLTech offers out-of-the-box AI and ML platforms with no-code/low-code functionalities for data scientists and non-data scientists to create guided and guard-railed solutions, along with the ability for quick deployment, monitoring, governance and maintenance.

**Infosys**

Infosys AI and Automation Services follows a product-agnostic approach and has expertise in operating most of the leading AI platforms, including open-source technologies. The company has developed tools and accelerators to help accelerate clients’ AI journeys.

**TCS**

TCS continues to invest in training, reskilling and upskilling its workforce to meet the evolving client demands and expanding the adoption of Agile methodologies. The company has a robust culture of continuous learning and talent upskilling.

**Wipro**

Wipro has high-level partnerships with leading hyperscalers such as Amazon, Google and Microsoft. The company is investing significantly in startups with expertise in Agile, cloud technologies and DevOps, among other areas.
Cognizant

Overview
Cognizant is headquartered in New Jersey, U.S. and operates in 42 countries. It has more than 351,500 employees across 162 global offices. In FY22 the company generated $19.4 billion in revenue, with Financial Services as its largest segment. The Cognizant application development practice is honed and nurtured under Cognizant’s Software and Platform Engineering (SPE) Unit, which brings together offerings across software, data, platforms, industries and the cloud. Cognizant offers services through three strategic C-suite narratives for digital product development, application modernization and cost to value.

Strengths
Modern stack talent: Cognizant has a robust talent pool across varied technologies ranging from legacy to next-generation digital technology stack. It is building digital skills across full stack engineering (FSE), DevSecOps, SRE, containerization, Kubernetes and hybrid cloud management platforms, cloud/digital architecture and performance engineering, and microservices and API management.

Data science and AI and ML: Cognizant’s data science centers of excellence (CoEs) have been helping clients develop and build AI and ML models. It has developed a minimum viable product (MVP)-based Agile approach for clients to deliver innovative data science solutions using open-source toolkits (Python/R/Github/Jupyter notebooks) to predict asset failure risks.

Vital assets for transformations: Cognizant has developed more than 100 IP assets covering hybrid cloud integration, API management and microservices for driving efficiency and enabling faster time-to-market. It has launched Cognizant Skygrade, a multi-hybrid cloud and edge management platform designed to help firms transition to modern cloud-native architectures and streamline cloud management operations. The platform operates seamlessly across multicloud environments, simplifying complex cloud management, enabling clients to operate cloud-native businesses and addressing cloud transformation lifecycle.

Caution
Cognizant should focus on improving the messaging around AI use across the ADM lifecycle. Most competitors are focused on delivering benefits to clients by using AI to reduce the entire lifecycle time.

“A cognizant has developed new reference models for modern delivery, architecture and talent management and aligned software development capabilities with 55 industry offerings.”
Akhila Harinarayan
Appendix
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
Akhila Harinarayan
Lead Analyst

Akhila Harinarayan is Senior Lead Analyst and the lead author for ISG Provider Lens studies with a focus on Digital Business Transformation and SAP Services. She has more than 12 years of experience across research and consulting including provider strategy, enterprise strategy, industry roadmaps, point-of-view papers, service provider assessment across regions. She has strong expertise on strategy and transformation, digital insights, thought leadership, benchmarking, market assessments and go-to-market strategies.

She has authored many thought leadership papers, digital insight studies, devised go-to-market strategies across products/industries/regions, built frameworks and maturity models across industries for both enterprises, vendors and service providers.

Maharshi Pandya
Research Analyst

Maharshi Pandya is a Research Specialist at ISG and is responsible for supporting and co-authoring ISG Provider Lens™ studies on SAP HANA Ecosystem & Next-Gen ADM Solution and Services. 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 & forecasting, competitive benchmarking, pricing analysis vendor profiles and market share analysis for several industry verticals such as information and communication technology, media & information services, and automotive. His area of expertise includes analytics, application development and maintenance, and enterprise resource planning.
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 research director, principal analyst 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.

ISG offers research specifically about providers to state and local governments (including counties, cities) as well as higher education institutions. Visit: Public Sector.

For more information about ISG Research™ subscriptions, please email contact@isg-one.com, call +1.203.454.3900, or visit research.isg-one.com.

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 900 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 1,600 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 isg-one.com.