A research report comparing provider strengths, challenges and competitive differentiators

*ISG Provider Lens™*

Next-Gen Application Development & Maintenance (ADM) Services

Europe 2019

Quadrant Report

Customized report courtesy of:

Cognizant

August 2018
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 June 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.

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EXECUTIVE SUMMARY

Next-Gen ADM

- **Hybrid Cloud environments a must:** Enterprises are seeking providers able to accomplish migration and maintenance across multiple and hybrid cloud environments. Besides the creation of cloud-native applications that can be deployed where needed, solving security and regulatory issues that come with cloud deployment is a must.

- **Higher productivity, business-based metrics and decision-making:** Enterprises are looking for methods to quantify next-gen services. Their modern, 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 and enables the current ADM workforce to focus on higher-value work. Decisions about ADM services are more and more in the hands of business units - with a stronger focus on digital transformation and a measurable and direct impact on digital labor and their respective business outcomes. Commercial contracting structures and preferences are shifting from traditional input-based transactional models to ones built on business-based metrics.

- **Automation by AI on the rise:** With Artificial Intelligence and machine-learning algorithms feeding cognitive and predictive analytics, new means of automation and factorization of ADM emerge. This already includes aspects of automated business modelling and business process migration. Large providers are well ahead of the curve but have to prove local presence and understanding of local market specifics to be successful in Europe.

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Agile Development

- **DevSecOps becomes the new normal:** Enterprises and providers alike are realizing that security cannot be an afterthought. DevSecOps has replaced DevOps across the board. Thus, during early DevOps implementation phases, security principles are being incorporated as a default feature. Some companies already provide access to quantum computers to ensure security and proper cryptography.

- **Rapid application development is on the rise:** As organizations transform into agile enterprises, there is 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 in the market. Such enterprises prefer to partner with service providers able to offer a globally distributed agile organization that balances the cost dynamics with the need for speed. New ways to integrate on-, near- and offshoring capabilities into local agile development projects are under way. Some providers developed agile factory approaches to solve this very issue.

- **Agile business process design:** Legacy systems seem to be the biggest hurdle for enterprise agility, as they often hinder agile development and block extreme agile business processes development. Companies therefore seek ways to overcome the blockage of their legacy systems, demanding consulting that integrates agile elements into all aspects of a digital transformation. Deep knowledge of key legacy systems will continue to be a crucial aspect for agile development in many industries.
Continuous Testing

- **Testing as a technology enabler:** With emerging technologies like IoT, edge/fog computing, blockchain, etc., testing is being viewed as an enabler to implementing these technologies. Therefore, the demand for testing automation methods and tools for emerging technologies is rising strongly, including very industry-specific tools, e.g., to cover dedicated security or regulatory aspects.

- **Domain and vertical integration:** A wide range of testing services is being mapped with industry-specific tools, reusable scripts and accelerators. The mapped services include test consulting, and testing of applications, application security, enterprise solutions and IoT. Moreover, service providers are creating specialized vertical solutions for testing clients. All these integration activities are working on a global scale with minimal localization, except for some areas of the public sector or very specific local business requirements.

- **Test automation by AI:** Machine learning and cognitive analytics are the basics for test automation, often offered within an as-a-service contract. Test automation as-a-service is being advocated as a differentiator to win testing contracts with dominant digital scope. AI-driven test automation often comes within complete software development factory platforms covering legacy systems as well as hybrid cloud environments.

- **Increased demand for full-stack testing engineers:** The desire to achieve continuous testing capability has led to greater demand for full-stack testing engineers in most European countries. 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 public cloud and virtual environments. Europe as a whole seems to face an overall shortage in application development and testing capabilities and needs to rely on offshoring capabilities for many large projects.
Next-Gen ADM – Banking, Financial Services and Insurances

- **Agile development vs. legacy:** Legacy systems remain the biggest obstacle in the BFSI industry for rapid changes and agile business process development. Companies therefore seek consulting that brings agile elements into all aspects of a digital transformation and that will move legacy applications onto a modern infrastructure, such as code re-utilization, cloud integration and containerization. This will continue to be a crucial aspect for agile development in the BFSI industry. Also, upcoming Brexit could also have a strong effect on the BFSI industry and create an explosively rising demand in agile development.

- **Public cloud becoming the default services model:** Non-core functions like CRM, HR and F&A already are being delivered through a cloud-based SaaS model. Gradually, as the CXO organization becomes more comfortable, core functions such as payments, billing and credit scoring are being moved to the public cloud. The EU-wide harmonization of financial regulations will support this trend in Europe.

- **The promise of Robotic Process Automation (RPA):** RPA gets included in the applications' service portfolio by most of the competitors serving the BFSI market. Clients can consume RPA inside application development projects. RPA can be a backlog item in an agile project sprint or even an improvement under an application maintenance contract. RPA has become pervasive and low cost and can be implemented quickly, without the need for additional contracting terms.

- **Blockchain technology is finding more use cases in the financial industry:** Interbank use cases are still rare; however, banks are making use of the technology to simplify their existing systems and remove process bottlenecks. Several application service providers report preparing consultants and developers for the delivery of blockchain applications, and providers reported cases and experiments.
**Executive Summary**

**Next-Gen ADM – Health Care and Life Sciences**

- **Data-driven initiatives come of age:** Health care 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 health care 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.

- **Security and ever-changing regulations:** Regulations and security issues are still on high standards in the HCLS industry in Europe, especially in the areas of customer data processing and analytics. Public opinion tends to be over-cautious in some of the major markets (e.g., Germany), and no enterprise wants to expose itself to security issues. We have seen many indications that customers require very high levels of knowledge in this area, creating limitations for globally organized companies with less local presence and knowledge of local market specifics to join the market.

**Next-Gen ADM – Manufacturing**

- **Agility in all areas of business:** Manufacturing companies are seeking ways to improve agility in terms of business processes and to reduce costs. In parallel, they need to stay competitive in their respective areas as well as drive business in new areas, e.g., automotive companies partnering with Apple or Google to develop in-car communication systems and autonomous technologies, and setting foot in the areas of car-sharing models, selling cars as-a-service and creating new transportation applications. This requires Next-Gen ADM services to integrate business process consulting and design thinking as well as agile development methodologies on a broader scale, with a deep multi-industry BPM knowledge and some automation capabilities.

- **Omni-chain disruption of supply chain:** Although in its infancy, some manufacturers are using a blockchain-based “omni-chain” model to connect different processes in the ecosystem. Omni-chain is a cloud model that unifies both internal and external processes across extended networks.
- **New technology in business processes and products**: Manufacturing enterprises can achieve significant efficiency improvements with cloud, IoT, Industry 4.0 and supply chain integration. The scaled adoption of IoT is enabling predictive maintenance, which self-optimizes production and automated inventory management, and results in lower maintenance, maximized equipment life and uninterrupted production cycles. Most service providers evaluated in this quadrant have these technologies and competencies, and clients have started using advanced technology in manufacturing and supply chain optimization as well as integrating it in their products.

- **Smart factories transform the production process**: IoT and smart factories are not just making the shop floor more agile and efficient, they are leading to higher process compliance and better quality management. Given just-in-sequence manufacturing processes that increasingly perform within a global supply chain, requirements in the areas of industry knowledge, automation and industry specific tools have risen extraordinarily.
Introduction

Service providers are augmenting their traditional ADM offerings with emerging technologies and collaborative frameworks to meet their enterprise clients' objectives. ISG terms such contract types as next-gen ADM contracts. This study tries to understand the client objectives and assesses provider capabilities to deliver on next-gen ADM contracts.

Definition

Simplified Illustration

Next-Gen Application Development & Maintenance (ADM) Services

Horizontals
- Next-Gen ADM
- Agile Development
- Continuous Testing

Verticals
- Next-Gen ADM - BFSI Industry
- Next-Gen ADM - HCLS Industry
- Next-Gen ADM - Manufacturing Industry

Source: ISG 2018
Definition (cont.)

Scope of the Report

The following areas associated with next-gen ADM are included within 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 focused 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 focuses on an incremental and iterative approach to application development. Because agile encompasses frequent and early releases of the working software, it is being viewed by enterprise as a medium for attaining enterprise agility.

This quadrant assesses capabilities of a provider to deliver tangible results through use of various agile methodologies. It looks at the focus each provider has toward using agile development with respect to its 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 to sync
Definition (cont.)

with sprint cycles, feature-driven testing, responsiveness to change, creating a feedback loop and promoting 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 the progress they have made and the capabilities they have 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 offer next-gen ADM services to the BFSI industry vertical, which comprises banking and diversified financial and insurance companies.

Next-Gen ADM – HCLS

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

Next-Gen ADM – Manufacturing

This quadrant assesses the strength of providers of next-gen ADM services to the manufacturing industry vertical, which includes conglomerates, capital goods, construction, consumer durables (like automotive and 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.
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

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*ISG Provider Lens™*
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 with a focus on achieving enterprise agility and solving business problems. This quadrant will assess 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 will also assess provider capabilities in incorporating new approaches to develop and deliver applications that focus on business outcomes.
Observations

- Capgemini is the clear leader in Europe, leveraging its rich consulting and transformation experience and having a comprehensive and modern services portfolio, continuous development of innovative technologies and a broad presence in all European markets.

- Accenture combines deep BPM consulting and latest technology skills with a broad presence in all major European markets.

- Some of the India-heritage service providers, e.g., Tech Mahindra and HCL, provide excellent solutions but lack dedicated presence in local markets.

- Cognizant and TCS continue to grow in Europe by relying on their breadth and depth of services and their exceptionally high offshoring capabilities.

- Infosys continues to impress with its end-to-end transformation offerings and pursuit of next-gen ADM deals.

- With Watson AI, IBM is farthest ahead with integrating AI technology and cognitive analytics capabilities into next-gen ADM product and service offerings.

- Atos and DXC technology approaches the customers’ cloudification and automation requirements each with its own transformation and automation factories, with France-based Atos providing a (traditionally) very strong FTE-basis in Europe.
**Overview**

Accenture is among the world’s leading next-gen ADM providers with global ADM services revenue estimated to be approximately $17 billion in 2017, from which Europe has a share of approx 40 percent, with more than 150 active clients. In recent years, Accenture has made a series of acquisitions in the areas of analytics, cloud, application design and automation.

**Strengths**

Accenture offers its customers a worldwide network of delivery centers, including approximately 20 in Europe. Accenture can thus provide high capacities either locally or near- and offshore.

Accenture has a wide range of more than 150 alliances with universities, start-ups and leading technology providers, including SAP, Oracle, Microsoft, Pega and emerging companies.

Accenture runs R&D projects for client companies in seven technology laboratories. Accenture has invested more than $500 million globally to develop cloud-related capabilities. It also has invested in a SaaS application testing environment plus cloud migration, cloud brokerage and augmentation capabilities.

Accenture provides end-to-end digital portfolio services in the ADM environment, including strategy, design, implementation and execution of operations. It has a network of digital design studios that complement the development of industry-specific solutions. Also, Accenture has more than 10 years of agile development experience with 1,600 agile certified FTEs globally.

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**Caution**

Accenture's premium price strategy could have an impact on financial performance as the market looks more closely at the cost-benefit ratio of ADM services.

**2019 ISG Provider Lens™ Leader**

Accenture provides a strong worldwide R&D presence, vast industry-specific knowledge, an excellent long-term strategy and the ability to locally execute at scale across the business application space.
ATOS

Overview
Atos is very well positioned in the next-gen ADM market and — being of French origin — is one of Europe’s largest providers in this environment ($3 billion in revenue). Atos offers application services, as well as digital transformation services and consulting. Broadly positioned, Atos has a large number of employees for ADM in Europe locally and in several near- and offshore centers. Due to its strong presence in Europe — Atos has about five times more ADM FTEs in Germany than in the U.S. — many capacities are concentrated in these countries.

Strengths
New and further developments of the product range through the integration of new technologies, and continuous acquisitions, which keep Atos extremely competitive in the ADM market. The basis for ADM at Atos is its digital transformation factory, based on Atos Codex, orchestrated hybrid cloud, digital workplace and business accelerators.

Atos focuses intensively on cloud orchestration, Artificial Intelligence (AI), Machine Learning (ML), cognitive computing and analytics and identifies these as its main growth drivers. Its latest partnership with Google Cloud brings together Google’s cloud and technology services and Atos’ proven understanding of complex transformation solutions.

Atos has more than 30 years of experience and strong domain knowledge catering to multiple industries, including financial services, public sector, health, energy, utilities, manufacturing, retail, transportation, telecom, media, and technology.

Caution
Atos still shows weaknesses in the area of agile development; its focus in customer projects continues to be on traditional application development. There are also very few acquisitions that could give a stronger boost to the topic of agile development in Europe.

2019 ISG Provider Lens™ Leader
Atos is an excellent, forward-thinking supplier with a strong focus on the European market, broad knowledge and experience in industry specifics and thus especially in Europe it is an ideal player to cover large, multinational projects.
**Overview**

Capgemini is very well positioned in the next-gen ADM market globally and is one of the largest providers in this segment in Europe. Approximately 60 percent of the company's turnover comes from ADM projects, in Europe with more than 1,000 enterprise customers in all industries. Capgemini proves its strength with a wide range of customer references.

**Strengths**

Capgemini's Rightshore® approach industrializes delivery and enables customers to combine local and offshore resources into a unified and globally managed delivery network. It is a dynamic and flexible model that accommodates delivery location changes according to the changes in the client's business and demand, including quality, availability and cost considerations.

Capgemini's functional capabilities and capacities are vast and cover all customer ADM requirements — up to the implementation of entire application landscapes. In Europe, the focus lies on business intelligence, SCM, cloud integration, BPM and mobility platforms. ERP/BPM capacities are also broadly defined, with a clear focus on Microsoft, SAP and Oracle.

Capgemini is moving forward with several acquisitions, some of them from industry-specific suppliers. Topics such as data science, RPA, cognitive technologies, AI and DevOps automation are proactively developed and integrated.

Capgemini's vertical-specific centers of excellence play a major role in marketplace differentiation. They are CALORIE for the energy and utility industries, CHROME for automotive and other manufacturing and CRESCENT for consumer products and retail.

**Caution**

ISG consultants rate Capgemini as average when it comes to offering low-cost ADM solutions in managed services contracts.

Revenue comes mainly from fixed-price and time/material-based contracts. Nontraditional topics such as transaction-based or outcome-based are still underrepresented.

**2019 ISG Provider Lens™ Leader**

With their successful strategy to industrialize the delivery of their full-stack services portfolio and to expand their capabilities in data science, cognitive and AI technologies Capgemini is well ahead in the ADM market.
Cognizant offers a wide and deep range of ADM services in Europe. With 22 delivery centers in Europe and large near- and offshore capacities, Cognizant is one of the largest suppliers in this market.

Of late, Cognizant has been focusing on transforming its clients’ portfolio via its zero-maintenance framework to maximize value and minimize maintenance spend. The framework emphasizes reducing run cost, optimizing change cost and delivering business outcomes.

Strengths

Application management automation using Cognizant HIVECenter™: An integrated portfolio of services, platforms and solutions that brings together collective automation capabilities for any given business and IT scenario.

Business value management (BVM) framework: A comprehensive blueprint that takes a holistic view of the ecosystem to create synergy across applications, infrastructure and business processes. The framework charts out a transformation roadmap to deliver business outcomes, thereby, achieving improved business performance.

Cognizant develops its own frameworks such as AVMPlus and SimpliFIT for a modular and integrated approach. They aim to introduce new mechanisms and technologies faster into the customers’ environment and thus accelerate their delivery.

Caution

Cognizant representation concerning continuous testing and agile development is not very strong in Europe and focuses on few countries.

Cognizant does not cover smaller ERP/CRM providers that could be relevant for European customers. There are also gaps in the coverage of specific software topics, e.g., in PLM, embedded software, messaging or digital asset management.

Cognizant is among a few service providers that have been able to make a leap from an efficiency play to a value play an imperative required to succeed in the next-gen apps market.
DXC TECHNOLOGY

Overview

DXC Technology (DXC) is a leading global provider of next-gen ADM services with clients from all industries and a strong presence distributed across Europe. It generated revenue of approximately $2.7 billion, providing 19 delivery centers for around 900 ADM clients.

DXC has become bigger, smarter and more local through its mergers, acquisitions and strategic investments.

Strengths

The company has built up an impressive range and scope of offerings. It has entered into next-generation outcome-based application contracts with selective, innovative clients while continuing to support its remaining clients through traditional offerings, leading them gradually toward transformation.

DXC’s proprietary platform DXC Bionix™ infuses automation into application management service delivery. It offers tools for next-generation application performance management, automatic robotic tooling, identification of improvement opportunities, and optimization of operational service delivery and analytics.

DXC has a comparatively small turnover with ADM in Europe but serves many customers in several countries and provides 19 delivery centers in Europe. DXC grows through acquisitions and focuses on select but very intensive partnerships.

Caution

In the ERP/BPM area, DXC focuses clearly on SAP and Microsoft and — but with much smaller capacities — covers Oracle, Salesforce and Netsuite. Also, the functional range of enterprise software is rather limited.

The proportion of development projects that are processed with agile methods is less than 30 percent, which is also reflected in the number of employees who master agile methods and concepts.

2019 ISG Provider Lens™ Leader

DXC is on an aggressive transformation path considering inception of next-gen offerings, more flexible sourcing models and an extreme partnering program. In particular, customers should take a closer look at DXC’s ADM automation approach.
**Overview**

IBM offers highly innovative next-gen solutions in ADM, including AI, analytics, automation, cloud, mobility and security. Many competitors use IBM solutions to create their own offers, e.g., several service providers use IBM Watson as the basis for their own AI offerings.

**Strengths**

ADM is part of IBM Global Business Services (GBS) and is closely integrated with other technical and strategic consulting units. IBM serves a large number of customers from all industrial sectors in Europe and offers a complete and wide range of partnerships, even with smaller providers.

IBM is organized within a Globally Integrated Capabilities (GIC) Network. Services Integration Hubs (SIH) in Dublin and Singapore concentrate the business and ensure global integration and standardization of the services provided to customers in Global Delivery Centers and local IBM services centers.

IBM has been a U.S. technology patent leader for 25 consecutive years, providing technology labs worldwide. Through a series of acquisitions (24 in the ADM environment between 2015 and 2017 alone), IBM is continuously expanding its own strong technology portfolio.

**Caution**

Recently, the company has been fighting for sustainable profitability in the IT service business. IBM's premium service positioning is repeatedly challenged by cost-effective offerings from competitors, especially India's leading providers.

Although GBS is completely responsible for the consulting, IBM is often not effective enough in bringing all areas of GBS together at the customer's site to provide a powerful unit. Internal processes and responsibilities are a frequent obstacle.

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**2019 ISG Provider Lens™ Leader**

IBM's extreme internationally organized service and their vast technological leadership especially in cognitive analytics and AI clearly make them the leading provider for large and strategically designed (architectural) projects.
INFOSYS

Overview
Infosys is a widely positioned, globally active IT service provider and serves approximately 300 customers in Europe on the topic of ADM. ADM plays a key role at Infosys and accounts for 51 percent of consolidated revenues, with another 35 percent coming from Maintenance Services. Infosys is expanding its business worldwide and is strengthening strategically important markets on a local level.

Strengths
Infosys offers a comprehensive range of ERP/CRM knowledge and covers smaller providers as well. In the enterprise software environment, the focus in Europe is on PLM, business intelligence and big data.

The proportion of projects based on outcome or application-based pricing is quite high compared to the competition. This demonstrates a high level of (successfully proven) self-confidence in being able to implement defined goals within projects.

In Europe, ISG rates Infosys as a leader in the field of agile development and in the manufacturing industry. Infosys is quite active on a global level in the more recent topics such as data science and embedded software. In Europe, the focus is clearly on DevOps automation and narrow AI.

Caution
Compared to other companies, the proportion of employees with many years of experience is lower — more than 40 percent of employees in the ADM environment have less than 3 years of experience.

Most of the services are provided offshore in India. Infosys offers only a few and rather small nearshore delivery centers.

2019 ISG Provider Lens™ Leader
Infosys pursues a business approach strongly focused on offshore business and accelerates its move to strengthen local markets through expansion of its own presence.
TCS

Overview

ADM accounts for about 70 percent of TCS's sales, with 65,000 employees locally and 200,000 employees in 164 centers worldwide, including 11 in Europe. In 2018, TCS for the first time achieved a market capitalization of more than $100 billion.

Strengths

TCS has defined the goal of becoming 100 percent agile by 2020. TCS aggressively re-trains employees and redesigns processes and structures to achieve this goal.

TCS receives very high ratings for customer satisfaction, and consistently adapts its offers and market entry strategies to changing customer needs.

- TCS has understood the diversity of the European market and is strengthening its regional structures based on local requirements. On a European level, TCS relies on the adaptation of agile and DevOps and primarily supports financial services, health care and manufacturing.

- TCS addresses customers' needs to reshape their IT requirements in order to realize a truly digital business. TCS has been strengthening its focus on domain specialization and helping clients accelerate time-to-value using vertical-specific tools and accelerators for all major industries.

Caution

TCS could improve its position by acquiring companies that bring completely new capabilities, not just those that enhance its existing strengths — especially in the areas of cloud, mobility, AI and cognitive analytics.

TCS still has the image of a low-cost value player — supported by the ability to achieve low costs with consistently high quality, but this can still be a barrier for projects.

2019 ISG Provider Lens™ Leader

TCS constantly reflects and quickly adapts to changing market conditions. TCS achieves high customer satisfaction rates with its strong offshore capabilities and through the ongoing expansion of its regional capabilities.
Definition

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

This quadrant will assess capabilities of a provider in being able to deliver tangible results through use of various agile methodologies. It will also look at the focus a provider has of using agile development with respect to its overall application development practice.

Source: ISG Research 2018
AGILE DEVELOPMENT

Observations

Infosys is the clear leader in market presence, while HCL, Capgemini and IBM stand out for their functionality and technical capabilities. DXC Technology and Wipro both persuade with their individual strengths.

- Infosys is a broad-based, globally active IT service provider, growing at a very fast pace and expanding its 27 delivery centers in Europe on a local level with local innovation hubs.
- HCL offers comprehensive support in all project stages and has good onshore and offshore capacities. HCL’s growth is also the result of several targeted acquisitions in Europe in recent years.
- IBM takes a strategic perspective and understands agile ADM as part of an agile business process design. Accordingly, its consulting offering integrates agile elements into all aspects of a digital transformation.
- Capgemini offers the widest scope of tools and accelerators to support agile development, continuous integration and automated application delivery. Its workforce and project definition reflect a deep knowledge of agile ADM.
- Wipro employs around 1,300 people for agile development projects in Europe and provides more than 13,500 agile development employees worldwide via offshore activities.
- DXC integrated agile development through its DXC Bionix and DXC Rapid Digital Delivery platforms and offers a wide scope of tools and methods.
CAPGEMINI

Overview

France-based Capgemini is very well positioned in the next-gen ADM market in Europe and is one of the largest providers in this sector. Of late, Capgemini has been making a significant effort to include agile methodologies as a fundamental ethos of its delivery strategy. Agile development is integrated with business services to provide on-going business and IT improvements; and is integrated with infrastructure services to deliver applications and end-user services.

Strengths

Capgemini has established Accelerated Delivery Centers (ADC) in the U.S., U.K., France, Poland and India. These centers use more than 60 tools and accelerators (both industry standard and internally developed) to ensure continuous integration and automated application delivery. Examples are the Continuous Delivery Orchestration Engine, App Swift, BDD Swift, RDV, RoboQ, App Builder and Cloud Swift.

Capgemini continues to grow through a series of acquisitions, some of them from industry-specific suppliers. Topics such as data science, RPA, cognitive technologies, AI and DevOps automation are proactively developed and integrated. Capgemini offers its own framework for agile development.

Capgemini provides an established agile eco-system. and is a SAFe gold partner. Its scrum masters are trained on its proprietary Capgemini Agile Framework (CAF). CAF includes training for four agile scaling frameworks, e.g., SAFe, LeSS, Nexus, and DaD. Moreover, CAF includes SAFe additions to standard LEAN, XP and Scrum practices.

Caution

The percentage of clients adopting a DevOps-led delivery model is low compared to Capgemini’s peers. There is enough evidence to suggest that Capgemini has multiple instances of DevOps implementation; however, its penetration seems low.

2019 ISG Provider Lens™ Leader

Capgemini’s strength is its application development and integration capabilities based on a strong portfolio of proprietary tools and longstanding technology partnerships. Capgemini’s ability to anticipate and react to the way applications are being consumed by enterprise clients is impressive.
Overview

DXC Technology has grown larger, more powerful and more local through mergers, acquisitions and strategic investments. Around 28 percent of DXC's application development revenue came from agile development in 2017 through a combination of industrialized services and delivery from global and regional delivery centers.

Strengths

DXC grows through acquisitions, focuses on selected, but very intensive partnerships and has established Digital Transformation Centers in Europe. DXC is expanding its integrated offerings and advisory services of agile development and DevOps. It is actively integrating agile development with DXC Bionix™, and DXC Rapid Digital Delivery (RDD) — an offering that leverages the power of crowd to rapidly develop software modules or capabilities to fulfill a project's requirements.

Agile development is tied to DXC's value-based solution (VBS) model, which is priced and delivered from a base solution, with available options and add-on features and services. The pricing quotation is constructed to align with DXC's clients' financial needs, having options such as business outcome-based, consumption-based and, unit-based payouts.

Caution

In general, the proportion of agile development projects (compared to those conducted using traditional methods) at DXC is still low. DXC lags behind many peers in cross-trained employees on emerging agile methodologies. DXC needs to up-skill and train its current workforce on multiple agile-oriented methodologies.

2019 ISG Provider Lens™ Leader

DXC Technology serves clients in different stages of maturity and has service philosophies, offerings and contracts tailored to each customer, ranging from traditional staff augmentation outsourcing on the low end to application integration covering SaaS, IoT and other systems on the high end.
HCL

Overview

HCL is well positioned in the European market with nine Application Development Delivery Centers and achieves — on an expandable basis — strong growth of approx. imately 10 percent. HCL offers comprehensive support in all project stages and has good onshore and offshore capacities.

Strengths

Under the name “Mode 123,” HCL is pursuing a strategy of reorganizing its internal teams, service areas and technology focuses. The goals is to improve the design and user-friendliness of modern applications, consistency of connected systems — with data at the center of the action — and simplified organization of increasingly complex network infrastructures.

HCL uses a platform-based approach for application development (application development platform-as-a-service) and operational excellence IPs such as ALMSmart and DevOps. HCL’s DRYiCE and ADVantage offerings are focused on bringing in extreme automation into application development and operations cycles.

HCL’s growth is also the result of several targeted acquisitions in recent years, such as Volvo IT, Datawave and, most recently, Actian.

Caution

HCL is shifting its focus and wants to act as a technology provider rather than a personnel service provider. This can be problematic with customers who primarily aim to outsource their development activities.

HCL’s presence in the market and its image with customers vary greatly across Europe.

2019 ISG Provider Lens™ Leader

HCL is one of the few providers who have managed to build to a certain size while remaining flexible and agile enough to implement even small and innovative project approaches.
IBM provides highly innovative offerings including AI, analytics, automation, cloud, mobility and security. Many competitors use IBM solutions to create their own offers. For example, several service providers use IBM Watson as the basis for their own AI offerings.

ADM is part of IBM Global Business Services and is closely linked to other technical and strategic consulting units globally.

IBM always considers ADM from the perspective of business agility and acts accordingly with the customer. The focus is on a strategic consulting offering aligned with agile development, transformation (in terms of operating model and change management) as well as implementation in the form of enablement, agile scaling and operational governance.

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.

More than two thirds of development projects at customers are agile, while most IBM employees in the development environment are trained in agile methodologies (primarily Scrum, Kanban, XP, SAFe, and MSF for Agile). IBM also uses almost all automation tools inhouse and at the customer's site and delivers elements in its own products (e.g., Docker and, Puppet).

Recently, the company has been struggling for sustainable profitability in the IT service business. IBM's premium service positioning is repeatedly challenged by cost-effective offerings from competitors, especially India's leading providers.

There are very few meaningful customer references in Germany for agile development.

With its impressive capabilities, its approach from the perspective of business agility and its focus on strategic agile transformation, IBM is best suited for large, global, integrated or bundled engagements in which the company can leverage its proprietary tooling, methodologies and platforms.
INFOSYS

Overview

Infosys is a broad-based, globally active IT service provider, growing at a very fast pace. Infosys provides 27 delivery centers in Europe and, is expanding its business and strengthening strategically important markets on a local level with local innovation hubs.

Strengths

Infosys has established development centers in London, Edinburgh, Swindon, Amsterdam, Paris, Düsseldorf, Frankfurt and Brussels to strengthen local project teams.

Infosys adopts a design-thinking approach to enterprise agility that helps clients drive agile & DevOps adoption in an integrated way, taking an end-to-end view of the value chain, guided by lean principles. The key strategy elements are:

- Agile academy helping with training across India centers and with remote trainings for the rest of the world.
- Agile-DevOps CoE to research tools and a central tools lab to enable engineers across the world.
- Partnerships with tool and process vendors to improve expertise on the high-performing process and technology areas. Infosys has vendor partnerships with players such as IBM, Microsoft, HP, CA, and AWS and works closely with niche product vendors like Atlassian, CloudBees, Tricentis, Redhat, and Xebia Labs to provide end-to-end services. Infosys is also a Gold Partner with SAFe Academy.

Caution

Compared to many peers, Infosys has been a laggard in aggressively pursuing next-gen application deals. Given that ASM contracts make up a significant portion of its revenue and represent a shrinking share of discretionary spend by clients, the company needs to be more aggressive in its go-to-market strategy to sustain growth.

2019 ISG Provider Lens™ Leader

Infosys pursues a design-thinking approach to push agile development and DevOps on the customer side. In Europe, Infosys is particularly strong in the BFSI and manufacturing industries and is moving heavily into the telco and media industry.
Wipro

Overview

Wipro's sales of application development services in the European market in 2017 were approximately $450 million, including approximately $190 million in agile development. The company offers five delivery centers and employs around 1,300 people who support agile development projects for customers in Europe. Wipro has more than 14,000 agile development employees worldwide.

Strengths

In line with its "4 Cs" strategy (Customer Experience, Cloud, Cybersecurity and Cognitive Computing), Wipro has created its own tools and methods covering the entire life cycle of the application, including the development phase. Some of the leading IPs are Digital Rigs, Cloud Migration Factory, Agile Base, DevNXT, Data Discovery Platform and the Security Intelligence Center.

Wipro is increasingly investing in local employees to trigger customer-specific agile projects. With enterprise business agile consulting, Wipro seeks to integrate agile methodologies at the enterprise level.

Wipro Ventures is the strategic arm of Wipro tasked with driving non-linear growth, delivering client innovation, entering new markets and creating strong differentiation through partnerships and IP. The group's activities include performing global innovation work with start-ups and pursuing investments in new and emerging technologies.

Caution

Wipro continues to prefer to sell IP only in connection with services. Other vendors sell licenses for their own products. This licensing often proves to be an effective strategy for generating recurring revenues.
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, feature-driven testing, responsiveness to change, feedback loop creation 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 would be assessed on their progress made and capabilities developed in terms of creating a continuous testing environment for their clients with measurable outcomes.
Observations

A high degree of automation across testing phases, supported by latest AI and machine-learning technology, and a consultative approach to testing becomes leadership standard in the market. Atos, Mindtree and IBM have impressive depth and breadth of services, offering proprietary tools and accelerators across domain and industry verticals. TCS, DXC Technologies and Capgemini show strong expertise, highly trained resources and good alliances in the testing space.

- Integrated test automation, automated performance testing, robotic test environments, and data management and Smart Test Dashboards — all combined with a deep industry knowledge — are the main focus of Atos in the CT marketspace.

- Capgemini shows strong capabilities in all areas of continuous testing and offers dedicated CT-frameworks for industry-specific testing environments.

- A large portion of IBM's testing revenue is generated with CT projects, based on IBM's highly innovative developments in cognitive analytics, AI and machine-learning. IBM is the first company to offer test environments based on quantum computing.

- TCS runs an aggressive strategy to become a 100 percent agile company, which includes CT offerings and tools. TCS also keeps developing a stronger regional presence in Germany.

- DXC has grown its testing capabilities and become more powerful and more local through mergers, acquisitions and strategic investments. Especially in Europe, DXC focuses on expansion in the retail, energy, utilities and transportation sectors.

- Mindtree is very focused on the test market. Approximately 80 percent of Mindtree's existing contracts are stand-alone wins, a number that reflects and affirms its dedicated focus on this practice.
**Overview**

Atos is very well positioned in the next-gen ADM market. Due to the strong presence in Europe — relative to the rest of the world — many capacities are concentrated in these countries. The bulk of Atos’ testing business is also generated in Europe ($408 million out of $692 million).

**Strengths**

Atos focuses on integrated test automation, automated performance testing, robotic test environments and data management, as well as smart test dashboards.

Atos has around 9,000 employees worldwide in testing, of which more than 85 percent are certified in CSTE, ISTQB, CTM or ITIL. These resources are organized in 25 competence centers to promote a strong focus on innovation.

Atos has more than 30 years of testing experience with clients in multiple industries, including financial services, public sector, health, energy, utilities, manufacturing, retail, transportation, telecom and, media, and technology.

Atos provides some of its own IPs, e.g. M-Frame with focus on automated model-based testing (MBT), or TEMPO (Test Execution, Management, Planning and rePorting and Organizer) to simplify the test process and test management and provide methods for test case design.

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**Caution**

In the customer environment, most of the business is in the area of functional test design and execution automation. Topics such as cloud-based environment provisioning and service virtualization testing could have a stronger presence in the services that are offered. Also, the number of projects running in DevOps mode is rather low.

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2019 ISG Provider Lens™ Leader

Atos has commendable technical expertise spanning multiple industries and has a strong presence in the European market.
**Overview**

Capgemini’s 2017 European revenue from application testing was approximately $500 million. Of this, almost 75 percent of the revenue was constituted by non-traditional testing services. Capgemini provide testing services to more than 200 enterprise clients.

Capgemini is looking to enhance its capabilities in the areas of open source technology, cloud, virtualization, artificial intelligence and bots.

**Strengths**

Capgemini’s technical approaches are diverse, and the ecosystem is constantly expanding. These include data and services virtualization, self-service test data management, automation bots development and execution, and self-healing automation solutions. Topics such as AI and bots, as well as test virtualization and the specific integration solution for testing cloud environments, are being promoted.

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.

Through use of practices like SAFe and lean, Capgemini is attempting to industrialize early testing phases across its portfolio and individual programs.

**Caution**

The majority of Capgemini’s testing clients belong to the BFSI industry. It does have clients in other industries like, telecommunication, CPG and, health care, but penetration remains low.

**2019 ISG Provider Lens™ Leader**

With its strong European and global presence, Capgemini is an excellent fit for large enterprise clients looking for managed and continuous testing services with a balanced mix of offshore and onshore delivery options.
DXC TECHNOLOGY

Overview

DXC Technology has grown larger, more powerful and more local through mergers, acquisitions and strategic investments. DXC offers its customers 275 onshore testing specialists and more than 2,000 employees in near- and offshore locations in 10 continuous testing delivery centers in Europe.

Strengths

DXC packages managed testing services into its pay-as-you-go model testing-as-a-service (TaaS). Some of the services offered under TaaS include functional and automation, performance and mobile TaaS.

The intelligent automation solution not only addresses testing, but also provides an end-to-end automation across the DevOps lifecycle.

Most projects are carried out in agile mode, with greater demand for regression and performance testing in comparison. New topics also include the use of machine-learning and AI. Especially in Europe, DXC focuses on expansion in the retail, energy, utilities and transportation sectors.

Caution

Compared to total continuous testing sales, Europe is rather small for DXC, with Germany and the U.K. accounting for the majority share.

2019 ISG Provider Lens™ Leader

DXC Technology provides a strong industry expertise and can be a partner of choice for testing division overhaul and cloud-based as-a-service expertise, especially in contracts requiring a dedicated industry focus.
Continuous Testing

IBM

Overview
IBM provides highly innovative offerings including AI, analytics, automation, cloud, mobility and security. IBM has more than 300 continuous testing customer projects in Europe, which account for about 25 percent of total testing sales.

Strengths
Testing is of great (financial) importance in ADM at IBM.

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. IBM supports a vast variety of ERP/CRM or enterprise software systems. In niche markets, IBM covers all areas apart from low code and embedded software.

IBM has strong cloud-based testing capabilities and uses Watson's cognitive abilities for adaptive testing and decision-making. IBM combines continuous testing with cognitive analytics, microservices and API using open source (IGNITE), microservice-driven modernization and cloud migration. Further developments include AI, cloud, security, blockchain, and testing in the quantum-computing environment.

Caution
Although IBM has customers ranging from $1 million to over $20 million, it may not be suitable for more simple testing projects due to the higher prices.

There are only a few continuous testing projects that run in agile or DevOps mode.

2019 ISG Provider Lens™ Leader
IBM provides a comprehensive software-testing portfolio and is an excellent choice for large clients requiring support from multiple locations and, across multiple technologies and are capable of integrating a vast variety of future technologies into the test environment.
Overview

In 2017, Mindtree's sales with application testing amounted to approximately $30.6 million in the European market and are growing very strongly.

Strengths

Mindtree is very focused on the test market and effectively convinces customers of its capabilities. Approximately 80 percent of Mindtree's existing contracts are stand-alone wins, an amount that reflects and affirms dedicated focus on this practice.

Mindtree has growing experience in agile and DevOps environments, and 90 percent of its current test projects in Europe are running in agile mode. The company was able to automate 64 percent of all tasks during test phases.

Mindtree has developed its own differentiated test offerings tailored to dynamic test environments. Key platforms include the Dynamic Test Engineering Platform (DTEP), a unified platform for continuous testing that provides centralized access to multiple proprietary resources and accelerators, and a chat bot that provides automated test runs on-demand and from any location using AI. These tools are integrated into each other.

Caution

Most of Mindtree's IP is industry independent. Mindtree should invest in the development of industry-specific tools to expand its business faster.

The expansion of local locations and capacities in Europe should be pursued more strongly to expand the still small customer base.

2019 ISG Provider Lens™ Leader

Mindtree has a strong focus on next-gen testing contracts and expands its business rapidly, with a large and growing experience in agile and DevOps environments.
**Overview**

ADM accounts for about 70 percent of TCS's sales, with 65,000 employees locally and 200,000 employees in 164 centers worldwide, including 11 in Europe. TCS has testing services sales of approx. imately $ 500 million in Europe and serves more than 60 enterprise customers out of 15 delivery centers in Europe.

**Strengths**

TCS has a rich set of tools and frameworks to automate the test environment, resulting in accelerated delivery. Examples include: Non-production Environment Tracking and Release Automation (NETRA) for automating application testing, integration and deployment; OMNI, a unified test automation solution for mobile and Web services; and the eSwift reusable test automation framework that leverages HP Business Process Testing (BPT) to automate testing of enterprise apps like Oracle ERP, SAP, Siebel, PeopleSoft and Salesforce. TCS has been able to achieve more than 60 percent automation across test phases through such tools.

TCS has defined the goal of becoming 100 percent agile by 2020. TCS aggressively retrains employees and redesigns processes and structures to achieve this goal. In Europe, approx. imately 80 percent of TCS's continuous testing projects run in agile mode.

TCS is taking a transformational approach to testing by which it assesses process maturity and decides on methodology through its TIARA proprietary framework. TCS commits to a desirable end-state, suggests next-gen commercial models like pay-per-use and conducts in-depth assessments and rollouts for frameworks, tooling and automation, test data and environment, and digital assurance services.

**Caution**

TCS could improve its position by acquiring companies that bring completely new capabilities, not just those that enhance its existing strengths, especially in the areas of cloud, mobility, analytics and other new technologies.

**2019 ISG Provider Lens™ Leader**

TCS offers an impressive portfolio of frameworks, tools and platforms for end-to-end transformation with assured cost savings and effort reduction and provides a European structure that takes the regional diversity into account.
Definition

BFSI industry includes ADM services provided to banking, diversified financial and Insurance companies.

This quadrant will assess the strength of providers that provide next-gen ADM services to the BFSI industry vertical.
HCL and Capgemini lead a densely packed leadership quadrant with Cognizant as additional functional leader plus Accenture, Atos, DXC Technology and IBM. European BFSI companies seek suppliers with a strong local market presence and the capability to solve their specific issues that arise due to the share of legacy application still in use.

- Capgemini keeps developing very specific BFSI capabilities and offers a strong portfolio and local support in the areas of blockchain, machine-learning analytics, distributed agile and microservices.
- HCL generates strong growth of approximately 10 percent in the BFSI market. The customer mix strengthens HCL's position as an end-to-end ADM player in this industry.
- Accenture combines deep Business Process Management (BPM) consulting and latest technology skills with broad industry knowledge and a large presence in all major European markets.

- IBM has a long and successful history in the BFSI space and the most experience with legacy systems transformation and modernization. Its organizational structure — viewing next-gen ADM as part of its international business consultancy — is dedicated to supporting BFSI customers in their modernization efforts.
- With a lot of partnerships, a dedication to analytics and BFSI specifics like customer services and fraud detection, Atos takes a specific approach to the BFSI sector.
- Cognizant understands the special requirements of BFSI customers in an increasingly digitized market and offers very specific, future-oriented solutions. Cognizant's focuses on the customer's global business with more than 35 technology and industry partnerships to cater to BFSI clients.
- BFSI is a large portion of DXC's revenue in the next-gen ADM space, given both HPE's and CSC's traditionally strong position in this sector. DXC shows impressive transformational capabilities and a very rich toolset.
Overview

Accenture has approximately 70,000 application outsourcing experts worldwide, from which Europe has a share of approximately 40 percent, Accenture provides ADM services to customers through a global sales network of more than 50 centers in 35 countries, with about 20 centers in Europe.

Strengths

Accenture is one of the few providers equally capable of consolidating its customers’ application landscapes on external platforms such as SAP HANA or Oracle and of building its own platforms. Accenture can do this through its partnerships with leading technology providers and industry experts.

As a leader in Business Process Management (BPM) for finance and accounting, Accenture offers comprehensive platform integration services and has been quite successful in developing complementary business services for BFSI companies.

Accenture is rapidly progressing in its ability to offer automation solutions by acquiring technology capabilities to serve its BFSI clients.

Accenture runs R&D projects for client companies in seven technology laboratories. Accenture has invested globally more than $500 million to develop cloud-related capabilities. It also has invested in a SaaS application-testing environment, plus cloud migration, cloud brokerage and augmentation capabilities.

Caution

Most of Accenture’s large BSFI clients belong to the Change-the-Bank (CTB) category, which means that their projects focus on generating new revenue streams through disruptive technologies. Although CTB is a rapidly growing area, financial institutions are still spending more on run-the-bank (RTB) services that save costs and maximize efficiency.
**Overview**

Atos is very well positioned in the next-gen ADM market and is one of Europe's largest providers in this environment ($3 billion revenue). Atos offers application and digital transformation and consulting. Atos has many employees for ADM in Europe locally as well as in several near- and offshore centers and is very broadly positioned. Due to the strong presence in Europe — relative to the rest of the world — many capacities are concentrated in these countries.

**Strengths**

Atos serves almost all sub-segments of the industry and is very well positioned in terms of expertise. Atos is driving forward an industry-specific Fintech program and has established an environment of more than 25 partners. The new in-house digital lab shall promote solution integration in this environment.

In the field of homogeneous customer service (contact centers) and payment fraud detection, Atos offers proprietary solutions that are very successful in the market.

Atos focuses intensively on the topics cloud orchestration, artificial intelligence (AI), machine-learning (ML), cognitive computing and analytics and identifies these as the main growth drivers. Its latest partnership with Google Cloud brings together Google's cloud and technology services and Atos' proven understanding of complex transformation solutions.

**Caution**

Despite the Fintech program, industry-specific partnerships have not been very strongly developed and, in this environment, too, Atos concentrates on its large customers. A broader program strategy that does not focus exclusively on Fintech could expand the company's market presence.

**2019 ISG Provider Lens™ Leader**

Atos is a strong, forward-thinking ADM provider in the BFSI industry with a focus on the European market and characterized by a broad portfolio.
Overview

Almost 27 percent of Capgemini’s revenue is contributed by the BFSI sector. Capgemini's key area under focus in the BFSI sector includes open and connected banking, digital marketing, SMART analytics for financial services, co-innovation with Fintech, claims transformation, front office optimization, insurance all-channel experience, increased automation of processes using RPA and AI, property and casualty core policy processing, and solvency II solutions.

Strengths

In addition to very specific topics for banking/capital markets and insurance, Capgemini strongly develops blockchain, machine-learning analytics, distributed agile and microservices technologically and dedicated BFSI consulting practices.

Capgemini has long-standing partnerships and experience with many leading software vendors in the financial sector, including FLEXCUBE (banking), Guidewire (insurance), Temenos (banking), Calypso (capital markets), EbaoTech (insurance), FirstData (cards) and Clear2Pay (payment). The partnerships allow Capgemini to work on a wide variety of engagements with a tailored approach.

Capgemini continues its growth through several acquisitions of industry-specific suppliers. Topics such as data science, RPA, cognitive technologies, AI and DevOps automation are proactively developed and integrated. In addition, Capgemini has its own framework for agile development.

Caution

India is currently Capgemini’s most important offshore location. As Capgemini wants to expand its BFSI business locally, it must expand its delivery centers at European locations.

2019 ISG Provider Lens™ Leader

With its broad capabilities, deep industry expertise and long-lasting partnerships, Capgemini provides tailored solutions for the BFSI industry and is a strong candidate for executing large ADM transformation contracts.
COGNIZANT

Overview

Cognizant offers a wide and deep range of ADM services in Europe. With 22 delivery centers in Europe and large near- and offshore capacities, Cognizant is one of the largest suppliers in this market. The BFSI sector formed about a third of Cognizant’s overall revenue in 2017.

Strengths

The go-to-market strategy for customers at BFSI is a consulting-oriented, domain-plus technology game focusing on the rationalization and modernization of applications, migration through accelerators and platforms, and end-to-end transformation.

Cognizant covers all sub-segments in a complete scope. With many of its own services and tools, e.g., ADPART (models business flows and automates test design) and GRAFT (automation test suite for UFT/Selenium/CITS), as well as a very broad range of partners, Cognizant can provide BFSI customers with the required flexibility in a rapidly changing market segment.

Cognizant understands the special requirements of BFSI customers in an increasingly digitized market and offers very specific, future-oriented solutions, e.g., branch transformation through beacons, voice-banking with voice authentication, crypto-currency payment solutions and, integration framework for blockchain or cybersecurity analytics. Cognizant's focus is on the customer's global business.

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

Caution

In continuous testing and agile development, Cognizant is not very strong in Europe and is only well represented in a few countries. As the BFSI segment makes up close to 35 percent of its revenue, changing market dynamics could have a direct impact on the company's financial growth and performance.

2019 ISG Provider Lens™ Leader

ISG believes that Cognizant is on the right track for growth, but it will need to focus on building more sophisticated automation systems and develop relationships with its European clients’ business organizations to accelerate the pace of this growth.
DXC TECHNOLOGY

Overview

DXC Technology is a leading global provider of next-gen ADM services with a broad BFSI client spectrum and a strong presence across Europe. It generated revenue of approximately $950 million, with about 270 BFSI ADM clients in Europe.

DXC has become bigger, smarter and more local through its mergers, acquisitions and strategic investments.

Strengths

BFSI accounts for a large share of DXC sales in the ADM environment. Due to the concentration of HPE and CSC on the BFSI segment, DXC is equipped with one of the most comprehensive toolsets comprising RDAR, INGENIUM, ProductXpress and RADIENCE from HPE and Celeriti, Boomerang and CyberLife from CSC. In addition, DXC has partnerships with the major providers in the market, including AWS, IBM Watson, Microsoft, SAP and others.

In development, DXC is particularly driving forward the topics of customer experience and platforms. A broad spectrum of interesting and challenging reference customer projects completes the good impression.

DXC grows through acquisitions, focuses on selected, but very intensive partnerships and builds up digital transformation centers worldwide, which are supposed to promote its own application service automation solution, DXC Bionix.

Caution

DXC has the image of not being the cheapest option and should therefore revise its pricing strategy.

The proportion of development projects that are processed with agile methods is less than 30 percent, which is also reflected in the number of employees who master agile methods and concepts.

2019 ISG Provider Lens™ Leader

DXC Technology is capable of not only handling the applications but also the infrastructure portfolios and can be an ideal choice for BFSI companies looking to outsource large, bundled ITO deals.
HCL

Overview

HCL is very well positioned in the European BFSI market with almost 5,400 FTEs and generates strong growth of approximately 10 percent with 45 enterprise customers (out of 145 globally). The customer mix strengthens HCL’s position as an end-to-end ADM player in this industry.

HCL Vision for BFSI is to be a next-generation leading technology services firm in enabling its strategic partner financial services firms in moving to digital, then from digital to open, and finally from open to connected in the next three to five years with a primary focus on customer centricity.

Strengths

HCL has dedicated domain solutions covering specific areas such as cards and payments, trade finance, treasury, cash management, core banking, consumer loans, and commercial and corporate loans.

HCL offers a comprehensive toolset that propagates a specific approach to ADM services. For example, FENIX is an operating model specially developed for the BFSI industry with the core objectives of cloud and digital transmission. HCL developed FinEdge (based on Microsoft Dynamics) and SFDC — Wealth CRM to improve its system integration capabilities.

HCL has formed deep strategic partnerships with multiple other providers and financial product vendors that give a massive boost to its own capabilities. HCL also has six innovation labs and agile centers globally that are dedicated to key themes like mobility, customer experience, IoT and co-innovation.

Caution

Although HCL is focused on developing a product-driven IP business, there are still no significant developments in this area. Proprietary IP is still not the strength of HCL.

HCL’s presence in the market and its image with customers vary greatly across Europe.

2019 ISG Provider Lens™ Leader

Through its long-standing industry and technology partnerships, innovation and industry-focused tooling, HCL has become a partner of choice for many large clients belonging to the BFSI sector.
**Overview**

IBM offers highly innovative offerings, including AI, analytics, automation, cloud, mobility and security. Many competitors use IBM solutions to create their own offers. For example, several service providers use IBM Watson as the basis for their own AI offerings. Traditionally, IBM has a very strong positioning and deep industry knowledge in the BFSI market.

**Strengths**

IBM is uniquely qualified to provide a breadth of services across various financial platform implementations. IBM offers services for financial and business process transformation, change management, organizational design, application development and consulting integration, managed services — both for support and cloud infrastructure — and business process outsourcing.

IBM has several successful implementations of digital native systems that are based on integrated processes, run on cloud platforms and provide deep business insight through analytics. Implementations often rely on a wide range of proprietary tools: Bluemix Cloud, WebSphere, API Economy, MobileFirst and Watson.

IBM can add value to the entire modernization process through industry-specific tools, proven methods and a pool of experienced industry consultants and engineers.

**Caution**

Recently, the company has been fighting for sustainable profitability in the IT service business. IBM's premium service positioning is repeatedly challenged by cost-effective offerings from competitors, especially India's leading providers.

2019 ISG Provider Lens™ Leader

IBM has deep domain and technical expertise across the banking, financial markets and insurance industries and leads the industry into new fields with its AI, analytics, cloud and cognitive initiatives.
NEXT-GEN ADM – HCLS INDUSTRY

Definition

HCLS industry includes ADM services provided to health care institutions, health payers, pharma, biotech and medical devices companies.

This quadrant will assess the strength of providers of next-gen ADM services to the HCLS industry vertical.

Source: ISG Research 2018
**NEXT-GEN ADM – HCLS INDUSTRY**

Observations

The nature of the market and its very specific requirements limit the number of next-gen ADM providers to be mentioned in the quadrant for the European HCLS market. Capgemini, together with Accenture, leads with DXC Technology and Tech Mahindra.

- Capgemini leads the market, functionally as well as from a perspective of industry specific solutions and their exceptional presence in Europe.

- Accenture's consultancy approach, flanked by impressive industry knowledge and technical capabilities, seems to be the right approach to address HCLS requirements to change its ADM landscape.

- DXC concentrates on the industry subsegments payer, provider and pharmaceuticals and offers its own set of integrated digital health solutions. Its local presence is strong.

- Tech Mahindra provides about 1,100 employees for the HCLS industry in Europe and a strong enterprise architects practice and could be able to address more larger customers.
**Overview**

Accenture is among the world's leading next-gen providers with global ADM services revenue estimated to be approximately $17 billion in 2017, from which Europe has a share of about 40 percent, with more than 150 active clients. In recent years, Accenture has made a series of acquisitions in the areas of analytics, cloud, application design and automation.

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**Strengths**

Accenture successfully bundles the capabilities of different business units in customer projects, e.g., Accenture Research, Accenture Ventures, Accenture Labs, Accenture Studios, Accenture Innovation Centers and Accenture Delivery Centers, and thus delivers strong innovation and design-thinking methods.

Over the years, Accenture has invested heavily in the development of applications, analysis, accelerators, platforms and methods. Accenture also has a strong suite of constantly evolving, problem-specific technology solutions.

Accenture wins many large digital contracts due to its strong portfolio of mobility services, cloud capabilities, technology stacks, automation approaches and consulting experience.

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**Caution**

Accenture is a supplier in the high-price segment because of its capabilities. For customers looking for simple solutions, Accenture is not always the best partner.
CAPGEMINI

Overview
Capgemini is very well positioned in the next-gen ADM market globally and is one of the largest providers in this segment in Europe. Approximately 60 percent of the company's turnover comes from ADM projects.

Capgemini's health care practice is part of financial services (FS), which accounted for 27 percent of the group revenue in 2017, and LifeSciences is part of MALS (Manufacturing, Automotive and Life Sciences), which accounted for 21 percent of the group revenue in 2017. Capgemini has about 25 HCLS customers in Europe.

Strengths
Through the ADMnext suite, Capgemini is able to provide multiple benefits and services to the HCLS companies, including regulatory and compliance-specific expertise, unified delivery platform, access to diverse workforce with domain and technical expertise, and flexible pricing based on business outcomes.

Capgemini has developed various solutions and accelerators catering to various segments under the HCLS sector. For example: LS Path is an end-to-end preconfigured digital transformation platform for life sciences companies; Digicare is a patient-engagement platform; and fraud analytics analyze a payer's data to identify and flag potential fraudulent claims.

2019 ISG Provider Lens™ Leader
Capgemini has a strong position in the overall next-gen ADM market and a promising portfolio in the European HCLS industry, with some impressive use cases.

Caution
ISG consultants rate Capgemini as average when it comes to offering low-cost ADM solutions in managed services contracts.

The number of specific and identifiable customer references in Europe is relatively small and should be expanded.
DXC TECHNOLOGIES

Overview

DXC Technology is a leading global provider of next-gen ADM services with clients from all industries; it has a strong presence distributed across Europe. It generated revenue of approximately $245 million in the HCLS industry with around 75 ADM clients.

DXC has become bigger, smarter and more local through its mergers, acquisitions and strategic investments.

Strengths

DXC covers all sub-segments of the HCLS market and focuses on very intensive partnerships with the most important providers. DXC offers customized IP applications that include electronic patient records (EMR), clinical applications, health-care claims, administrative and regulatory applications in health-care and life sciences, and an Open Health Connect (OHC) platform.

DXC has a strong presence among the Fortune 500 global companies working with pharmaceutical, biotech, medical devices and medical device manufacturers.

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 Microsoft Cloud.

Caution

DXC has a fragmented customer base with its top five clients in the HCLS sector forming less than 4 percent of the overall sector revenue.

2019 ISG Provider Lens™ Leader

DXC Technology can work on an array of HCLS engagements with varying objectives and is particularly strong in technology consulting.
TECH MAHINDRA

Overview

Approximately 8,600 Tech Mahindra employees provide ADM services to its customers in Europe, including 1,100 in HCLS — through a network of 18 delivery centers in Europe and 61 worldwide.

Strengths

Tech Mahindra has a good track record in large agile exposures with assets such as SPEED (agile transition methodology) and AIM (agile index of maturity). It has a dedicated advisory team for DevOp’s strategy and adoption.

Tech Mahindra offers few but highly interesting industry-specific IPs, e.g., TACTIX, an AI-based knowledge engine for operations automation, and mPAC, a managed platform for adaptive computing that also supports RPA.

Additional Tech Mahindra resources are the DevOps assessment tools and maturity model, and the ADOPT platform, which enables end-to-end automation by orchestrating the process and information flow through a tool stack.

Tech Mahindra has a strong enterprise architect (EA) practice with more than 40 EAs and a dedicated business excellence (BE) consulting team supported by individual platform and package competency teams to drive transformational journeys globally.

Caution

The number of enterprise customers is rather small in relation to the competition, especially relative to the extremely strong growth. Tech Mahindra should be able to attract larger customers.

2019 ISG Provider Lens™ Leader

Tech Mahindra’s position in the European HCLS market is promising. Its next-gen ADM capabilities and innovation focus make it a compelling choice for clients looking to move forward on the maturity curve.
NEXT-GEN ADM – MANUFACTURING INDUSTRY

Definition

Manufacturing industry includes service provided to conglomerates, capital goods, construction, consumer durables (like automotive, household appliances), aerospace and defense, materials, semi-conductors, technology hardware and equipment companies.

This quadrant will assess the strength of providers that provide next-gen ADM services to manufacturing industry vertical.

Next-gen Application Development & Maintenance (ADM) Services
Next-gen ADM – Manufacturing Industry

Source: ISG Research 2018
Observations

Capgemini clearly leads the pack, followed by IBM and Infosys. Accenture, HCL and Atos add to them. The European manufacturing industry market is characterized by a high proportion of local, midmarket companies and their close linkage and cooperation with large enterprises.

- Capgemini’s strong position in the manufacturing industry is based on its large local presentation and digital factory approach. Capgemini is strongly pushing its position in the manufacturing sector.

- IBM brings its own manufacturing tradition to the table. Combined with its large local team, its ability to quickly and effectively integrate engineers from all over the world into customer projects and its consultative approach, IBM offers effective modernization efforts into all stages of the application lifecycle.

- Infosys continues to impress with its end-to-end transformation offerings and pursuit of next-gen ADM deals in this rather sophisticated market.

- Accenture’s consultancy approach, flanked by impressive industry knowledge and technical capabilities, seems to be the right approach to address manufacturing industry requirements to move their ADM landscape towards new business opportunities.

- HCL’s customer mix strengthens its position as an end-to-end ADM player in this industry. The manufacturing vertical covers about a quarter of HCL’s European ADM revenue.

- Atos has a good position in the manufacturing industry segment and offers a wide variety of dedicated solutions, with a clear focus on SAP and Siemens among its biggest clients and partners.
**ACCENTURE**

**Overview**

Accenture has approximately 70,000 application outsourcing experts worldwide, providing ADM services to customers through a global sales network of more than 50 centers in 35 countries, from which about 20 are located in Europe.

**Strengths**

Accenture is one of the few providers equally able to consolidate its customers’ application landscapes on external platforms such as SAP HANA or Oracle and build its own platforms. Accenture can do this through its partnerships with leading technology providers and its industry expertise.

As a leader in BPM for finance and accounting, Accenture offers comprehensive platform integration services and has been quite successful in developing complementary business services for manufacturing companies.

Accenture clients get early access to new technologies via its wide range of more than 150 alliances with universities, start-ups and top technology vendors, including SAP, Oracle, Microsoft, Pega and emerging players. Its seven technology labs (including two in the U.S.) incubate and prototype new concepts through applied R&D projects for clients’ businesses.

Accenture wins many large digital contracts due to its strong portfolio of mobility services, cloud capabilities, technology stacks, automation approaches and consulting experience.

**Caution**

Accenture has approximately 70,000 application outsourcing experts worldwide, providing ADM services to customers through a global sales network of more than 50 centers in 35 countries, from which about 20 are located in Europe.

Accenture's premium price tag could affect its financial performance as the market becomes more cost competitive. In stand-alone development contracts, it faces stiff competition from both midsize and large providers.

**2019 ISG Provider Lens™ Leader**

Accenture has a comprehensive portfolio of development services, joint research and industry-specific tooling capabilities and a technology-aligned delivery.
**ATOS**

**Overview**

Atos is very well positioned in the next-gen ADM market and is one of Europe’s largest providers in this environment ($3 billion in revenue). Due to its strong presence in Europe — relative to the rest of the world — many capacities are concentrated in these countries. Almost 20 percent of Atos’ ADM revenue is generated by the manufacturing sector.

**Strengths**

Atos has the capability to take over end-to-end responsibility for applications, including to consolidate, harmonize and manage applications — standard software and homegrown; integrate ERP, MES and even PLM level; connect IT and operation technology (OT); ensure mobile business processes execution; transform and migrate to the cloud; and comply with regulatory requirements.

Atos provides services in all sub-segments of the industry and is very well positioned in the field of IPs and accelerators. These include topics such as MES, Industry 4.0, manufacturing performance management, IoT, manufacturing warehouse management, dynamic PLM and supplier integration.

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**Caution**

The focus of the partnerships in terms of the number of collaborative implementations is clearly SAP and Siemens. Other partnerships can be significantly expanded, especially in the context of the strategic goal of integrating ERP, MES and PLM at the customer’s site into one overall system and combining IT and operational technologies.

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**2019 ISG Provider Lens™ Leader**

Atos is a strong, forward-thinking provider of next-gen ADM solutions in the European manufacturing industry, featuring a very broad portfolio and a focus on the local market characteristics.
**Strengths**

Capgemini is present in all sub-segments of the manufacturing industry and shows interesting and successful customer projects. A wide range of its own solutions and tools demonstrates a deep understanding of the industry and are used successfully by many customers. These include solutions for Industry 4.0 Data Analytics Platform, 3D Visualization, AR/VR-based process digitization and automotive cyber security.

With a strategic focus on intelligent automation, cloud/SaaS adoption, cognitive computing/AI, analytics - with Big Data Lake as a Service (BDLaaS) and Digital Factory concepts, Capgemini continues to develop intensively in the industry.

CHROME is the manufacturing and automotive domain Center of Excellence (CoE). It leverages domain subject matter specialists (SMSs) and assets for digital manufacturing excellence to help deliver innovative solutions. It also acts as a source of in-depth knowledge for new-age technologies such as IoT, AR, VR, blockchain, machine-learning and drones supported by analytics, as well as more traditional technologies of ERP, MES, PLM, and asset management platforms. It also features excellence platform factory of the future (FotF), focused on Industry 4.0.

**Overview**

Capgemini is very well positioned in the next-gen ADM market globally and is one of the largest providers in this segment in Europe. Approximately 60% percent of the company's turnover comes from ADM projects, in Europe with more than 300 enterprise customers and approximately $500 million in revenue in the manufacturing industry.

**Caution**

Capgemini’s Automation Drive suite, comprising a unified, open and dynamic set of automation tools, is impressive. However, its peers have been able to develop equally or more effective platforms with use cases yielding a high percentage of task automation and incident elimination.

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**2019 ISG Provider Lens™ Leader**

Capgemini leads the European manufacturing industry ADM market with business value and sector-specific knowledge delivered through its ADMnext services. It has an effective services portfolio with an ideal blend of traditional and next-gen offerings.
HCL

Overview

HCL is very well positioned in the European manufacturing market with approximately 3,700 employees and a revenue of $250 million. The customer mix strengthens HCL’s position as an end-to-end ADM player in this industry. The manufacturing vertical covers about a quarter of HCL’s European ADM revenue.

Strengths

HCL offers several comprehensive toolsets that take a 360-degree perspective on the tasks. These include operations and supply chain management, partner networks of suppliers, dealers and distributors, customer services and customer communications. Furthermore, topics such as maintenance, DryIce and Autonomics (AI-enabled automation) and orchestration are provided.

FENIX is a customer-centric service delivery model, supported by highly experienced engineers used to working in an agile environment on a modern technology landscape. It is designed to drive speed, automation and efficiency.

HCL’s strong growth is also the result of several targeted acquisitions in recent years, such as Volvo IT, Datawave and, most recently, Actian.

Caution

HCL’s presence in the market and its image with customers vary greatly across Europe. In relation to the number of FTEs compared to its peers, the number of enterprise clients is low.

2019 ISG Provider Lens™ Leader

HCL’s modernization and transformation-based approach leveraging agile POD-based delivery model has been a key strength to meet the growing manufacturing industry needs for ADM services.
IBM

Overview
IBM provides highly innovative offerings, including AI, analytics, automation, cloud, mobility and security. Many competitors use IBM solutions to create their own offerings. For example, several service providers use IBM Watson as the basis for their own AI offerings.

Strengths
IBM strongly focuses on cognitive analytics in manufacturing and provides this in various areas of the supply chain. With the Watson IoT Platform, IBM offers a development platform for integrative IoT solutions.

IBM has the tools, best practices from its own factories and a pool of experienced industry consultants and engineers to add value to the entire manufacturing modernization process.

IBM has several successful implementations of digital native systems based on integrated processes, run on cloud platforms and provide deep business insight through analytics. Implementations often rely on a wide range of proprietary tools: Bluemix Cloud, WebSphere, API Economy, MobileFirst and Watson.

IBM has been a U.S. technology patent leader for 25 consecutive years, providing technology labs worldwide. Through a series of acquisitions (24 in the ADM environment between 2015 and 2017 alone), IBM is continuously expanding its own strong technology portfolio.

Caution
Recently, the company has been struggling for sustainable profitability in the IT service business. IBM's premium service positioning is repeatedly challenged by cost-effective offerings from competitors, especially India's leading providers.

2019 ISG Provider Lens™ Leader
IBM combines deep manufacturing industry knowledge and best practices with an internationally organized service and vast technological leadership, especially in cognitive analytics and AI.
INFOSYS

Overview

Infosys is a broad-based, globally active IT service provider. Infosys is expanding its business worldwide and strengthens strategically important markets at local level. In Europe, Infosys serves the manufacturing industry with more than 6,000 employees.

Strengths

Infosys has established development centers in London, Edinburgh, Swindon, Amsterdam, Paris, Düsseldorf, Frankfurt and Brussels to strengthen local project teams.

Infosys has more than 450 DevOps consultants, more than 120 DevOps customers, over 10,000 CI CD tool specialists worldwide, multiple vendor alliances and a complete set of IPs, platforms and labs to support such initiatives. In addition, it has succeeded in achieving this with an offshore delivery model.

Infosys has a wide range of IPs and accelerators, which increasingly rely on AI and cover topics such as legacy modernization, data analytics and rapid prototyping.

Infosys’ Nia AI platform can reduce effort considerably for L3 engineers involved in application enhancements and bug fixes. Nia’s natural language processing 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

Compared to other companies, the proportion of employees with many years of experience is lower — more than 40 percent of employees in the ADM environment have less than 3 years of experience.

Most of the services take place offshore in India. Infosys offers only a few and rather small nearshore delivery centers, which might not be well taken by the many midmarket manufacturing companies in Europe.

2019 ISG Provider Lens™ Leader

Infosys can be the right partner for manufacturing clients who are looking for deep DevOps and offshoring capabilities.
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 Europe 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
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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.