A research report comparing provider strengths, challenges and competitive differentiators
About this Report

Information Services Group Inc. is solely responsible for the content of this report. Unless otherwise cited, all content, including illustrations, research, conclusions, assertions and positions contained in this report were developed by, and are the sole property of Information Services Group Inc.

The research and analysis presented in this report includes findings from the ISG Provider Lens™ program and 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 was current as of March 2018. 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 lead author for this report is Ashish Chaturvedi. The editor is Jan Erik Aase and John Burnell. The data analyst is Kankaiah Yasareni.
EXECUTIVE SUMMARY

Enterprises in the U.S. are at the forefront of adopting and integrating Next-Gen ADM technologies. Enterprise-wide adoption of concepts such as DevOps is helping clients:

- Achieve agility and coordination among development, testing and production functions
- Develop a culture where application updates are shaped by user feedback
- Eliminate silos and realize maximum value across the application lifecycle
- Bridge the efficiency voids across business processes

Next-Gen ADM

- **Digital labor is making the existing workforce more productive:** Digital labor goes far beyond the realms of bot-based automation, to include diagnostic, predictive and remediating capabilities using intelligence acquired over time to solve non-linear problems. Digital labor is enabling the current applications development and maintenance (ADM) workforce to focus on higher-value work. For example, an analyst can now spend more time analyzing data, rather than checking the data’s authenticity, quality and applicability.

- **Higher demand for hybrid cloud environments:** Enterprises are increasingly creating cloud-native applications that can be moved directly to the public cloud. However, security and regulatory limitations have created a pool of applications that still resides in dedicated private clouds. Hence, enterprises are seeking providers that can accomplish migration and maintenance across cloud environments.

- **Business-based metrics to measure results:** To divert budgets toward digital transformation, enterprises are looking for methods to quantify Next-Gen services and their direct impact on business. The commercial contracting structures and preferences are shifting from traditional input-based transactional models to ones that are built on business-based metrics.

Agile Development

- **DevSecOps becomes the new normal:** DevSecOps has replaced DevOps across the board. Enterprises and providers alike are realizing that security cannot be an afterthought. Thus, during early DevOps implementation phases, security principles are being incorporated as a default feature.
Executive Summary

- **Rapid application development is on the rise:** As enterprises become more agile, they have a growing necessity for tight integration among their business, engineering and operations organizations. These organizations are required to maintain rapid development cycles to quickly add features to existing offerings and release new ones to the market. Such enterprises need to partner with service providers that can offer a globally distributed agile organization that balances the cost dynamics with the need for speed.

- **Full-stack developers for application development:** Providers are looking to full-stack developers for application development to avoid unnecessary coordination cycles. Having a single resource with a 360-degree view of the environment can speed the entire development cycle. A full-stack developer is a developer that has knowledge and expertise to work from back-end through front-end application components.

Continuous Testing

- **Test automation as-a-service.** Test automation as-a-service is being advocated as a differentiator to win testing contracts with dominant digital scope. Enterprises are engaging with service providers to build test automation centers of excellence and initially manage them.

- **Domain and vertical integration:** A wide range of testing services are being mapped with industry-specific tools, reusable scripts and accelerators. The services being mapped include test consulting, application testing, application security testing, enterprise solution testing and internet of things (IoT) testing. Moreover, service providers are creating specialized vertical solutions for testing clients.

- **Testing as a technology enabler:** Testing is being viewed as an enabler to emerging technologies. For example, for many IoT projects, service providers and clients are resorting to software in a loop (SIL) and hardware in a loop (HIL) testing approaches to test the real-world performance of connected devices.

- **Increasing demand for full-stack testing engineers:** The desire to achieve continuous testing capability has led to greater demand for full-stack testing engineers. Such resources are expected to have knowledge across test phases. For example, a full-stack engineer might be required to perform test execution automation on Selenium, integrate it with Jenkins for continuous integration, and then provision the test environments in the public cloud and virtual environments.

Next-Gen ADM – BFSI

- **Blockchain technology is finding more use cases in the financial industry:** Interbank use cases are still rare, but banks are making use of the technology to simplify their existing systems and remove process bottlenecks. Blockchain is enabling faster and cheaper settlements and is shaving off a significant portion of the transaction costs, while improving transparency.
Customer intelligence becomes predictor of growth: Advances in data analytics are helping financial institutions meet and anticipate customer needs. Artificial intelligence (AI) is helping run various banking functions, including marketing and sales, wealth management and compliance.

Public cloud becoming the default services model: Non-core functions like customer relationship management (CRM), Human Resources (HR) and Finance and Accounting (F&A) already are being delivered through a cloud-based software-as-a-service (SaaS) model. Gradually, core functions such as payments, billing and credit scoring are being moved to the public cloud.

A design-thinking approach to delivery: A customer-first design is enabling application delivery. As banking consumers are becoming more tech-enabled, e-banking is becoming the primary channel to onboard, serve and retain them. Hence, each service, from account onboarding to loan disbursal, is being designed to decrease customer effort and enhance experience.

Next-Gen ADM – Healthcare & Life Sciences

Data-driven initiatives come of age: Healthcare and life sciences (HCLS) clients are adopting an analytics-driven approach to transformation projects to harness data and generate insights, thereby becoming more customer-centric and optimizing the entire value chain. The sector is also stepping into newer technology areas like industrial machine learning (IML), which uses big data to improve healthcare standards. Such applications could lead to better clinical decisions, lower readmission rates and fewer adverse events.

Accelerated cloud adoption: Cloud resources are addressing process inefficiencies, enabling end-to-end visibility and streamlining commercial operations for various life sciences companies. In the payer and provider segments, cloud adoption is boosting connectedness and information accessibility among practitioners, payers and patients.

Maintenance savings are funding change initiatives: HCLS organizational IT budgets have remained flat for several years. So, there has been more emphasis on reducing discretionary spend for maintenance services by using automation levers, then using the savings to fund business intelligence, cloud migration, data warehousing and platform development engagements.

Next-Gen ADM – Manufacturing

IoT driving efficiencies: The scaled adoption of IoT is enabling predictive maintenance, self-optimizing production and automated inventory management, resulting in lower maintenance, maximized equipment life and uninterrupted production cycles. Although the IoT has far-fetched applications benefits, most use cases still pivot around value chain optimization.
- **The production process**: IIoT and smart factories are not just making the shop floor more agile and efficient, they also are creating higher process compliance and better quality management.

- **Omni-chain disrupting supply chain**: Although in its infancy, a blockchain-based “omni-chain” is being used by manufacturers to connect different processes in the ecosystem. Omni chain is a cloud model that unifies both internal and external processes across extended networks.

- **Rapid increase in enterprise cloud and mobility engagements**: Manufacturers are looking to leverage cloud and mobility to form a connected ecosystem of suppliers, manufacturers, customers and partners.
Introduction

Definition

Service providers are augmenting their traditional ADM offerings with emerging technologies and collaborative frameworks to meet their enterprise clients’ objectives. ISG defines such contract types as Next-Gen ADM contracts. This study explores client objectives and assesses provider capabilities to deliver on Next-Gen ADM contracts.
Definition (cont.)

**Scope of the Report**

The following areas associated with next-gen ADM are included in this study:

**Next-Gen ADM**

Like traditional application services, next-gen ADM includes consulting, design, custom development, packaged software integration, operations and testing. However, the scope, delivery mechanism and outcome for such contracts pivot around a value-based approach that focuses on achieving enterprise agility and solving business problems.

This quadrant assesses vendors based on their capability to augment traditional ADM services with emerging technologies and methodologies like agile, DevOps, automation, digital and modernization techniques to deliver application outsourcing projects. It also assesses provider capabilities in incorporating new approaches to develop and deliver applications that focus on business outcomes.

**Agile Development**

Agile development is an incremental and iterative approach to application development. Because it encompasses frequent and early releases of the working software, the agile methodology is being viewed by enterprise as a medium for attaining enterprise agility.

This quadrant assesses provider capabilities in delivering tangible results through use of various agile methodologies. It looks at how providers use agile development with respect to their overall application development practice.

**Continuous Testing**

Continuous testing focuses on delivering quality assurance at speed. In terms of technology, it encompasses various aspects of automated testing such as shift-left, end-to-end automation across testing phases. However, in terms of people and processes, it goes a step beyond automation testing to accomplish higher collaboration among QA and development teams so they
Definition (cont.)

can sync with sprint cycles and promote feature-driven testing, responsiveness to change, feedback loops and greater client involvement. Continuous testing is gaining momentum, especially to help enterprises keep pace with their agile and DevOps initiatives.

Service providers in this quadrant are assessed on their progress made and capabilities developed for creating a continuous testing environment with measurable outcomes for their clients.

Next-Gen ADM – BFSI

This quadrant assesses the strength of providers that provide next-gen ADM services to the BFSI industry, which is comprised of banking, diversified financial and insurance companies.

Next-Gen ADM – HCLS

This quadrant assesses the strength of providers that provide next-gen ADM services to the HCLS industry, including healthcare institutions, payers, pharmaceutical, biotech and medical device companies.

Next-Gen ADM – Manufacturing

This quadrant assesses the strength of providers that provide next-gen ADM services to the manufacturing industry, which includes conglomerates, capital goods, construction, consumer durables (like automotive, household appliances), aerospace and defense, materials, semiconductor, technology hardware and equipment companies.
Provider Classifications

The ISG Provider Lens™ quadrants were created using an evaluation matrix containing four segments, where the providers are positioned accordingly.

**Leader**

The “leaders” among the vendors/providers have a highly attractive product and service offering and a very strong market and competitive position; they fulfill all requirements for successful market cultivation. They can be regarded as opinion leaders, providing strategic impulses to the market. They also ensure innovative strength and stability.

**Product Challenger**

The “product challengers” offer a product and service portfolio that provides an above-average coverage of corporate requirements, but are not able to provide the same resources and strengths as the leaders regarding the individual market cultivation categories. Often, this is due to the respective vendor’s size or their weak footprint within the respective target segment.

**Market Challenger**

“Market challengers” are also very competitive, but there is still significant portfolio potential and they clearly lag behind the “leaders”. Often, the market challengers are established vendors that are somewhat slow to address new trends, due to their size and company structure, and have therefore still some potential to optimize their portfolio and increase their attractiveness.

**Contender**

“Contenders” are still lacking mature products and services or sufficient depth and breadth of their offering, while also showing some strengths and improvement potentials in their market cultivation efforts. These vendors are often generalists or niche players.
Provider Classifications (cont.)

Each ISG Provider Lens™ quadrant may include a service provider(s) who ISG believes has a strong potential to move into the leader’s quadrant.

Rising Star

Rising Stars are mostly product challengers with high future potential. When receiving the “Rising Star” award, such companies have a promising portfolio, including the required roadmap and an adequate focus on key market trends and customer requirements. Also, the “Rising Star” has an excellent management and understanding of the local market. This award is only given to vendors or service providers that have made extreme progress towards their goals within the last 12 months and are on a good way to reach the leader quadrant within the next 12-24 months, due to their above-average impact and innovative strength.

Not In

This service provider or vendor was not included in this quadrant as ISG could not obtain enough information to position them. This omission does not imply that the service provider or vendor does not provide this service.
## Next-Gen Application Development & Maintenance (ADM) Services Cross-Quadrant Provider Listing 1 of 3

<table>
<thead>
<tr>
<th>Provider</th>
<th>Next-Gen ADM</th>
<th>Agile Development</th>
<th>Continuous Testing</th>
<th>Next-Gen ADM - BFSI Industry</th>
<th>Next-gen ADM - HCLS Industry</th>
<th>Next-Gen ADM - Manufacturing Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accenture</td>
<td>Leader</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Atos</td>
<td>Leader</td>
<td>Product Challenger</td>
<td>Contender</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Capgemini</td>
<td>Leader</td>
<td>Product Challenger</td>
<td>Leader</td>
<td>Leader</td>
<td>Not in</td>
<td>Leader</td>
</tr>
<tr>
<td>CGI</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Cl&amp;I</td>
<td>Not in</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Cognizant</td>
<td>Not in</td>
<td>Not in</td>
<td>Contender</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Cognizant</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>DXC Technology</td>
<td>Leader</td>
<td>Product Challenger</td>
<td>Leader</td>
<td>Leader</td>
<td>Not in</td>
<td>Leader</td>
</tr>
<tr>
<td>EPAM</td>
<td>Contender</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Rising Star</td>
<td>Not in</td>
</tr>
<tr>
<td>HCL</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Not in</td>
<td>Leader</td>
</tr>
</tbody>
</table>
# Next-Gen Application Development & Maintenance (ADM) Services Cross-Quadrant Provider Listing 2 of 3

<table>
<thead>
<tr>
<th>Next-Gen ADM</th>
<th>Agile Development</th>
<th>Continuous Testing</th>
<th>Next-Gen ADM - BFSI Industry</th>
<th>Next-gen ADM - HCLS Industry</th>
<th>Next-Gen ADM - Manufacturing Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexaware</td>
<td>Contender</td>
<td>Rising Star</td>
<td>Leader</td>
<td>Product Challenger</td>
<td>Contender</td>
</tr>
<tr>
<td>IBM</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Not in</td>
<td>Leader</td>
</tr>
<tr>
<td>Infosys</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
</tr>
<tr>
<td>ITC Infotech</td>
<td>Not in</td>
<td>Product Challenger</td>
<td>Contender</td>
<td>Contender</td>
<td>Not in</td>
</tr>
<tr>
<td>KPI</td>
<td>Contender</td>
<td>Leader</td>
<td>Contender</td>
<td>Not in</td>
<td>Product Challenger</td>
</tr>
<tr>
<td>LTI</td>
<td>Leader</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Leader</td>
<td>Not in</td>
</tr>
<tr>
<td>Luxoft</td>
<td>Not in</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Not in</td>
<td>Product Challenger</td>
</tr>
<tr>
<td>Mindtree</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Product Challenger</td>
<td>Not in</td>
</tr>
<tr>
<td>Mphasis</td>
<td>Product Challenger</td>
<td>Contender</td>
<td>Contender</td>
<td>Product Challenger</td>
<td>Not in</td>
</tr>
<tr>
<td>NTT DATA</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Product Challenger</td>
</tr>
</tbody>
</table>
### Next-Gen Application Development & Maintenance (ADM) Services Cross-Quadrant Provider Listing 3 of 3

<table>
<thead>
<tr>
<th></th>
<th>Next-Gen ADM</th>
<th>Agile Development</th>
<th>Continuous Testing</th>
<th>Next-Gen ADM - BFSI Industry</th>
<th>Next-gen ADM - HCLS Industry</th>
<th>Next-Gen ADM - Manufacturing Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softtek</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Syntel</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>TCS</td>
<td>Leader</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Tech Mahindra</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Market Challenger</td>
<td>Rising Star</td>
<td>Contender</td>
<td>Leader</td>
</tr>
<tr>
<td>UST Global</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Contender</td>
<td>Contender</td>
<td>Contender</td>
</tr>
<tr>
<td>Virtusa</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Contender</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Wipro</td>
<td>Leader</td>
<td>Leader</td>
<td>Leader</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
</tr>
<tr>
<td>Yash Technologies</td>
<td>Not in</td>
<td>Not in</td>
<td>Not in</td>
<td>Contender</td>
<td>Not in</td>
<td>Contender</td>
</tr>
<tr>
<td>Zensar</td>
<td>Not in</td>
<td>Not in</td>
<td>Product Challenger</td>
<td>Product Challenger</td>
<td>Not in</td>
<td>Not in</td>
</tr>
</tbody>
</table>
Next-Gen Application Development & Maintenance (ADM) Services Quadrants
**NEXT-GEN ADM**

**Definition**

Like traditional application services, Next-Gen ADM includes consulting, design, custom development, packaged software integration, operations and testing. However, the scope, delivery mechanism and outcome for such contracts pivot around a value-based approach that focuses on achieving enterprise agility and solving business problems. This quadrant assesses vendors based on their capability to augment traditional ADM services with emerging technologies and methodologies like agile, DevOps, automation, digital and modernization techniques to deliver application outsourcing projects. It also assesses provider capabilities in incorporating new approaches to develop and deliver applications that focus on business outcomes.
Accenture banks on its onshore/nearshore delivery footprint, rich technology consulting legacy and application modernization capabilities to compete in the U.S. market.

Atos focus on process automation and industrialization, innovation, and inorganic growth makes it a strong player in the U.S. market.

Capgemini leverages its Rightshore® strategy to get the right resource mix for each engagement in the U.S. Its business-centric services and applied innovation exchange are key differentiators.

Cognizant leverages its Next-Gen ADM frameworks along with a strong application strategy to win large engagements in the U.S.

DXC Technology is banking on its newly opened digital transformation center in New Orleans and rapid digital delivery to win more Next-Gen services contracts in the U.S.

HCL has gained momentum in the Next-Gen application development space owing to its Silicon Valley partnerships, go-to market approach that focuses on standardization and automation of services, and a focused customer target segment.

IBM’s services alignment with Next-Gen technologies along with a strong partner eco-system makes it a strong player in the U.S. market.

Infosys is pivoting on its global delivery model, value-add delivery and automation capabilities to provide Next-Gen services to U.S. clients.
Next-Gen ADM

Observations (cont.)

- LTI's focus on innovation and its digital Way of Working (WoW) approach are some of its core differentiators, which is leading to strategic engagement wins in the U.S.

- In the U.S., Mindtree is wooing clients with digital agenda through regional innovation centers and an impressive automation tooling stack.

- TCS continues to expand in the U.S. banking on analytics capabilities, automation focus and investment in R&D.

- Wipro is adopting a localization strategy in the U.S. It is focusing on digital services, expanding cognitive capabilities and developing tools, IP & accelerators.
**Overview**

Accenture's ADM services revenue from the U.S. market is estimated at $7 billion for 2017. Accenture provides ADM services to its U.S. clients from a global delivery network of more than 50 centers in 35 countries.

**Strengths**

- **Onshore/nearshore delivery footprint:** With approximately 20 delivery centers in North America and 12 centers in Latin America, Accenture provides clients with an array of options for time zone, cultural alignment and language capabilities.

- **High marks on innovation:** Accenture clients get early access to new technologies via its wide range of more than 150 alliances with universities, startups and top technology vendors. Its seven technology labs (including two in the U.S.) incubate and prototype new concepts through applied R&D projects for clients' businesses.

- **Focus on high-velocity business:** Accenture has more than 10 years of agile development experience with 1,600 agile-certified FTEs. It also boasts more than 5,000 FTEs engaged in mobility solutions.

- **Rich application modernization portfolio backed by industry knowledge:** Accenture's application modernization services include migration, rationalization, retirement, re-platforming, remediation and refactoring. Accenture's effectiveness in delivering these services is a function of its industry-leading technology alliances and industry-specific tooling and solutions. In 2016, Accenture rolled out its MyWizard intelligent automation platform that encapsulates business knowledge across 40 industries. Moreover, the company has more than 5,000 employees trained to work on application modernization projects.

**Caution**

Accenture was rated below average in “proactively identifying savings opportunities” and “overall price competitiveness during contract period” by U.S. clients in ISG's 2018 Voice of the Customer (VoC) Study.

**2019 ISG Provider Lens™ Leader**

Accenture’s core strength in next-gen ADM delivery is its industry tooling, transition know-how and cloud migration services, which are complemented by its rich heritage of technology consulting services. This makes it a juggernaut in the application outsourcing industry.
**Overview**

Atos has a moderate-sized ADM practice in the U.S. market. It supports U.S. clients from various onshore, nearshore and offshore locations including India, Argentina, Mexico, Brazil, Thailand, Costa Rica and the U.S.

**Strengths**

**Focus on process automation and industrialization:** Atos is transforming its service delivery through process industrialization and automation. Delivery is being led from its engineering functions in India to provide quality and cost competitive services. Atos has aligned all delivery units, including application development, testing and maintenance, together to focus on consistent, industrial and cost-competitive delivery at a global scale. This effort supports high-quality service delivery to U.S. clients while ensuring cost competitiveness.

**High points on innovation:** Atos invests 300 million Euros in R&D globally each year and has 15 R&D centers and 5,000 patents, as well as 10 business and technology innovation centers (BTICs) - nine physical locations including one in Dallas and one virtual.

**Digital capabilities:** Atos has been pursuing digital as a key component to its overall ADM strategy. Some of the steps Atos has taken in that direction include its acquisitions of Bull, Unify and Xerox's ITO business and forming strategic partnerships with Google and EMC2 to bolster its cloud and enterprise architecture portfolio.

**Caution**

After the Xerox IT acquisition, Atos cemented its position as a global provider. However, the company still has a relatively moderate U.S. practice compared to its peers.

**2019 ISG Provider Lens™ Leader**

Atos has commendable technical expertise spanning multiple industries. Of late, its growing focus on an offshore-heavy delivery model for U.S.-based clients makes it a cost-competitive-yet-effective choice for enterprise clients.
Overview

Capgemini’s ADM services revenue is estimated at $2.2 billion from the U.S. market in 2017. Capgemini employs approximately 10,000 employees in the U.S., approximately 4,000 in nearshore locations and 15,000 in offshore locations to effectively implement its Rightshore® strategy for U.S. clients.

Strengths

**Rapid digital portfolio expansion in the U.S.**

In the past two years, Capgemini has made a series of acquisitions including Fahrenheit 212, LiquidHub, Ideaan and LyonsSG to augment its applied innovation exchange (AIE) initiatives and support the ADM engagements in transformative services.

**Business-centric services portfolio linked to commercial specificity**

Capgemini uses its business process framework to identify the key processes and KPIs that impact business performance. It then applies business-specific metrics into its contractual models to provide commercial specificity to customer’s requirements. Its ADMnext services offers clients to Excel at the fundamentals of ADM; enhance the core; and innovate to achieve sustainable competitive advantages.

**Applied Innovation Exchange (AIE)**

The Applied Innovation Exchange (AIE) is Capgemini’s global initiative for applying innovation. It is designed to enable enterprises to discover, contextualize, experiment with and draw value from innovations across the globe. Enterprises can leverage partners in AIE’s ecosystem (which includes technology vendors, startups and specialist firms) to execute new ideas and develop prototypes or proof-of-concept (POC) projects with short deadlines and limited budgets.

Caution

Capgemini’s revenue from new pricing models like application- and outcome-based pricing is significantly lower than its peers.

**2019 ISG Provider Lens™ Leader**

Capgemini has been quite successful in scaling up its IP-driven application business in the U.S. market after the IGATE acquisition. Capgemini’s current focus and investment in digital and cloud can help it win large deals in this geography.
Cognizant has approximately 1,400 enterprise clients in the Americas who are supported by a network of 11 onshore centers. The company also has more than 70,000 offshore resources located primarily in India catering to clients in the Americas.

Strengths

Strong onshore/nearshore presence: Almost 30 percent of Cognizant’s ADM resources are in either onshore or nearshore centers. It has centers in Argentina, Brazil, Canada and the United States to optimize on-site/offsite resource ratios, especially as required for engagements leveraging DevOps delivery models in which a product release cycle might be as short as a few days.

Next-gen ADM frameworks: Cognizant has developed proprietary frameworks such as AVMPlus, AppLens, Customer Value Management (CVM) and OneDigital for a modular and integrated approach to shorten delivery times and introduce new delivery mechanisms and technologies into the client environment.

Strong application strategy: Cognizant’s Application Strategy transforms the client’s portfolio to maximize its value and minimize maintenance spend through the Zero Maintenance Framework, which focuses on reducing run cost, optimizing change cost and delivering business outcomes. All this is enabled through the following five-step approach that includes eliminating application debt with a debt management framework, automating through the Cognizant HiveCenter™ Platform, industrializing through standardization, synergizing work silos with integrated app-infra services and transforming business value with a business value management framework.

Caution

Cognizant’s depth and breadth of services are most visible in the banking, financial services, insurance (BFSI) and healthcare industries. It has only a moderate presence in the manufacturing, CPG and retail, and media and communication industries.

2019 ISG Provider Lens™ Leader

Cognizant’s high client DevOps adoption rate, its establishment of dedicated digital units and use of newer engagement models such as gainsharing are all testimony to the company’s successful adoption of next-gen, value-based delivery models.
**DXC TECHNOLOGY**

**Overview**

In 2017, DXC produced approximately $3.4 billion in ADM services revenue in the U.S. market. It serves around 1,900 enterprise clients from a network of four U.S. delivery centers, 10 nearshore centers and multiple offshore delivery centers in India.

DXC is executing a comprehensive go-to-market plan with targeted applications focused on its top 20 client accounts in the U.S.

**Strengths**

**New digital transformation center in New Orleans:** In 2018, DXC has opened a digital transformation center based on a public-private partnership with state and municipal government and local educational institutions, including the University of New Orleans, Louisiana State University, Southeastern Louisiana University and Delgado Community College. DXC intends to employ 2,000 professionals over a period of five years. The center is categorically focusing on the development, delivery and support of next-generation digital services, such as cloud computing, cybersecurity, applications, data analytics and intelligent automation.

**Extreme Partnering:** DXC has signed aggressive and highly collaborative contracts with select providers and vendors, including Micro Focus, Dynatrace, CA Technologies and Mphasis. The intent is to create an environment where all walls are removed and build a partnership with no barriers, where the partners will participate in sales, solutioning and offering development. The final objective is to exploit this partnership ecosystem to create force multipliers and joint revenue channels.

**Rapid digital delivery:** DXC is focusing on rapid digital delivery enabled by collective genius crowdsourcing. The goals are to transform ideas into minimum viable application products (MVPs) in weeks, create application designs, wireframes and prototypes, and increase the rate of application innovation.

**Caution**

DXC is making good progress at strengthening its current go-to-market strategy. However, to maintain this momentum, it needs to continue to invest to ensure it grows its share of wallet of the next-gen opportunities.

---

**2019 ISG Provider Lens™ Leader**

Since its formation in April 2017, DXC has quickly taken some major steps to rationalize its services portfolio and is making some big bets on key technologies and accounts in the U.S. to revitalize its revenue stream.
HCL Technologies’ (HCL) ADM services revenue was approximately $2 billion from the U.S. market in 2017. It has approximately 30,000 employees who provide ADM services to its 200 U.S. clients.

It has more than 10 same-shore delivery centers located in California, Texas, North Carolina, Michigan, New York, Washington, New Jersey, Minnesota, Canada and Mexico.

**Overview**

**Strengths**

- **Engineering legacy:** Because of its legacy as a product engineering firm, HCL is continuously engaged with major software companies to design and develop their next products, thereby incubating those capabilities in HCL’s own digital portfolio.

- **Focus on standardization and automation:** HCL has been able to achieve significant efficiencies in ADM engagements primarily through the following automation offerings:
  - DRYICE™, which leverages cognitive technology for predicting and preventing incidents in an application landscape. This extensive toolset also offers business and IT KPIs.
  - The ADVantage product suite is focused on bringing efficiency to application development. It includes ADVantage Code for developer productivity improvement, ADVantage Migrate for migrating applications from legacy technologies to a modern stack, and ADVantage ALM, which is HCL’s gold standard for agile-based application lifecycle management.

- **Silicon Valley startup partnership:** HCL is an investment partner in Morado Venture Partners, which focuses on funding startups that are working in next-gen technologies such as machine learning, drones and big data. It has made 49 strategic investments so far.

**Caution**

HCL can further invest in building domain-specific industry solutions. Domain expertise is an important consideration for clients when selecting partners for innovation and next-gen initiatives.

Through its Mode 123 strategy and progress made in automation, cloud and digital, HCL is prepared to ride the next wave of major investments in the IT industry.
Overview

IBM generated almost 40 percent of its revenue from the Americas in 2017. An estimated 40,000 employees provide ADM services to its U.S. clients from a network of more than 25 global delivery centers.

Strengths

Service portfolio aligned with next-gen ADM: IBM's service portfolio covers the following three key areas:

– Digital strategy and interactive consulting: strategy consulting geared toward enterprise-wide digital reinvention of business models. Resources include IBM Global Business Services' (GBS) design and creative studios, Salesforce consulting, digital commerce and a marketing platform.

– Cognitive process transformation: helps clients define, implement and operate new business processes enabled by digitalization, advanced analytics, big data, modern process reengineering with design thinking, Watson technology and data platforms such as Watson IoT, blockchain, cognitive process automation and Watson health.

– Cloud application innovation services: helps clients modernize the core systems underpinning enterprise and process transformation by using modern architecture approaches, including microservices, API, agile and DevSecOps. IBM also helps clients develop and implement cloud migration strategies for migrating existing workloads to cloud and for developing native cloud applications. The group also has embedded security into its practices and capabilities for the entire development lifecycle.

Partnership ecosystem: IBM already has one of the biggest partner ecosystems in the industry. It is further expanding into newer areas. For example, IBM has built capabilities for big data analytics using IBM products on the Hortonworks data platform, and it has a new partnership with MIT to create the MIT-Watson AI Lab, to mobilize the talent of more than 100 artificial intelligence scientists, professors and students to advance AI hardware, software and algorithms.

Caution

In ISG's 2018 Voice of the Customer (VoC) Study, IBM was rated below average in "proactively identifying savings opportunity" and "overall price competitiveness during contract period."

IBM

2019 ISG Provider Lens™ Leader

IBM is a unique service provider that has an even larger software business. Thus, IBM’s services division has access to many of the company's proprietary software products that it can leverage across the application value chain.
INFOSYS

Overview

Infosys’ ADM services revenue was approximately $4.2 billion from the U.S. market in 2017. It has approximately 120,000 employees who provide ADM services to its 200 U.S. clients.

Strengths

Global delivery model (GDM): Infosys ADM goes beyond multiple teams in different locations – it is about services delivered by teams that are integrated by established processes and infrastructure. Some attributes include virtual teams connected by information, intelligent work distribution and integration, an extended workday for faster project completion, access to experts and knowledge, and choices of various iterative and waterfall models.

Value-add delivery approach: Infosys has a standardized and mature approach to managed services contracts, following its “Navigate your Next” strategy, which focuses on enabling digital capabilities on priority and energizing the core systems and processes with next-generation technologies.

L3 automation: Infosys’ Nia artificial intelligence platform can considerably reduce effort for L3 engineers involved in application enhancements and bug fixes. Nia’s natural language processing (NLP) capabilities, text analytics and machine learning techniques can be applied to automate bug localization, root-cause and impact analysis and test-plan generation. Automation can reduce the effort for those activities by almost 60 percent.

Caution

Infosys has long taken a conservative approach to investing in emerging areas or in gaining capabilities through inorganic growth. More recently it has made acquisitions and investments in emerging areas like social, mobile, analytics and cloud (SMAC) and other digital technologies.

2019 ISG Provider Lens™ Leader

Infosys’ biggest differentiation is its value-based offerings delivered through a well-coordinated and aligned global delivery resource pool.
LTI

**Overview**

LTI's ADM services revenue from the U.S. contributed to more than 65 percent of overall ADM in 2017. It has approximately 10,500 employees who provide ADM services to its 150 U.S. clients.

**Strengths**

**Focus on innovation:** LTI's Business Innovation Center (BIC) model is an idea-led innovation approach built on the principles of collective creativity, design thinking, agile development and fail-fast methodology. BIC teams are spearheaded by SMEs that converge to deliver unique business solutions.

**Digital Way of Working (WoW) approach:** LTI's digital Wow was designed to deliver and amplify outcomes. It includes the following key themes:

- Embed digital: Wow is an amplified outcomes model for IT support through digital enablers like advanced analytics, artificial intelligence, machine learning, cloud mobility and design thinking.

- Digitize the core: Wow is intended to enable companies to interact with customers in real time and serve them with a 360-degree view.

- Pivot on platforms: LTI sees its platform as an economy that creates new paths for growth and new revenue streams.

- Service-as-a-Product (SaaP): This focuses on developing scalable and repeatable service experience to ensure consistency in customer experience and scale services over time, without quality issues.

**IP-led growth:** LTI leverages its proprietary Mosaic platform that provides a ready-to-use reference architectural framework and integrates LTI proprietary tools and widely adopted open source and third-party tools. Mosaic is a highly modular platform that introduces components like Mosaic Automation, Mosaic Things, Mosaic Experience, Mosaic Decisions and Mosaic Artificial Intelligence in managed contracts as required. This has resulted in a growth of digital revenues from 10 percent to 33 percent.

**Caution**

An increased focus on managed services can help LTI extract a higher wallet share from clients that are aggressively investing in next-gen application technologies.

---

**2019 ISG Provider Lens™ Leader**

LTI's experience in working with both packaged and custom software, running multi-year maintenance deals and its growing digital portfolio make it an attractive alternative to large multinational providers.
MINDTREE

Overview

Mindtree’s ADM services revenue was approximately $410 million from the U.S. market in 2017.

Strengths

Digital Innovation center at New Jersey: In late 2017, Mindtree launched the Digital Pumpkin in Warren, New Jersey, which is its second innovation hub and first in the U.S. The digital hub focuses on creating digital experiences by rethinking the way customers engage with companies, partners and employees; digitizing the value chain by building a “graceful” API layer to connect both new and legacy systems; and developing sense-and-respond systems that build models that can predict changes in customer, partner and employee demand.

Focus on rapid automation: Mindtree has built multiple platforms and accelerators to help clients reap a high ROI by leveraging automation. Some of these accelerators include:

- Advanced Learning ENgine (ALEN), which is an accelerator to conduct machine learning modeling, testing and deployment to any platform.
- Mindflow: Mindtree’s conversational platform that can integrate, orchestrate and automate with different NLP engines; the deep learning algorithm can work with machine learning or business users to create specific domain chatbots at an enterprise level.
- CAPE: the Composable Automated Platform for Enterprises is used to visualize the IT lifecycle, accelerate end-to-end integrated automation and real-time decision-making through unified dashboards.
- RAPID: is Mindtree’s RPA implementation framework for discovering, designing and executing appropriate automation solutions.
- ATLAS™ Intelyzers: Data science and machine learning components that bring predictive capabilities to perform auto-triage, auto-classify, auto-respond, auto-escalate, failure-detect and auto-fix issues in managed services environments.

Caution

Mindtree could strike partnerships with innovative startups and look toward some key acquisitions to further strengthen its capabilities in areas such as blockchain, application security, cloud-native architectures and the API economy.
TCS

Overview
The U.S. market is estimated to have contributed around half of TCS’ overall ADM revenue for 2017. More than 60,000 employees provide ADM services to its U.S. clients from a network of more than 100 local, regional and global delivery centers, with primary locations in India, the U.S., Mexico and Uruguay.

Strengths

Analytics capabilities: TCS is continuously investing in deep learning platforms by researching and piloting e-mail mining, voice analytics, natural language processing, robotics and services automation. It has a dedicated SAP center of excellence in Cincinnati, Ohio, that is focused on building applications for high-speed analytics and managing performance-intensive business transactions. TCS’ own analytics platform Customer Intelligence and Insights collects and analyzes large volumes of structured and unstructured customer and operational data in real time.

Automation focus: TCS has a holistic approach to automation; every single delivery unit has responsibility to include automation. TCS is continuously investing in developing new IP, tools and platforms. These developments have led to Digitate, a dedicated unit to develop cognitive products, and TCS MasterCraft, a set of software automation tools that enable businesses to optimize their IT service delivery processes.

Investment in R&D: After the success of its automation and financial services platforms Ignio and BaNCS, the company is dedicating non-billable teams to work in its R&D centers to develop intellectual property that can be monetized through additional offerings. To maximize innovation potential, TCS offers an environment that encourages collaboration through the TCS Co-Innovation Network (COIN™), which provides access to an ecosystem of various TCS customers, entrepreneurs and experts from industry and academia.

Caution
This market has become highly commoditized, with incumbents losing some or all of their scope to new competitors more than half the time when contracts are put up for competitive rebid, according to ISG Research. Because TCS is one of the biggest players, it needs to continuously evolve to win new business and retain existing clients.

2019 ISG Provider Lens™ Leader
TCS is following a strategy that, at the core, reflects changing market conditions. Being able to serve clients across the outsourcing maturity spectrum will help TCS offset some of the slowdown in mature markets by tapping first-time outsourcers in emerging markets.
Wipro's ADM services revenue was approximately $2.5 billion from the U.S. market in 2017. It serves nearly 700 U.S.-based enterprise clients.

**Strengths**

**Localization in the U.S. market:** Wipro employs a diverse employee base with a variety of skillsets in the U.S. It has invested close to $2 billion in North America and employs more than 13,000 people there. It has opened and expanded facilities across the U.S. and now has approximately 50 offices in the country.

**Focus on digital:** Wipro's Digital Experience Platform is an integrated platform designed to deliver experience across marketing, sales and services functions. In the last five years, Wipro has made some key acquisitions. Major deals include the Appirio acquisition to become a dominant player in cloud applications, TopCoder platform to enable innovation via crowdsourcing and the Designit & Cooper acquisition to enhance its capabilities in digital and customer experience.

**Cognitive capabilities:** Wipro's HOLMES cognitive solution leverages semantics, machine learning, pattern recognition and knowledge-modeling technologies to enable solutions that add valuable context, intelligence and automation to enterprises. Holmes application types include cognitive process automation, intelligent virtual agents, knowledge process systems, visual computing and human interface, autonomous applications and anticipatory and predictive systems.

**Tools, IP and accelerators:** In line with its "4 Cs" strategy (customer experience, cloud, cybersecurity and cognitive computing), Wipro has created intellectual property to span the application lifecycle, including the development stage. Some of its leading IP includes Digital Rigs, Wipro Digital Experience Platform, Cloud Migration Platform, Wipro's Integrated Agile DevOps Platform (WID), devNXT, Data Discovery Platform and the Security Intelligence Center.

**Caution**

Wipro's ADM services revenue was approximately $2.5 billion from the U.S. market in 2017. It serves nearly 700 U.S.-based enterprise clients.

**Overview**

Wipro has a mature managed services practice with an equally strong portfolio of handling off-the-shelf and custom applications. In recent years, it has made tremendous progress in augmenting its ADM offerings with automation and transformational capabilities, thereby guaranteeing quantifiable business outcomes.

**2019 ISG Provider Lens™ Leader**

Wipro has a mature managed services practice with an equally strong portfolio of handling off-the-shelf and custom applications. In recent years, it has made tremendous progress in augmenting its ADM offerings with automation and transformational capabilities, thereby guaranteeing quantifiable business outcomes.
AGILE DEVELOPMENT

Definition

Agile development is an incremental and iterative approach to application development. Because agile encompasses frequent and early releases of the working software, it is being viewed by enterprises as a medium for attaining enterprise agility.

This quadrant assesses each provider’s capabilities to deliver tangible results through use of various agile methodologies. It also looks at the focus a provider has toward the use of agile development with respect to its overall application development practice.
AGILE DEVELOPMENT

Observations

- Cognizant's gamut of digital offerings for the U.S. market coupled with its OneAgility™ framework provides a distinct advantage.

- HCL's investments in next-gen platforms, innovation lab and scaled agile delivery centers and enterprise transformation capabilities form its primary strengths in the U.S.

- IBM's client-centric service delivery and agile complementing tools and methods differentiates it from competition.

- Infosys' partnerships with tool and process vendors, asset bases and large agile/DevOps ecosystem helps in catering to the varying agile development needs of client in the U.S.

- KPIT's rapid application development framework, engineering legacy and selective industry focus makes it a specialist provider in the agile development space.

- Mindtree offers an array of agile-enabled services. Its GATE model for distributed agile delivery makes it stand out among peers in the U.S. market.

- Wipro's strength lies in its scaled-agile expertise, DevOps and agile and cloud capabilities.

- Hexaware's technology focus, cross-trained workforce and innovation initiatives in the U.S. makes it a Rising Star.
**Strengths**

Gamut of digital offerings: Cognizant has an array of offerings for enterprises seeking digital transformation. The four key offerings and principles include:

- Insight to code, which accelerates software development by helping each client unify its business and digital strategies at scale.
- Greenfield engineering, which is a cloud-native philosophy with agile practices that uses iterative sprints to assure first-mover advantage by delivering production-ready, tested and secure code.
- Value stream: Cognizant experts examine the client's existing application portfolio, assess its economic impact and effectiveness to help the client attain high-level, customer-focused business objectives. It then develops recommendations for maximizing the long-term economic return for the entire portfolio.
- Application transformation: By leveraging its labs, Cognizant delivers essential transformation components, including assessment, a prioritization framework, app redesign, restructuring and cloud-native operation via agile and DevOps practices.

Cognizant OneAgility™: It is an integrated framework for enterprise agility. The OneAgility™ Lab, one of the core components, is a platform made up of industry products, open source toolsets, SaaS services and templates for best practices and tool chaining to rapidly enable modern IT delivery. The majority of Cognizant's new applications are being developed in agile mode.

Packaged technology strength: Cognizant is particularly strong in integrated SAP, Oracle and Pega packaged software products, both on-premise and SaaS.

**Caution**

Cognizant can strike new partnerships in the area of hyper-agile development. It should focus on rapid delivery of minimal viable product (MVP)-based solutions, where it can form alliances with low-code and PaaS providers.
HCL

Overview
HCL’s agile development services revenue was approximately $570 million from the U.S. market in 2017. Its 71 U.S. clients are supported by 8,507 employees engaged in agile development and integration activities.

Strengths

**Investment in next-gen platforms**: HCL has invested in building a next-gen technology platform and is already engaging with customers on their pilots. HCL CoTrust and HCL ARStudio are examples of its platforms. CoTrust is a blockchain platform that simplifies enterprise blockchain adoption by automating the needs for set up. It supports most of the widely used blockchain implementations including Ethereum and Hyperledger. HCL ARStudio is a platform that focuses on building cross-reality (XR) solutions leveraging various AR implementations. It simplifies augmented reality and virtual reality technology adoption.

**Innovation lab and scaled agile delivery centers**: Based on the maturity level of its customers and their immediate digital targets, HCL’s approach is to establish innovation and scaled agile delivery centers at strategic locations based on its key customer base. HCL adopts a flexible commercial model that ranges from traditional T&M and fixed cost terms to outcome-based commercials as needed.

**Enterprise Transformation**: HCL has proven expertise in providing a customer-centric value proposition thereby enabling enterprise transformation. HCL offers modern application development platforms to improve business outcomes, developer productivity and standardization across the enterprise. HCL leverages platforms such as ADVantage products, DryiCE, Kalibre and Academy to enable agile and DevOps ways of working.

Caution
HCL can further invest in building domain-specific industry solutions. Domain expertise is an important consideration for clients that are selecting partners for innovation and next-gen initiatives.

2019 ISG Provider Lens™ Leader
HCL is poised to transform businesses based on its digital platforms, startup innovation initiatives, extensive partner ecosystem and flexible approach to contracting.
Overview

Almost two-thirds of IBM’s engagements are agile-enabled and roughly 90 percent of its development staff is trained on agile frameworks and key agile methodologies like Scrum and Kanban. IBM serves approximately 250 enterprise clients in the Americas via its agile development services.

Strengths

Client-centric service delivery: IBM garage-based services are a great example of how uniquely IBM project teams are organized around user stories rather than based on work-breakdown structure in a “function-based” or “role-based” organization. Contrary to a waterfall structure, where a business analyst defines requirements, a developer develops, a tester tests and operations deploys the application, IBM garage teams take end-to-end ownership of their contribution in terms of user stories, and thus are more aligned to project outcomes.

Agile complementing methods and tools: IBM’s ADM-oriented methods and tools have been built to enable agile delivery. For example, Agile@Maintenance is designed for rapid deployment. It drives maturity across the portfolio and reduces application break/fix backlogs. IBM’s Lean2Agile catalyzes process improvement and increases client value through lean improvements and agile delivery.

Caution

Given IBM’s size and scale and the integration of its services division with other business units, it is very difficult for the company to stay flexible — which is why niche, local and specialist services providers have made strong gains in the ADM and other ITO service towers in recent years.

2019 ISG Provider Lens™ Leader

IBM is best suited for large, global, integrated or bundled engagements in which the client can leverage the company’s proprietary tooling, methodologies and software to gain a strong advantage.
INFOSYS

Overview

Infosys’ agile development revenue was approximately $1.2 billion from the U.S. market in 2017. It has approximately 21,500 employees that provide ADM services to its 85 U.S. clients.

Infosys has innovation hubs in Dallas, Texas, Raleigh, North Carolina, Indianapolis, Indiana, and Glastonbury, Connecticut, to host project teams closer to customer bases and provide the next-best option to colocation. The Dallas operation currently hosts six Scrum teams for financial institutions.

Strengths

Asset bases: Infosys has established an agile academy for training resources across its India centers and has created web-based remote trainings for the rest of the world. It has a center of excellence for agile and DevOps to research tools, enhance IDP (the company’s CI/CD platform) and build innovative solutions (including custom, mainframe, ERP and other packages). Infosys also has an extensive resource pool of coaches to support the needs of the local market and train local delivery teams on agile and DevOps principles.

Partnerships with tool and process vendors: To improve its expertise in high-performing process and technology areas, Infosys has strengthened its vendor partnerships with established players such as IBM, Microsoft, HP, CA and AWS. It also is working closely with a host of niche product vendors, including Atlassian, CloudBees, Tricentis, Redhat and Xebia Labs, to provide end-to-end services. Infosys is a gold partner with SAFe Academy.

Large agile/DevOps ecosystem: Infosys boasts 20,000 FTEs trained on agile methodologies, 10,000 DevOps engineers, 15+ vendor alliances, 20+ agile training programs, a DevOps platform that supports 20 packaged technologies and more than 60 tools, plus the experience of serving more than 1,000 agile engagements in 25+ countries.

Caution

Infosys could further enhance its presence and client base in the utilities industry.

2019 ISG Provider Lens™ Leader

Infosys has a design thinking-led approach to enterprise agility that helps clients drive agile and DevOps adoption in an integrated way, taking an end-to-end view of the value chain.

Agile Development
Strengths

Rapid application development framework: KPIT has its own rapid application development platform called FoundationK for custom application development. The platform has a responsive UI, is scalable and secure and supports multiple languages. KPIT has been able to achieve 40 percent reduction in cost and a 25 percent reduction in development time through FoundationK, compared to traditional custom application development.

Selective industry focus and engineering legacy: Given its medium size, KPIT prefers specializing and aligning its offerings toward select industries. KPIT serves manufacturing, CPG and retail, energy, healthcare and life sciences industries. It also has a product division that helps it gain more domain expertise within these industries.

Resources trained across DevOps automation tools: KPIT has resources trained across all major DevOps automation products including Docker, Git, Puppet, Ansible, Jenkins, SonarSource, Chef, Artifactory, Splunk, SaltStake, Logstash, Maven and Automic.

Caution

KPIT could further enhance its offerings for smart applications, business intelligence and analytics, ERP and commercial-of-the-shelf (COTS) products.

Overview

KPIT’s application development revenue reached approximately $185 million from the U.S. market in 2017, 36 percent of which is made up of agile development services.

KPIT offers various agile models, including lean and scaled agile. Most of the development in its digital transformation and Oracle business units follows agile methodology.
MINDTREE

Overview

Mindtree's application development revenue was approximately $376 million from the U.S. market in 2017, approximately 40 percent of which is constituted by agile development services.

Strengths

Array of agile-enabled services: Mindtree provides a gamut of agile services ranging from consulting services (coaching, transformation) to delivery through various means, including PO augmentation and managed services. The company is focusing on enhancing agile-based delivery in areas like data analytics, cloud and COTS applications from Salesforce, SAP and Duck Creek.

Agile experience: Mindtree has approximately 4,400 employees working on agile engagements. Of these, there are 3,970 agile engineers, 30 agile coaches, 200 scrum masters and 200 architects. It has an agile center of excellence in Gainesville, Florida. This high-tech ideation and communications hub focuses on agile transformation, agile consulting, agile delivery and digital business.

GATE model for distributed agile delivery: GATE stands for Global Agile Teams for Enterprise. Through this model, Mindtree supports onsite agile delivery at clients' premises, onshore at domestic delivery centers, and offshore delivery at one of its India-based delivery centers. The core tenets of the GATE model are to distribute cross-functional teams and not people, distribute work based on the level of collaboration so collaborative work stays close to the client, and using technology enablers to support virtual teams.

Caution

Mindtree should look to cross-train its agile resources on multiple agile methodologies so it can offer and recommend different development options based on varying client requirements. Mindtree currently trains on Scrum, SAFe, Kanban, and eXtreme Programming, and leverages its internal proprietary frameworks.

2019 ISG Provider Lens™ Leader

Mindtree is successfully combining agile, DevOps, process and tool automation technologies to achieve faster speed-to-market, thereby, providing higher return on investment to its clients.
Wipro's agile development revenue was approximately $540 billion from the U.S. market in 2017. It has approximately 7,700 employees that provide agile services to its 80 U.S. clients.

**Strengths**

**Scaled-agile expertise:** Because enterprise-wide agile adoption is a priority for several U.S.-based clients, Wipro advocates scaled agile methodologies to drive agile delivery at the portfolio, program and team levels, wherein business needs are aligned and synchronized through the delivery pipeline. Wipro's practitioners are trained in more than one agile methodology to help clients realize the value of agile.

**DevOps and agile advisory:** Wipro's DevOps framework provides a continuous delivery model to provide on-demand IT delivery. Wipro's Global Agile Model for Enterprise (W-GAME) is a step-by-step model that focuses on aligning people, processes, practices and tools utilizing various lean principles and agile approaches. Wipro also has a proprietary approach called 3D (Discover, Develop and Deliver) to help clients in their agile transformation.

**Cloud capabilities:** Wipro provides solutions to consolidate clients' application portfolios by moving them to platforms from vendors like Microsoft, Oracle and SAP, or by developing customized, intrinsic platforms. Wipro's Cloud Integration Kit (CLiK) is an accelerator framework of methods, reusable components and best practices to help customers plan, strategize and execute cloud integration. The company reports it has four dedicated SAP HANA-powered labs, one each in India, the U.S., Germany and Australia.

**Caution**

Wipro can look to upskill its workforce to fully take advantage of the increasing traction for agile delivery being observed in industries such as BFSI, manufacturing and energy.
RISING STAR: HEXAWARE

Overview

Hexaware’s agile development services revenue was approximately $69 million from the U.S. market in 2017.

The company’s primary focus areas include product development, automation and employing cloud architecture using agile and DevOps approaches.

Strengths

FTEs trained across DevOps automation continuum: Hexaware has a dedicated workforce trained across DevOps automation tools including Docker, Puppet, Ansible, Jenkins, Git, SonarCube, CHEF, Splunk, SaltStack, Logstash, Automic, Maven and Artifactory.

Technology focus: Hexaware has carved out a technology focus, including smart automation (by applying AI and machine learning in focused industries), business transaction innovation using the API economy, and disrupting traditional business models using blockchain technology.

Capable workforce: At an organizational level, Hexaware has more than 400 professionals who hold agile certifications (including CSM, CPO, PMI ACP, CSD, SAFe, LKU, and ISTQB-Agile Cert). It has more than 4,000 agile trained consultants, including agile coaches, working across approximately 80 projects.

Caution

Hexaware was rated average for “responsiveness” during project execution in ISG’s Voice of the Customer (VoC) Study – 2018.

2019 ISG Provider Lens™ Rising Star

Hexaware has been able to successfully demonstrate a human-centric approach based on design thinking and intelligent process automation to transform the businesses of its enterprise clients.
Definition

Continuous testing focuses on delivering quality assurance at speed. In terms of technology, it encompasses various aspects of automated testing such as shift-left, end-to-end automation across testing phases. However, in terms of people and processes, it goes a step beyond automation testing to accomplish higher collaboration among QA and development teams to sync with sprint cycles and feature-driven testing, improve responsiveness to change and create a feedback loop and greater client involvement. Continuous testing is gaining momentum, especially to help enterprises keep pace with their agile and DevOps initiatives.

Service providers for this quadrant are assessed on their progress and capabilities developed for creating a continuous testing environment with measurable outcomes for their clients.
CONTINUOUS TESTING

Observations

- Capgemini’s core strengths include strong IP, industrialized delivery and a rich tool stack for client in the U.S.

- Cognizant IP-based solutions, automation as-as-continuum, workforce transformation initiatives make it a strong player in the U.S. market.

- DXC’s testing-as-a-service and domain and vertical specialization are some core differentiators in the U.S. market.

- In the U.S., HCL banks on its strong product portfolio, agile and flexible engagement models and quality as-a-service offerings.

- Hexaware’s in-house and partner-led solution development makes it a worthy contender to execute continuous testing projects in the U.S.

- IBM’s market leading software platform IGNITE quality and test services coupled with its breadth and depth portfolio depth enables it to execute large testing engagements in the U.S.

- Infosys strong partnership eco-system, investments in next-gen services, and automation solutions gives it an edge over competition in the U.S. market.

- Mindtree’s full-stack and cross-trained resource pool, QA transformational experience and local delivery hubs provides a unique value proposition for the U.S. market.

- Wipro’s focus on automation-led testing, continuous testing assessment & strategy form its key differentiators for the U.S. market.
Overview

Capgemini's application testing services revenue in the U.S. market was estimated at $400 million in 2017. It has more than 100 testing clients being supported by approximately 1,650 FTEs located in eight U.S. delivery centers, and a shared pool of almost 10,000 FTEs in offshore delivery centers.

Strengths

**Ecosystem improvement initiatives:** To enable more effective continuous practices, Capgemini has taken multiple steps to improve its delivery ecosystem. These include virtualization, self-service test data management with auto-integrations, development of bots for touchless automation executions and self-healing automation solution development.

**Strong IP:** Capgemini’s proprietary tools, including SmartQA, intelligent Test Automation Platform (iTAP), SmartFoundry, SmartAnalytics and NFT Hub, help bring value across different testing stages by ensuring both agility and quality.

**Re-defined SLAs that support Shift-left:** Testing SLAs are being defined jointly with development teams so that there is an end-to-end quality focus. Some of the important metrics being considered include first time pass rate, build failure rate and zero touch automation thresholds.

Caution

The majority of Capgemini’s testing clients are in the BFSI industry. It does have clients in other industries including energy, telecommunication, CPG and healthcare, but penetration outside the financial sector remains low.

2019 ISG Provider Lens™ Leader

Capgemini has undertaken major transformation initiatives to better align itself with the continuous testing requirements of enterprise clients thereby making it an ideal partner to engage for new methods like context-based testing.
**Overview**

More than half of Cognizant’s testing revenue comes from the U.S. The company has almost 100 clients based in the Americas.

Cognizant’s overarching vision for QA is to assure its clients’ success in the digital economy by bringing together deep industry and technology expertise to drive quality and speed.

**Strengths**

**IP-based solutions:** Cognizant has one of the largest sets of automation testing products for varying client needs across the test management lifecycle. A few of its major products include Quality Insight Bots (which enable intelligent and automated QA using AI, machine learning and NLP techniques), TEBOT (which extends automation to the human-machine interface for testing digital solutions such as home automation and wearables), Intelligent Test Scripter (an open source scriptless test automation platform that improves automation speed).

**Automation as-a-continuum:** Cognizant’s HiveCenter™ addresses automation holistically, including continuous testing. HiveCenter is an integrated portfolio of services, platforms and solutions.

**Workforce transformation:** The company is investing heavily to incubate “Pod-ready” quality engineers that can architect and deploy continuous testing solutions.

**Caution**

Most of the QA tools and platforms Cognizant has developed are industry agnostic, with exceptions for healthcare, and to some extent, the financial industry. The company could invest more to develop industry-specific IP to increase its win rate for contracts that require deep industry expertise.

**2019 ISG Provider Lens™ Leader**

Cognizant has an impressive set of continuous testing tools that can support customers in their end-to-end DevOps initiatives. Its localized approach to delivery enables seamless client-provider interaction.
DXC TECHNOLOGY

Overview

DXC generated nearly 75 percent of its testing revenue from the U.S. in 2017. DXC has 300 enterprise clients supported by 20 onshore, nearshore and offshore delivery centers.

After the CSC and HPE ES merger, DXC had only five percent account overlap. Thus, there is massive potential for cross-selling and up-selling high-value testing services to existing accounts.

Strengths

Testing-as-a-service (TaaS): DXC’s TaaS offers flexible, consumption-based testing services in a pay-as-you-go model. Some of the services offered under TaaS include:

- FTaaS: Functional and automation testing-as-a-service
- PTaaS: Performance testing-as-a-service
- MTaaS: Mobile testing-as-a-service

Domain and vertical integration: DXC has a wide range of testing services (including test advisory, lifecycle testing services, applications security testing, enterprise application testing and digital and emerging technology testing) that are mapped to industry-specific tools, reusable scripts and accelerators. DXC has specialized vertical solutions for the banking, insurance, healthcare, manufacturing, energy, CPG and retail industries. Currently, it is working to enhance its offerings in aerospace and telecom.

Caution

DXC needs to further expand its next-gen testing offerings around areas such as AI, machine learning, DevSecOps and analytics.

2019 ISG Provider Lens™ Leader

With the advent of digital transformation in the U.S., DXC is positioned as a go-to partner for addressing next-gen testing needs.
HCL

Overview

HCL’s application testing services revenue in the U.S. market in 2017 is estimated at $275 million. It has more than 121 testing clients being supported by around 1,500 FTEs.

HCL is strengthening its continuous testing business across the insurance, consumer services and high-tech manufacturing markets in the U.S. HCL is also partnering for domain-specific solutions.

Strengths

Products & platform: HCL is focusing on innovative IP-led transformation. For example, through its 15-year IP partnership with IBM, HCL is uniquely positioned to offer alternate consumption and commercial models for its enterprise customers.

Quality as a Service: QaaS is HCL’s next-gen approach to testing and has provided confirmed benefits such as reduced cost, defects and time to market for clients. HCL’s Quality as a Service approach has three core aspects to its value proposition: just-in-time (via use of reusable components, decoupling, core and flex models), industrialized processes (which is a platform approach to testing that includes automation and analytics) and the use of Six Sigma methodology.

Agile and flexible engagement models: HCL works on a range of flexible models, including pay-per-use and lab-on-rent, that enable rapid ramp up/ramp down of resources to provide scalability.

Caution

Most of HCL’s proprietary frameworks and tools are industry agnostic. Thus, the company may not be a good fit for testing projects that require deep industry expertise.

2019 ISG Provider Lens™ Leader

The biggest strength of HCL’s business assurance and testing services lies in its ability to quickly deliver solutions with flexible contracting models at a relatively low cost.
Strengths

**Software Development Engineer in Test (SDET) approach:** Hexaware has been trying to make SDET an ethos that is built into service delivery. To accomplish this, it is focusing on re-skilling its current workforce, sponsoring resources to acquire required certifications and organizing SDET-specific training programs.

**In-house solution creation:** Some of the key in-house solutions developed by Hexaware include a continuous assurance platform and Integrated Design to Execution (iD2E) platform. These platforms are used to enable continuous testing, progression/in-spirit test automation and multichannel automation across thin client applications (browser-based applications), thick client applications (.Net, Java, Delphi, etc.), mobile test automation (iOS, Android and Windows) and API test automation (ESB, SOA and MSA applications). As part of CAP, there are out-of-the-box plug-ins available for different automation solutions to integrate with different CI tools like Jenkins, Bamboo etc.

Hexaware was rated average for “Ability to deliver new services and innovation” during project execution in ISG’s Voice of the Customer (VoC) Study – 2018.

Hexaware’s vision is to enable and enhance continuous testing in an agile and DevOps environment for its customers through in-house and partner-led solutions, thereby reducing cost and improving quality at speed.

Hexaware is continuously adopting a customer-centric approach and can integrate continuous testing offerings as part of its DevOps consulting services or deliver them as standalone services.
**Overview**

The Americas formed around 45 percent of IBM's testing revenue in 2017 and 25 percent of its testing revenue are generated from continuous testing services. Approximately 13,500 FTEs are engaged in providing testing services to American clients.

**Strengths**

**Market-leading software platform:** The IBM Rational Test Workbench offers software testing tools for a DevOps environment, including API testing, functional UI testing, performance testing and service virtualization.

**Strong in emerging areas:** IBM has strong capabilities for cloud-based testing and is leveraging Watson's cognitive capabilities for adaptive testing and decision-making.

**IBM IGNITE quality and test services:** It is an AI-enabled framework that expedites tasks from error detection to error prevention at increased speed, while ensuring quality and producing cost savings. There are three stages to this framework: optimize (which has reduced the number of tests by up to 88 percent); automate (testing process automation that reduces up to 99 percent of defects) and; analyze (pattern identification to prevent future errors).

**Breadth and depth:** IBM's testing portfolio includes a wide range of services, from design to run. Services extend to legacy systems, packaged applications, web applications and mobile applications. IBM also has industry-specific testing solutions and offers an as-a-service model.

---

**Caution**

Although IBM has clients across deal bands ranging from $1 million to more than $20 million, it may not be suitable for simpler testing projects given its higher price points.
INFOSYS

Overview
In 2017, Infosys generated revenue of $500 million from application testing services in the U.S. In the Americas region, Infosys has started hiring more local resources and plans to reach its target of 10,000 local hires over the next two years.

Strengths

Strong partner ecosystem: The Infosys partner ecosystem includes technology companies such as Microfocus, Tricentis, IBM, Perfecto, pCloudy and CA. It is aimed at delivering increased value to clients by developing joint go-to-market solutions, training and certification programs, branding and marketing activities via innovation hubs and infrastructure labs.

Investments in next-gen services: Infosys has made significant investments in a crowd testing platform, gaming initiatives for incentivization, user and customer experience, digital assurance, business assurance, IoT, AI, machine learning, DevOps, agile, quality engineering services and environment-as-a-service.

Infosys Data Testing Workbench (iDTW): This next-generation automation solution streamlines and accelerates data integration process testing by offering a user-friendly, comprehensive and integrated web-based platform.

Enterprise Quality Assurance Transformation Model (EQATM): EQATM is Infosys' methodology for assessing the maturity of an organization's software test practices.

Caution
Infosys can further expand and enhance its security testing offerings. It also can look to train its current testing resource base across test automation tools and frameworks.

2019 ISG Provider Lens™ Leader
In the U.S., Infosys is positioned as a technology and consulting partner, bringing quality engineering techniques for setting up and transforming its customers testing practices.
MINDTREE

Overview

In 2017, Mindtree generated revenue of $110 million from application testing services in the U.S., of which 60 percent came from continuous testing services.

Strengths

Local delivery hubs: Mindtree has two U.S. delivery centers, in Redmond, Washington, and Gainesville, Florida. Florida also has the Agile Center of Excellence that houses automated test engineers, architects, CD engineers, agile analytics experts and QA engineers with deep domain expertise and technology capabilities to support large continuous testing projects.

Full-stack and cross-trained resources: Mindtree is aggressively upskilling resources on continuous testing concepts and tools. It is looking to train resources across the testing value chain from back-office to front-office testing. Testers are being trained on concepts like user experience, analytics and more. This is being executed through Mindtree’s YORBIT virtual learning platform and classroom sessions.

Agile QA Transformation Experience (ATX): ATX is a new test consulting offering by Mindtree. This framework helps clients in their transformation journey by defining operating model to suit waterfall and agile/DevOps process guidelines for continuous testing, behavior-driven development, test-driven development or acceptance test-driven development as appropriate.

Caution

Mindtree should invest in creating more vertical-specific accelerators and tooling. There is huge scope for enhancing its offerings in areas like application security, cognitive capabilities and cloud testing.

2019 ISG Provider Lens™ Leader

Mindtree's differentiation revolves around the company's ability to demonstrate capabilities through same-shore innovation centers, the presence of highly trained QA testers and proprietary tooling designed to automate different phases of the testing lifecycle.
In 2017, Wipro generated revenue of approximately $1 billion from application testing services in the U.S., around 40 percent of which came from continuous testing services.

**Strengths**

**Resource skills:** Testers at Wipro are trained to work on several third-party automation tools/frameworks including Selenium, QTP, Cucumber, Junit, Maven, Testing, Lisa, TestComplete, Watir, Visual Studio Test Professional, SoapUI, FitNesse, eggPlant, Appium and Perfecto Mobil.

**Continuous testing assessment & strategy:** Wipro assesses the current state of assurance for continuous testing transformation, using the Continuous Testing Maturity Model (CTMM) and then develops a roadmap and strategy.

**Automation-led testing:** Wipro has made investments in automation to develop tools that can automate and accelerate the testing environment and maintain quality. Two of the primary tools include NXT, a next-generation QA delivery hyper-automation platform that is applicable across the testing lifecycle, and Assure, a next-generation IT wellness platform designed to improve predictability in application quality, reduce the cost of maintaining quality and build self-healing quality processes. Wipro has been able to automate more than 60 percent of tasks across test phases.

**Caution**

Wipro has been on the conservative side when it comes to putting “skin in the game.” Wipro doesn’t have any outcome-based or gainshare contracts for its testing services.

**2019 ISG Provider Lens™ Leader**

Wipro has a significant number of clients in the BFSI and retail customers leveraging its automation and continuous testing services. It is well placed to replicate its success to other industries.
Definition

The Next-Gen BFSI industry quadrant includes ADM services provided to Banking, Diversified Financial, and Insurance companies.

This quadrant assesses the strength of providers that provide Next-Gen ADM services to BFSI industry vertical.
Observations

- Capgemini’s digital solution accelerators and experience of running large transformation projects makes it a strong contender for U.S. clients.

- Cognizant’s innovative solutioning across the BFSI value chain and sector-oriented partnerships are some key attributes that help in catering to financial clients in the U.S.

- DXC’s ITO capabilities, rich product set and industry partnerships offer a distinct value proposition for clients belonging to the BFSI sector in the U.S.

- HCL’s rich toolset, strategic partnerships and micro-verticalized focus is helping to create tailored BFSI solutions for its U.S. clients.

- Infosys’ expertise in newer technology, go local strategy and investment in fintech is translating into newer opportunities with financial enterprise in the U.S.

- LTI’s domain expertise, Next-Gen solutioning and co-innovation initiatives is transpiring to strategic deal wins in U.S. BFSI sector.

- Virtusa’s business focused transformation, vertical-specific tooling and domain expertise form its core strengths.

- TechM’s formation of core alliances and platform strategy makes it a worthy option for BFSI engagements in the U.S. and earned the “Rising Star” position.
**CAPGEMINI**

**Overview**

Capgemini has a sizable BFSI practice in the U.S. market with approximately 180 clients and 3,500 onshore FTEs.

Capgemini’s key focus areas in the BFSI sector include open and connected banking, digital marketing transformation, SMART analytics for financial services, co-innovation with fintech companies, claims transformation, front office optimization, insurance, all-channel experience, increased process automation using RPA and AI, property and casualty, core policy processing and Solvency II solutions.

**Strengths**

**Digital accelerators:** Under its ADC model Capgemini has developed more than 40 solution accelerators to address digital challenges. A few examples include BDD Swift (an automation framework to generate automation test cases based on user stories), App Swift (a code generation solution accelerator for cloud-ready apps), a continuous delivery orchestration engine to automate release pipeline implementations based on the Jenkins platform, RoboQ (to reduce technical debt using RPA and Cloud Swift (process application code for cloud deployments).

**Ideal for large transformation projects:** Capgemini has a well-distributed client base across different contract sizes. Approximately 34 percent of its engagements generate more than $20 million in annual revenue. The scope of these contracts includes end-to-end ADM services from consulting to transformation and operations.

---

**Caution**

Capgemini should consider growing its presence in areas such as blockchain, microservices architectures and cloud technologies.

---

**2019 ISG Provider Lens™ Leader**

After the acquisitions of iGATE and TCube Solutions, Capgemini has gained strong momentum for growing its existing accounts and increasing its share of wallet from newly added clients in the U.S.
Strengths

**Innovative solutioning across the BFSI value chain:** Cognizant has developed digital solutions and capabilities spanning the entire banking and insurance value chain. Some of the key innovative solutions and proofs of concept include branch transformation through beacons, voice banking with voice authentication, crypto-currency payment solutions, a blockchain integration framework, cybersecurity analytics for next-gen security, future mapping and analysis, a digital maturity accelerator, cluster analysis for exploratory data mining and robotic process automation for business and IT processes, proprietary telematics platform and a geographic information system for the new business underwriting process.

**Sector-oriented partnerships:** Cognizant has more than 35 technology and industry partnerships that cater to BFSI clients. These cover technology areas such as digital, blockchain, analytics and cloud, and industry domains including payments, insurance, compensation management, administration management, retirement solutions, performance reporting, retail and core banking.

Caution

Due to consolidation and volatile market conditions in the U.S., Cognizant’s revenue growth has remained unsteady the last couple of years. Because the BFSI segment makes up to 35 percent of the company’s revenue, changing market dynamics can have a direct impact on its financial growth and performance.

Overview

Cognizant’s 2020 strategy has been developed in line with the rise of newer digital technologies like blockchain, RPA, intelligent process automation, AI, machine learning, predictive and prescriptive analytics, IoT (including autonomous cars and connected homes) and corresponding industry trends resulting from these technologies, like P2P transactions, fintech/insurtech evolution, the changing payments landscape, robo-advisory services, shared economy, drones-as-a-service, behavior-based insurance products, hyper-personalized customer interactions and social media scores for risk assessment.

2019 ISG Provider Lens™ Leader

Cognizant has been at the forefront of creating hyper-verticalized digital solutions for the BFSI sector. Its next-gen offerings, coupled with its longstanding industry partnerships, place it far ahead of the competition.
DXC TECHNOLOGY

Overview

DXC generated approximately $650 million in 2017 ADM annual revenue from almost 470 BFSI clients in the U.S. Along with an extensive network of partners, DXC is investing in innovative, next-generation technology solutions for all major BFSI segments in 2018.

Strengths

**Complete ITO capabilities**: DXC is responsible for not only handling the applications but also the infrastructure portfolios for many of its large financial services clients in the U.S. It can be an ideal choice for companies looking to outsource large, bundled ITO engagements.

**Rich product set**: Given HPE and CSC’s core focus on the BFSI segment, DXC is equipped with one of the most comprehensive toolsets, which includes Digital Life Insurance Platform, DXC OmniChannel, Ingenium, Celeriti™ and CyberLife®.

**Industry partnerships**: DXC has deep industry partnerships with financial product vendors like Temenos and FICO. It also has been a long-time member of the partnerships programs of large technology firms such as Oracle and Microsoft.

Caution

DXC is reworking its pricing strategy. It lost multiple large-scale deals in the last five years by not being the most cost-effective option.

2019 ISG Provider Lens™ Leader

DXC’s success will be dependent on how well the company is able to leverage its newfound scale to appropriately price its solution and offerings for the U.S. market.
**HCL**

**Overview**

HCL generated approximately $630 million in 2017 ADM annual revenue from around 65 BFSI clients in the U.S.

It currently serves customers from Jersey City, New Jersey; Cary, North Carolina; Frisco, Texas; Seattle, Washington; Guadalajara, Mexico; and São Leopoldo, Brazil. HCL intends to expand to other cities like Washington D.C., Charlotte and Boston.

**Strengths**

**Rich toolset:** HCL has developed a rich toolset that propagates a specialized approach to ADM services. For example, FENIX is an operating model specifically designed for the BFSI industry with cloud and digital transformation as its core goals. HCL developed FinEdge (which is built on Microsoft Dynamics) and SFDC – Wealth CRM to boost its system integration capabilities.

**Strategic partnerships:** HCL has formed many strategic partnerships with large tech firms (including Microsoft, SAP and IBM), disruptive tech companies (ApiGeek, Blue Prism) and fintechs (DXC, Finastra). It is also strengthening Silicon Valley investments through Morado Ventures, Powwow and Mooc.

**Micro-verticalized approach:** HCL has dedicated domain solutions spanning specific areas such as cards and payments, trade finance, treasury, cash management, core banking, consumer lending and commercial and corporate lending.

**Caution**

HCL can further enhance its as-a-service offerings, grow partnerships with next-gen (mode 2) technology firms and expand its services portfolio in key areas such as wealth, risk and compliance, payments, fintech, insurtech and regulatory technology.

**2019 ISG Provider Lens™ Leader**

HCL can be a right partner of choice for financial enterprises looking for end-to-end ADM services with a focus on modernization, digitalization and cloudification.
INFOSYS

Overview
Infosys generated approximately $1.7 billion in 2017 ADM revenue from around 134 BFSI clients in the U.S.

For the U.S., Infosys is focusing on AI, machine learning, cloud, data and analytics, its AssistEdge RPA offering, agile/DevOps and legacy modernization services.

Strengths

Expertise in newer technologies: Considering the emerging technology needs of BFSI clients, Infosys is investing heavily in new technology-led services. Infosys’ DevOps team is engaged with several clients to build innovative solutions to bring developers and operations together. The key technologies of microservices and Docker are being leveraged to help clients save technology infrastructure maintenance and deployment costs. Infosys’ UX & API Services team is engaged with several clients to build complete user experiences and integrate them with services enabled by integration technologies like Camel and Spring Integration.

Go local strategy: In 2017, Infosys announced plans to open four new Technology and Innovation Hubs across the U.S. The facilities will focus on cutting-edge technology areas, including artificial intelligence, machine learning, user experience, emerging digital technologies, cloud and big data, and will employ more than 10,000 U.S. workers over the next two years.

Investment in fintech: Infosys has partnered with fintech enterprises such as Waterline Data Science, which has data governance and data discovery software, Cloud Endure, which has a cloud migration and disaster recovery product and Trifacta, which specializes in data wrangling solutions.

Caution
Infosys' insurance practice is small compared to other global players. However, it has won some key accounts in the last year.

2019 ISG Provider Lens™ Leader
Infosys is increasingly enhancing its local talent and local delivery model in the U.S., and is creating a differentiated experience for its clients through transformation powered by digital innovation.
LTI

Overview

The U.S. contributes between 70 and 80 percent of LTI’s overall ADM revenue from the BFSI industry. It has around 50 BFSI clients in the region, which are supported by more than 4,000 FTEs.

Strengths

**Domain experience:** LTI has experience in building large-scale solutions for BFSI clients. It has built a complex derivatives-settlement platform that settles $60 trillion worth of derivatives trade. It also has built one of the largest global custody platforms, and one of the industry’s largest data lakes to manage financial and regulatory reporting for one of the largest global banks.

**Next-gen solutioning:** LTI has developed emerging technology solutions to take advantage of the next wave of client investment in the BFSI industry. Over 30+ solutions are developed across AML, KYC, risk & regulatory, asset management, connected insurance, trade finance and cards. Few prominent ones include blockchain for trade, machine learning for financial crime investigation, automated claim adjudication reducing the loss adjustment expenses, selfie-suite for underwriting with minimal questions, and various technologies for its investor services automation stack.

**Co-innovation initiatives and “finnovation” pods:** In 2017 LTI conducted close to 50 co-innovation initiatives for the BFSI segment, including hackathon events and collaborations with financial and insurance tech companies and academia. LTI also has built five Finnovation pods for its customers that include innovation labs and experience centers.

Caution

LTI has the right set of offerings and domain experience for the BFSI industry. To better compete with the larger players in the market it needs to ramp up its scale and presence, organically or inorganically.

2019 ISG ProviderLens™ Leader

LTI offers a full-stack of banking and insurance solutions that span traditional and digital business areas of banking, financial services and insurance organizations. This, coupled with its expanding partner-ecosystem, places the company in a position to cater to the next evolution of digital problems in the U.S. BFSI industry.
Strengths

Business-focused transformation: Virtusa's strength lies in digitally enabled transformation, which aims to achieve customer centricity, generate revenue and digitize processes. It engages through some innovative models, such as selling digital products (productizing elements of a digital environment) and as-a-service offerings.

Vertical-specific tooling: Virtusa has developed multiple industry-specific accelerators including:

- OpenInsurance, an API and microservices accelerator resource that integrates insurance technology company solutions with legacy carrier technologies;
- RPA point solutions for finance and underwriting;
- Machine learning solutions for OFAC screening and underwriting document ingestion;
- Solutions for digital boardroom, bank integration and customer-initiated and channel-based mobile payments.

Domain expertise: Virtusa is a specialist firm in the BFSI industry and more than 55 percent of its overall revenue comes from this segment. When it acquired Polaris in 2016 it added strength in corporate and investment banking. The merged company combines Virtusa's deep domain expertise in consumer and retail banking with Polaris' strength in corporate and investment banking. The company also has a range of proven solutions for insurance industry sub-segments, including property and casualty, life, wealth management and health. Virtusa has made at least six acquisitions that have augmented its consulting capabilities for the BFSI segment.

Caution

Although Virtusa provides application management services, that is not its primary strength. Its primary strength lies in complex high-end development projects and digital transformation capabilities.

Overview

In 2017, Virtusa generated approximately $360 million in ADM annual revenue from around 65 BFSI clients in the U.S. supported by 5,000 FTEs.
RISING STAR: TECH MAHINDRA

Overview
Tech Mahindra’s (TechM) 2017 ADM revenue from U.S. BFSI industry was between $100 and $120 million. It has 2750 FTEs supporting more than 40+ clients.

Strengths

Transformation, delivery, capability enhancement and innovation partner: TechM’s delivery ethos includes being a partner to its clients for transformation, delivery, capability enhancement and innovation, as highlighted below.

– Transformation: Drive end-to-end value chain transformation, including strategy, definition, coaching, training, implementation and change management.


– Capability enhancement: Offer independent training and coaching services covering upskilling modules.

– Innovation: Promote active learning through design thinking and collaboration.

Formation of core alliances and platform strategy: For the banking vertical, TechM has relied on alliances with Temenos, Actimize and OFSAA for growing its business. For the financial services vertical, TechM has focused on wealth management with capabilities around Temenos and Avaloq. It also has SURE which is a platform for retirements and wealth administration and MDS, which is a platform for managed data services. For the insurance vertical, TechM is driving business by relying on platform alliances, such as OneShield, Britecore and OIPA. Internally, TechM is focusing on platforms for straight through processing, such as IntelliClaims, Zero Touch Underwriting (ZTU) and SENTINEL.

Caution
TechM can further enhance its BFSI offering in areas like cybersecurity, fintech collaboration, IoT, open banking and microservices.

2019 ISG Provider Lens™ Rising Star

TechM’s key differentiation revolves around digital enablement services, a growing partner network and core transformation offerings.
The Next-Gen ADM HCLS industry quadrant includes ADM services provided to healthcare institutions, health payers, pharma, biotech and medical devices companies.

This quadrant assesses the strength of providers that provide next-gen ADM services to HCLS industry vertical.
Observations

- Cognizant's proprietary tooling, expanding delivery presence and extensive partner network in the U.S. HCLS sector form some of its core strengths.

- DXC willingness to foray into new technology areas, solidification via acquisitions and cloud-based digital services platform will further grow its business in the U.S. HCLS segment.

- Considering U.S. HCLS sector, HCL has the tools to accelerate the journey to digital coupled with autonomsics driven digital application maintenance provides a distinct advantage.

- IBM's software business, inorganic growth and cognitive capabilities provide a different value proposition for HCLS U.S. clients.

- Infosys' start-up investments, platform and solutions, domain expertise and academic partnerships make it an ideal provider for next-gen services for U.S. HCLS clients.

- EPAM has a rich software engineering legacy, product development services and a cognitive lab providing high-value services to HCLS clients in the U.S.
Strengths

Proprietary tools: Cognizant has a portfolio of more than 20 tools and other IP that are focused on healthcare and life sciences and address U.S. market needs. These include its TriZetto and ClaimsSphere™ solution suites, StarSERV solution for managing Medicare star ratings, TranZform for patient management collaboration and TruProvider for managing provider data.

Expanding delivery presence: Cognizant is in the process of expanding its already strong network of 25 regional delivery centers. It is evaluating locations in the U.S., Mexico, Argentina, Brazil, El Salvador and Costa Rica.

Extensive partner network: Cognizant has an extensive network of more than 50 domain and technology partners that meet various client needs in the HCLS industry. Some of the major partners include Optum, McKesson, Healthwise, Micro-Dyn and Zelis.

Caution

Cognizant can further develop its solutions in the payer value chain, cloud deployments, open APIs, analytics and user experience. It is already making investments in this direction with new platform solutions such as TruProvider for provider data management.

Overview

The majority of Cognizant's HCLS clients are based in the U.S., generating nearly 65% of overall industry revenue. Cognizant has expanded its footprint and strengthened its solution capabilities through recent acquisitions, by developing innovative engagement and delivery models and making investments in solutions and services capability development.

2019 ISG Provider Lens™ Leader

Cognizant has accelerated its investments around key market, domain and technology segments in the U.S. It is poised to address the important next-gen requirements of healthcare and life sciences clients and provide tangible business outcomes.
DXC TECHNOLOGY

Overview

DXC Technology (DXC) achieved ADM revenue of approximately $970 million from around 480 U.S.-based HCLS clients in 2017.

DXC is leveraging industrialized delivery from global and regional delivery centers, and scaled agile for stable, repeatable and scalable execution of large and complex enterprise programs.

Strengths

Willingness to foray into new technology areas: DXC is stepping into newer technology areas like industrial machine learning (IML), which uses big data to improve healthcare treatments. Applications could lead to better clinical decisions, lower readmission rates and fewer adverse events. The company has developed a successful IML proof of concept.

Solidification via acquisition: In 2017 DXC Technology acquired Tribridge, one of the largest independent integrators of Microsoft Dynamics 365. The combination of Tribridge with the existing DXC Eclipse business solidifies DXC’s position as a leading global systems integrator for Microsoft Dynamics. Tribridge Health360 is a consumer-centric, CRM-powered population health management solution built for the Microsoft Cloud.

Cloud-based digital services platform: DXC’s digital services platform addresses data flow by optimizing data acquisition and integration; delivers actionable, contextual and regulatory-compliant insights into healthcare professionals’ workflow (insight flow); creates an outcome-driven process enhanced by point-of-care automation across the care ecosystem (care flow); and tries to provide a holistic view of the patient to support value-based care and remuneration models (financial flow).

Caution

DXC is likely to face more competition from niche, local and specialist firms to win project-based development contracts. Such client engagements currently form a significant portion of its HCLS revenues.

2019 ISG Provider Lens™ Leader

The addition of Tribridge has brought significant value to the existing DXC Eclipse business in the Americas and will allow DXC to expand and enhance its offerings in the healthcare industry.
HCL

Overview

HCL Technologies (HCL) generated an estimated $350 million in revenue from ADM services to U.S. healthcare and life sciences clients in 2017.

Strengths

Tools to accelerate the journey to digital: HCL's tools and accelerators including ADPaas and Code Generator provide a low-code environment for developers to automate application development. HCL’s Advantage ALM framework can be used with third-party tools and the existing technology stack of healthcare organizations to build, deploy and test applications on premise and in the cloud. Moreover, HCL’s platform-as-a-service (PaaS) offerings are capable of moving a healthcare organizations’ IT capabilities to the cloud, the adoption of which is increasing at a healthy pace.

Autonomics Driven Digital Application Maintenance: HCL’s Application Support enables a transformative change for application management and digital operations that encompasses a zero incident culture, autonomics driven by DRYiCE and business-aware operations to eliminate IT and business waste. Efficiency in operations and cost is achieved through a combination of lean and automation levers that reduces and eliminates tickets.

The 4I Framework: Innovation around the patient is the focal point of HCL’s comprehensive framework, which was guided by “the four Is” – intelligence, interaction, integration and insight. The framework contains a strong intelligence layer, comprising patient segmentation, benchmarking, analysis, simulation and more. The interaction layer is multi-channel and includes social media, mobile, in-person and web support. The integration layer collects and organizes information from multiple sources, including from pharmaceutical companies, labs, providers and others. Finally, the insight layer provides actionable care and business recommendations. For example, through a partner, HCL has built a platform that can integrate data from more than 160 medical devices in real time.

Caution

HCL can further strengthen its offerings in the following areas: advanced analytics, cybersecurity and biotechnology.
Overview

The Americas region contributed to 39 percent of IBM's ADM HCLS industry revenue in 2017. Approximately 10 percent of its ADM workforce is engaged in catering to the healthcare and life sciences industry.

Strengths

**Complementary software:** IBM's ADM services for the HCLS industry are complemented by its proprietary software. For example, IBM Enterprise Content Management is in use in hundreds of U.S. hospitals and gives IBM more control of its clients' IT environments.

**Inorganic growth:** Since 2016, IBM has spent $5.7 billion acquiring companies with platforms and expertise to envision and enable digital, AI, cognitive and cloud solutions for its clients. A couple of important examples include the acquisitions of Truven Health Analytics, a leading provider of cloud-based healthcare data, analytics and insights, and Bluewolf Group, which is one of Salesforce's top partners and a globally recognized leader in cloud consulting and implementation services.

**Cognitive capabilities:** With Watson, IBM has positioned itself as a partner that can help HCLS clients become more customer-centric and deliver better solutions for healthcare, including better value and individual engagement. Watson's capabilities for harnessing data to generate insights are being used in engagements in healthcare, pharmaceutical and other life sciences segments.

Caution

IBM's services and solutions for the HCLS industry focus more on the "change" than the "run" element of IT operations. Thus, clients should consider their objectives for outsourcing and the services they require so they can assess IBM properly.
INFOSYS

Overview

Infosys generated an estimated $482 million in revenue from ADM services to 52 U.S. HCLS clients in 2017. Infosys is focused on developing its depth of industry expertise while leveraging software to drive automation for its customers.

Strengths

Academic partnerships: Infosys has strengthened its competence with extensive partnerships with educational institutions, including Purdue University and MIT. Infosys works with Indiana University with an innovation hub that is expected to help its pharmaceutical R&D.

Startup investments: Infosys’ investments in innovative start-ups like Unsilo and Trifecta, and industry partnerships with Antidote, AgilePV and ValGenesis have helped bring the latest digital offerings to its customers.

Platform and solutions: Approximately six percent of Infosys' total workforce is engaged in IP creation efforts. Its key offerings in this space are Nia and AssistEdge. Nia is the company's next-generation integrated AI platform. It is used to transform the landscapes that clients operate in and enable their systems to predict and automate business process management tasks that traditionally have been executed by people. AssistEdge is Infosys' robotic process automation tool to help rapidly digitize and automate workflows.

Domain expertise: Infosys demonstrates domain capabilities through development of various industry-specific tools and platforms like SKava, which can be used to create digital health platforms, and CarePlus, an integrated customer communications management platform that Infosys promotes as a key enabler for its care-as-a-service model.

Caution

Infosys can further strengthen its offerings and increase its client base in the healthcare provider segment.

2019 ISG Provider Lens™ Leader

Infosys’ strategic initiatives for academic partnerships, startup investments and localization strategy will help it tap into newer and more value-driven opportunities in the U.S. healthcare industry.
RISING STAR: EPAM

Overview

EPAM's ADM revenue from the U.S. HCLS industry stood at $93 million in 2017. It has 69 HCLS clients and 150 onshore resources to support those clients in the U.S.

EPAM's goal is to be among the leaders in global product development services and digital platform engineering services.

Strengths

Software engineering DNA: EPAM's original focus was to build software for leading software companies like SAP, Microsoft, Google and many others. Working within this industry for more than 20 years, EPAM's expertise and capabilities have become closely aligned with industry trends.

Cognitive Lab: EPAM has built and operates a dedicated cognitive lab focused on key technologies within the HCLS industry domain, including data science, conversational bots, smart robots and RPA. EPAM's cognitive lab is staffed by more than 200 data scientists, solution architects and data engineers with MS/PhD degrees in applied math, physics and computer science, and by more than 200 certified developers and machine learning engineers.

Product development services: EPAM is a leader in providing healthcare and life sciences organizations with end-to-end product development services encompassing digital strategy, user experience design, advanced technology and agile delivery.

Caution

EPAM is strong in the design and development functions, however, it needs to further develop a more comprehensive and value-added strategy for maintenance and support.

2019 ISG Provider Lens™ Rising Star

EPAM offers a different value proposition altogether than traditional system integrators, along with rich experience in product development services and expertise and exposure to the emerging technology spectrum.
Definition

The next-gen manufacturing industry quadrant includes services provided to conglomerates, capital goods, construction, consumer durables (like automotive, household appliances), aerospace and defense, materials, semiconductor, technology hardware and equipment companies.

This quadrant assesses the strength of providers that provide next-gen ADM services to the manufacturing industry.
**NEXT-GEN ADM FOR MANUFACTURING**

**Observations**

- Capgemini 360-degree next-gen offering for the manufacturing industry offers innovative value-based solutions to U.S. clients.

- DXC creates value for its U.S. manufacturing clients through industry partnerships, tools and accelerators.

- HCL’s Enterprise 360 strategy and industry-leading partnerships are its key differentiators in the U.S. market.

- IBM’s accelerated development and experience centric focus for manufacturing clients in the U.S. offer a distinct value proposition.

- Infosys’ workload transformation for cloud, start-up partnerships, comprehensive digital services portfolio are its core differentiators in the U.S. manufacturing sector.

- In the U.S. manufacturing industry, TechM’s application managed services toolkit, strategic partnerships and application migration competency form its key strengths.

- Mindtree’s strong cloud portfolio and strength in data science and vast service coverage have been some of its key strengths with respect to the U.S. manufacturing industry. It has been identified as a Rising Star for this quadrant.
Overview

Capgemini's 2017 revenue from U.S. manufacturing clients was approximately $600 million. Capgemini caters to around 125 clients in the U.S.

Strengths

A 360-degree next-gen offering for the manufacturing industry: Capgemini’s ADMnext offerings is differentiated on multiple fronts including vertical-specific knowledge repository, unified delivery platform, collaborative engagement options, diverse workforce, flexible outcome-based pricing and range of offerings across the delivery chain.

Impressive digital offerings: Capgemini has an array of offerings to achieve digital excellence and continuous evolution in manufacturing client journeys. These include intelligent automation achieved through its Automation Drive suite; DevOps-enabled maintenance, automated SAP service request, cloud and SaaS adoption through its Cloud Services cloud-first services portfolio; cognitive computing through Cortex self-managed autonomic systems; advanced analytics provided through its big data lake-as-a-service (BDLaaS); and unified delivery via its “digital factory” concept.

Caution

Capgemini’s 2017 revenue from U.S. manufacturing clients was approximately $600 million. Capgemini caters to around 125 clients in the U.S.

A 360-degree next-gen offering for the manufacturing industry: Capgemini’s ADMnext offerings is differentiated on multiple fronts including vertical-specific knowledge repository, unified delivery platform, collaborative engagement options, diverse workforce, flexible outcome-based pricing and range of offerings across the delivery chain.

Impressive digital offerings: Capgemini has an array of offerings to achieve digital excellence and continuous evolution in manufacturing client journeys. These include intelligent automation achieved through its Automation Drive suite; DevOps-enabled maintenance, automated SAP service request, cloud and SaaS adoption through its Cloud Services cloud-first services portfolio; cognitive computing through Cortex self-managed autonomic systems; advanced analytics provided through its big data lake-as-a-service (BDLaaS); and unified delivery via its “digital factory” concept.
DXC TECHNOLOGY

Overview

DXC Technology's (DXC's) 2017 revenue from U.S. manufacturing clients was approximately $595 million. DXC has around 220 clients and 800 on-shore FTEs aligned to the manufacturing sector.

For U.S. manufacturing clients, DXC is emphasizing global delivery with local consulting expertise.

Strengths

Industry partnerships: DXC has completed more than 100 SAP and Microsoft software implementations for the manufacturing industry. It also has segment-specific partners like Siemens, Dassault and GE for MES and PLM, AT&T for network integration and PTC for IIoT platform deployments.

Tools and accelerators: DXC has a range of tools and accelerators that were custom built for the manufacturing industry. These include the manufacturing value assessment (which assesses the business value for manufacturing projects), transformation experience workshop (a one-day event to create a three-year IT roadmap to match business needs), integrated delivery model (which combines global resources with standard ITIL- and CMMI-certified processes) and operational data mining (which applies real-time data analytics for prediction and prevention).

Caution

DXC has a fragmented customer base in the manufacturing sector, with its top five clients in the U.S. forming approximately four percent of the overall sector revenue.

2019 ISG Provider Lens™ Leader

DXC is fairly strong in several segments including aerospace and defense, automotive, travel and transportation and consumer goods. It is a worthy option for large system-integration projects.
HCL

Overview

HCL's 2017 ADM revenue from the manufacturing sector in the U.S. was approximately $550 million. It had 59 clients.

Strengths

Industry-leading partnerships: HCL has formed deep strategic partnerships with leading product vendors such as SAP, Oracle, Adobe, Microsoft, Software AG, Moogsoft, IBM, Informatica and Amazon. For example, HCL's strategic alliance with Moogsoft addresses large enterprises' needs for transitioning to digital architectures, software-defined infrastructures and IoT. This partnership enhances autonmics, machine learning and self-healing capabilities across HCL's services portfolio.

Enterprise 360 strategy: In response to changing trends in the manufacturing industry, in which the entire ecosystem consisting of operations, partners, suppliers and customers is focused on agility, HCL has formulated an Enterprise 360 strategy covering these four pillars.

- Operations 360: HCL's Intelligent Supply Chain Management iSCM is a portfolio of solutions that are backed by real-time analytics to improve forecasting accuracy, optimize inventory levels, facilitate collaboration and enable real-time visibility into manufacturing operations and the extended supply chain. It promotes seamless synchronization between demand and fulfillment.
- Partner 360: Enables an ecosystem of partners to drive better experience around product and service use.
- Service 360: Enables equipment manufacturers and their partners to provide insight-based proactive services to customers.
- Customer 360: Enables manufacturing organizations to use all available and meaningful information about customer data collected during campaigns, sales, on-boarding, product and service use and loyalty touch points to create a unified, 360-degree view.

Caution

HCL could further enhance its domain expertise in areas like value chain and supply chain redesign, connected solutions (connected operations, connected services, smart supply chain) and building global data hubs.

2019 ISG Provider Lens™ Leader

HCL's differentiation in the manufacturing industry lies in combining its ADM services with domain- and ecosystem-driven needs via its Enterprise 360 strategy.
IBM

Overview
Approximately 15 percent of IBM’s ADM workforce caters to the manufacturing industry. It is among the top five industries by revenue for IBM.

Strengths

**Accelerated development**: IBM provides industrialized and flexible models for accelerated application development. Its portfolio includes IBM design thinking, the IBM Migration Factory for bringing non-IBM clients into the IBM environment, cloud-based development platforms, the MobileFirst development platform, the API Economy marketplace, DevOps innovation services and garage-based development.

**Experience centric focus**: IBM is focusing on three areas with respect to the manufacturing vertical:
- Reimagining interactions with customers and consumers (for a smarter shopping experience)
- Improving processes in businesses (smarter operations)
- Optimizing supply chain from product development to post-sale customer service (smarter merchandising and supply networks)

Caution
Clients that have limited contract scope or only want service providers to run their operations without making disparate changes to the existing ecosystem may find IBM services expensive.

2019 ISG Provider Lens™ Leader
IBM has been experiencing high growth in the manufacturing industry driven by developments and innovations in areas like Watson IoT, cognitive, cloud and AI.

Imagine your future®
INFOSYS

Overview

Infosys' 2017 ADM revenue from its 155 clients in the U.S. manufacturing sector was approximately $1.2 billion.

Strengths

Workload transformation for cloud: Infosys has more than five years of experience and has handled more than 60 engagements across 40 clients. It has built industry-specific solutions and developed cloud-based platforms and a workload migration solution suite. This suite provides a codified and scientific approach to determine application readiness for cloud adoption and supports detailed application migration planning, including remediation and validation.

Startup partnerships: Infosys has struck multiple partnerships spanning specialized areas. It has partnerships with IdeaForge for drone technology and image processing, Airviz Speck for indoor air quality monitoring, Tulip for factory visibility solutions, FogHorn for edge analytics and computing, Nova for image generation capabilities as-a-service and Waterline Data Science for data discovery and data governance software.

Comprehensive digital services portfolio: Infosys has digital services that cover three key service areas: customer experience, process integration and enterprise solutions. Customer experience services help digitize and optimize the omnichannel customer experience by leveraging social, mobile and analytics technologies. Digital process integration digitizes both internal and external business processes to enable streamlined processing and increased automation. Its digital enterprise solutions transform legacy enterprise functions such as ERP, CRM, DCM and SCM to next-generation, SMAC-enabled platforms.

Caution

Although Infosys has approximately 155 clients, it generates 66 percent of its manufacturing revenue from the top five clients, which makes it highly dependent on a few accounts.

2019 ISG Provider Lens™ Leader

Infosys has a multitude of offerings across the manufacturing value chain and a good balance of traditional application services and cutting-edge next-gen technology services, making it an ideal provider to serve clients with varying requirements and IT maturity.
TECH MAHINDRA

**Overview**
Tech Mahindra’s (TechM’s) 2017 ADM revenue from the manufacturing sector in the U.S. was approximately $270 million. It has around 3,500 FTEs supporting approximately 35 clients.

**Strengths**

**Managed services toolkit:** The SureSmart Toolkit provides a set of TechM-developed tools that incorporate robotic process automation, self-learning, self-healing and AI. The tools can be integrated with third-party products to achieve high-end automation beyond just task or process automation. The TechM SureSmart Toolkit for Managed Services is powered by three main tools: CUBES, which provides application, infrastructure and network support automation; UNO, a set of RPA solutions; and TACTIX, a set of industry-specific AI applications for business and IT operations.

**Strategic partnerships:** TechM has strategic partnerships with leading technology vendors including Pega, Microsoft, SFDC, CA Technologies, HP, Kronos, Oracle, Cisco, Qlikview and IBM.

**Application migration competency:** TechM has dedicated consulting and enterprise architecture (EA) practices to provide application portfolio rationalization services that are supported by its homegrown tools and templates. It has helped more than 500 customers migrate to open platforms, packaged solutions and external-hosted platforms. Some of the key platforms it has worked with include CareXa, Socio, CartFULL, Cloud Aggregation Platform (CAP), MDS, Modular Enterprise Managed Services (mEMS) framework, Tecnico and PRISM.

**Caution**
TechM's clients rated it below average in "ability to deliver new services and innovation" in ISG's Voice of Customer (VoC) survey – 2018.

2019 ISG Provider Lens™ Leader
Through its managed services offerings and strategic partnerships, TechM is an ideal company to run large bundled ADM deals that focus on digitizing the core.
**RISING STAR: MINDTREE**

**Overview**

Mindtree's 2017 ADM revenue from the manufacturing sector in the U.S. was approximately $70 million and it served approximately 65 clients.

**Strengths**

**Strong cloud strategy:** Mindtree's cloud approach hinges on cloud-first thinking and its experience as one of the largest cloud platform-as-a-service providers in the world. Mindtree has a clearly defined multi-step approach towards cloud migration that is augmented by proprietary and third-party tools. Mindtree's strength lies in working with customers that want to transition from hosted SAP solutions and outsource their environments to hyperscale cloud providers.

**Strength in data science:** Mindtree has a value-led experimentation approach where it uses its Insights Sandbox and Decision Moments analytics platform to prove a hypothesis first, and then scale into a full-fledged data lake/data hub initiative.

**Services coverage:** Mindtree's experience and expertise range from engineering services to digitizing the manufacturing value chain with a cloud-first approach. It has more than 30 IP assets and accelerators related to asset, people, vehicle and premise intelligence, Bluetooth and edge computing.

**Platform-led delivery:** Mindtree's platform-led delivery is powered by end-to-end automation and IT lifecycle integration that leverages its IP, including CAPE, ATLAS and MWatch.

**Caution**

Mindtree is strong in select manufacturing segments, including automotive and industrial manufacturing and distribution. In other segments, the company needs to either consolidate or establish its credentials.

---

2019 ISG Provider Lens™ Rising Star

Mindtree is a specialized company in the manufacturing verticals with a wide range of cloud services, focus on data and the ability to infuse automation throughout the value chain through a local-global delivery model.
Methodology
METHODOLOGY

The research study “ISG Provider Lens™ 2019 – Next-Gen Application Development & Maintenance (ADM) Services” analyzes the relevant software vendors/service providers in the US market, based on a multi-phased research and analysis process and positions these providers based on the ISG Research methodology. The study was divided into the following steps:

1. Define the “Next-Gen Application Development & Maintenance (ADM) Services” market

2. Conduct questionnaire-based surveys with service providers/vendor across all trend topics

3. Hold interactive discussions with service providers/vendors on capabilities and use cases

4. Leverage ISG’s internal databases and advisor knowledge and experience (wherever applicable)

5. Analyze and evaluate services and service documentation based on the facts and figures received from providers and other sources.

6. Evaluate based on the following key criteria:
   - Strategy and vision
   - Innovation
   - Brand awareness and presence in the market
   - Sales and partner landscape
   - Breadth and depth of portfolio of services offered
   - Technology advancements
Authors and Editors

Ashish Chaturvedi, Lead Author
Principal Analyst

Ashish Chaturvedi is a DIGITAL XPERT and Principal Analyst at ISG with over 8 years of experience spanning IT sourcing, technology and industry research. In his current role, Ashish is responsible for authoring thought leadership papers and provider intelligence reports (i.e. Archetypes and Quadrants) in areas of Next-gen ADM and Data Analytics. He has authored several research papers in the realm of Enterprise applications, Cognitive technologies, and Big Data. He is also a member of IDG influencer network (CIO.com).

Jan Erik Aase, Editor
Director

Jan Erik Aase is a director and principal analyst for ISG. He has more than 35 years of collective experience as an enterprise client, a services provider, an ISG advisor and analyst. Jan Erik has overall accountability for the ISG Provider Lens™ reports, including both the buyer-centric archetype reports and the worldwide quadrant reports focused on provider strengths and portfolio attractiveness. He sets the research agenda and ensures the quality and consistency of the Provider Lens™ team.
ISG (Information Services Group) (NASDAQ: III) is a leading global technology research and advisory firm. A trusted business partner to more than 700 clients, including 75 of the top 100 enterprises in the world, 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; technology 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 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.