*iSG Provider Lens™

2022

Next-Gen ADM Services 2022

imagine your future®

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 800 clients, including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, visit www.isg-one.com.

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Introduction

Leveraging software capabilities to solve business problems and gain enterprise agility is an indispensable requirement for modern application outsourcing contracts. Cost cutting and staff rationalization are no longer enough. Service providers are augmenting their traditional application development and management (ADM) offerings with advanced technologies such as AI in operations, microservices-based development and accelerators such as low-code/no-code solutions. Service providers offer tailor-made roadmaps combining digital, operational and technology goals to meet their clients' objectives. ISG calls such contracts Next-Gen ADM contracts. This study focuses on the recent developments that have taken place across application development, application management and quality assurance markets. Simultaneously, ISG is launching the 2022 ISG Provider Lens™ Low-code/No-code Platforms study to offer clients a broader understanding of that application services market.

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

New end-user requirements based on businesses' focus on enhancing CX, quick access to information, eliminating data silos and faster decision-making, supported by technology, shape the application development market. Enterprises seek to adapt to changing requirements by implementing faster release cycles and frequently deploying enhanced application services. A typical ADM service includes consulting, design, custom development, packaged software integration, operations, quality assurance, security services and testing. More service providers have been implementing AI for AIOps functions across all these traditional services, adding innovative and advanced approaches to their application development workbenches. The ISG Provider Lens™ study offers IT-decision makers:

- Transparency into the strengths and weaknesses of relevant providers

- A differentiated positioning of providers by segments

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

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

Quadrant Research

As part of this ISG Provider Lens™ quadrant study, ISG is introducing the following five quadrants on Next-Gen ADM Services 2022:

Simplified illustration

Next-Gen ADM Services 2022	
Agile Application Development Outsourcing	Agile Application Development Projects
Application Managed Services	
Application Quality Assurance	Continuous Testing Specialists
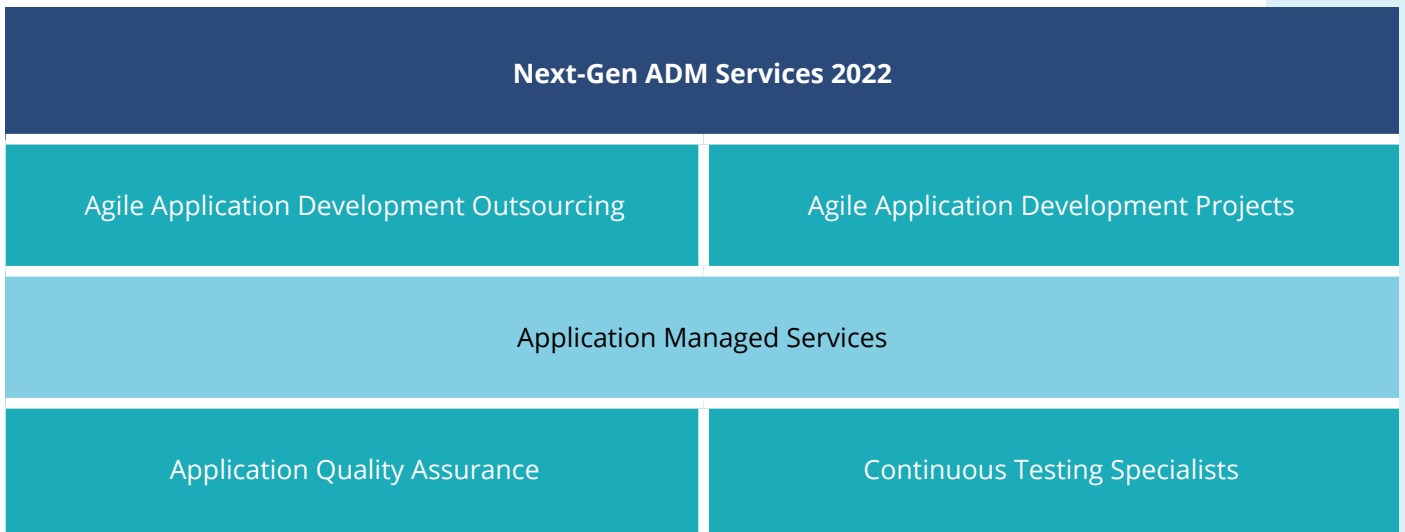
Source: ISG 2022

Agile Application Development Outsourcing

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

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

Eligibility criteria:

- Should manage more than 20 squads for a single client or be able to scale up to more than 1,000 developers, working simultaneously, in several projects

- Should possess the ability to rapidly scale up or down and add more than 100 developers in a week to meet the demands of a client, as necessary

- Should use a comprehensive tool set to coordinate resource allocation, portfolio management, backlog prioritization, Agile methods, Waterfall methods, system integration, application modernization, cloud-native application development and other services to optimize the performance of the development teams working simultaneously in a client's environment

- Should be certified to transform and deploy agile teams under frameworks such as Scaled Agile Framework (SAFe) and Large-Scale Scrum (LeSS)

- Should employ certified practitioners in more than two of the following methodologies: Scrum, Kanban, Extreme Programming (XP), Lean Development and Crystal

- Should have established partnerships with development platform providers, including AWS, Microsoft, Google and IBM, and be able to deploy a development workbench for a new client

- Should offer testing services and product development workshops in areas such as design thinking

- Not expected to offer organizational change management, but this capability can add to a provider's credibility

Agile Application Development Projects

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

Typical service providers in this quadrant offer expertise to ensure successful business outcomes for each agile project. Deals can include a fixed number of team members per squad or flexible models measured by application feature delivery or other pricing methods. Project engagements can vary from small mobile applications to large solution implementations, but typical engagements take less than 18 months and project costs are less than $2 million for regions such as Brazil, Germany, the Nordics and the U.K. and below $5 million for the U.S. Large projects are exceptions and most likely have staggered releases or, in case of continuous delivery, more sprints. Service providers in this quadrant also have full management responsibility for their delivery teams. Application staff augmentation services are excluded from this quadrant.

Eligibility criteria:

- The commercial business model centers on the provision of squads for client-managed application development units. Services are typically measured by the number of squad members, user stories delivered, deployment rate/frequency, defect count, time to market and business-related indicators such as shared business outcomes.

- The ability to engage many squads to support a client is considered. Each squad should have its own goals, cost and SLAs Providers should manage the squad size and offer experts according to throughput targets.

- Shows specific knowledge and skills required by squads or projects, such as programming languages, vendor certifications, data analytics, AI, machine learning, low-code/no-code development expertise, system architecture and, optionally, CX design and quality assurance.

- Providers should demonstrate delivery capacity; they should not be startups or recently established companies. They should also have reference clients and offer case studies to illustrate the digital products delivered and product-oriented delivery (POD).

- Providers should specialize in at least one of the following methodologies: Scrum, Kanban, XP, Lean Development or Crystal.

- Providers should offer optional quality assurance services and product design workshops in areas such as design thinking.

- Providers should have talent acquisition programs, training programs and knowledge management processes, and ensure a healthy work environment to retain top talent.

- Providers should differentiate themselves by offering business expertise or development accelerators in areas such as CRM, CX, e-commerce, ERP, industry-specific functionalities, IoT, supply chain management, and virtual reality.

Application Managed Services

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

Typical service levels include the time taken to resolve an incident or service request, service availability, the defect rate, user satisfaction or Net Promoter Score (NPS) and user experience. Service transition and client onboarding should include application documentation, service ticket records, knowledge transfer and, optionally, expert transfer/hiring. Ongoing service delivery starts after the transition period ends and often includes quality improvement programs and service knowledge refresh.

Eligibility criteria:

- Should demonstrate expertise in deploying and operating service platforms for team performance monitoring and defect management, including troubleshooting

- Should employ vendor-certified experts in packaged e-commerce, ERP, CRM or supply chain management applications (at least one of these technology platforms)

- Must support Microsoft and Oracle technologies, Java programming and relational databases such as MySQL, Oracle Database, PostgreSQL and SQL Server. Mainframe and other technologies can add to a provider's rating but are not required for inclusion

- Should integrate more than two service platforms, such as Atlassian Jira, SAP Solution Manager and ServiceNow, and service desk tools and application development platforms such as AWS, Google Anthos, IBM Rational and Microsoft Azure,

- Should include a service management platform to handle application tickets and service requests and track service levels

- Service providers using clients' tools should demonstrate certifications and expertise in integrating and managing commercial-grade platforms

- Should commit to quality improvement programs to reduce incidents that can include Lean methodologies plus AI and machine learning for analytics (trends and predictions) with incident/service request automation

- Should offer fixed service fees or outcome-based contracts, providing clients with options; staff augmentation is an exception

Application Quality Assurance

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

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

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

Eligibility criteria:

- Should offer a centralized quality assurance unit that lays down quality standards for clients' projects

- Should maintain a comprehensive technical quality assurance framework, which includes planning, implementation, monitoring, review and improvements

- Should maintain a consulting team focused on analyzing business demands and securing development and delivery according to business requirements

- Should use technology to perform analytics over logs and use AI for continuous improvement in results; ideally, the tool set includes analytics over logs of applications running in production

- Should provide differentiation with proprietary tools and accelerators for faster time to market

- Should leverage vendor partnerships for quality monitoring, application performance tools and testing tools

- Should offer training and education for developers, testers and operators to develop a quality excellence mindset and ensure that the overall product or service meets the desired quality, both technically as in supporting the affected business processes and functional requirements

Continuous Testing Specialists

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

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

Eligibility criteria:

- Provider should engage qualified professionals for test-driven development (TDD), behavior-driven development (BDD) and other approaches

- Should handle large-scale testing and continuous integration demands of complex systems such as ERP and e-commerce with many test cases

- Portfolio should include unit testing, system testing, regression testing, compliance testing, performance/load testing, user acceptance testing and smoke testing

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

- Should offer continuous services, including testing data and test coverage assessments automated testing enablement across many continuous integration pipelines, and managing testing artifacts for the significant reutilization of such artifacts

- Should replicate testing practices and use automated testing for multiple projects

Quadrants by Region

Quadrant	U.S.	U.K.	Brazil	Germany	Nordics
Agile Application Development Outsourcing	✓	✓	✓	✓	✓
Agile Application Development Projects	✓	✓	✓	✓	✓
Application Managed Services	✓	✓	✓	✓	✓
Application Quality Assurance	✓	✓	✓	✓	✓
Continuous Testing Specialists	✓	✓	✓	✓	✓

Archetype Report

In this report, we identify and classify the typical buyers of ADM outsourcing services. We have identified three major segments of buyers:

- **Enterprise Modernization:** This segment includes clients looking for an overhaul of legacy systems to gain or increase enterprise agility. Example objectives include integrating various application touchpoints and silos, creating cloud-native applications, implementing advanced technologies or expanding their use, application reengineering using business rules extraction, rewriting code to include APIs and legacy database conversion to new relational databases. Specific goals can include faster time to market and enhanced customer experience or user experience (CX/UX). Each client may leverage application development outsourcing providers, application development project specialists, application managed service providers or any combination of these in pursuit of its goals.

- **Operational Excellence:** Clients in this segment aim to reduce cost and bring in efficacy in app management. The scope of work includes leveraging or expanding automation, speeding ticket resolution, incident reduction or elimination and preempting app failures. Furthermore, the objective of such clients is to implement sophisticated maintenance philosophies such as AIOps, application upgrades and the reduction of discretionary (shadow) app maintenance expenditure over time.

- **Packaged Software Implementations:** Clients in this segment aim to either upgrade or move from one commercial-off-the-shelf (COTS) application or packaged technology ecosystem to another. Example objectives include replacing aging custom applications with modern off-the-shelf apps, upgrading to the latest version of the current product suite or moving from one product technology vendor to another. Pursuit of these objectives includes greenfield and/or brownfield implementations of one or more software categories such as ERP modules, CRM, customer data platforms, big data and analytics, web content management, collaboration software suites and commerce websites.

Schedule

The research phase falls in the period between **April and August 2022**, during which survey, evaluation, analysis and validation will take place. The results will be presented to the media in **September 2022**.

Milestones	Beginning	End
Launch	April 11, 2022	
Survey phase	April 11, 2022	May 16, 2022
Sneak previews	August 10, 2022	August 31, 2022
Press release	September 30, 2022	

Please refer to the link to view/download the ISG Provider Lens™ 2022 research agenda.

Access to Online Portal

You can view and download the questionnaire from here using the credentials you have already created, or refer to the instructions provided in the invitation email to generate a new password. We look forward to your participation!

ISG Star of Excellence™ – Call for Nominations

ISG Star of Excellence™ is an independent recognition of excellent service delivery based on the Voice of the Customer concept. It is a program designed by ISG to collect client feedback about service providers' success in demonstrating the highest standards of client service excellence and customer centricity.

The global survey is all about services that are associated with ISG Provider Lens™ (IPL) studies. In consequence, all ISG analysts are continuously provided with information on the customer experience of all relevant service providers. This information comes on top of existing firsthand advisor feedback that IPL leverages in context of its practitioner-led consulting approach.
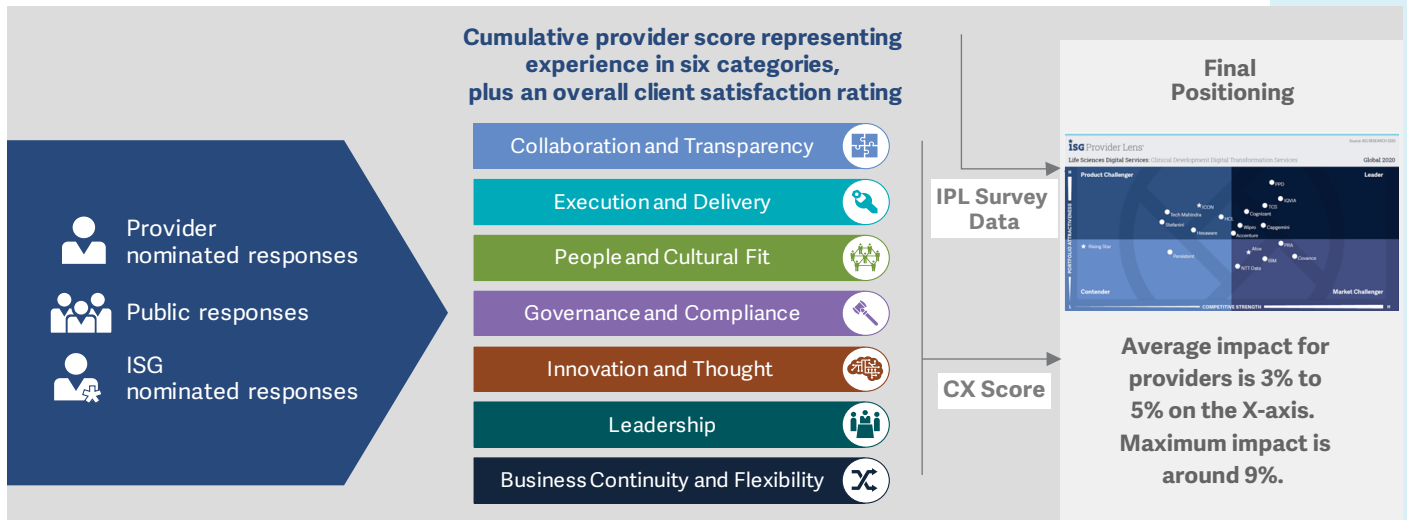
Providers are invited to nominate their clients to participate. Once the nomination has been submitted, ISG sends out an email confirmation to both sides. It is self-evident that ISG anonymizes all customer data and does not share it with third parties.

Our vision is to get Star of Excellence acknowledged as the leading industry recognition for client service excellence and to make it serve as the benchmark for measuring client sentiments.

To ensure your selected clients complete the feedback on your nominated engagement, please use the client nomination section on the Star of Excellence website.

We have set up an email where you can direct any questions or provide comments. This email will be checked daily; please allow up to 24 hours for a reply. Here is the email address: Star@isg-one.com

Research Production Disclaimer:

ISG collects data for the purposes of writing research and creating provider/vendor profiles. The profiles and supporting data are used by ISG advisors to make recommendations and inform their clients of the experience and qualifications of any applicable provider/vendor for outsourcing work identified by the clients. This data is collected as part of the ISG FutureSource™ process and the Candidate Provider Qualification (CPQ) process. ISG may choose to only utilize this collected data pertaining to certain countries or regions for the education and purposes of its advisors and not to produce ISG Provider Lens™ reports. These decisions will be made based on the level and completeness of information received directly from providers/vendors and the availability of experienced analysts for those countries or regions. Submitted information may also be used for individual research projects or for briefing notes that will be written by the lead analysts.

Partial list of companies being invited for the survey

Are you on the list, or do you see your company as a relevant provider that is missing from the list?
If so, feel free to contact us to ensure your active participation in the research phase.

1E Limited	Blujay Topco Limited	Congruent
a1qa	Bottomline	Connectis
Accenture	Bouvet ASA	Contino
ACL Digital	Bravura Solutions (UK) Limited	Contrast Security
Adesso	BRISA	Contus
Aiven	BRQ Soluções	CTC
AlgoWorks	BT	CWI
Allgeier	CANCOM	Cybage
Amdocs	Capgemini	Cygnet Infotech
ANS Group Limited	Cast group	Cyient
Applause App Quality, Inc.	Cegeka	D4t4 Solutions PLC
AppSphere	CGI	Datagroup
Arvato Systems	Checkmarx	DBServer
Aspire Systems	CI&T	Deal
Atea	Cigniti	Deloitte
Atos	Ciklum	DeviQA Solutions
Auditeste	Cisco	Devoteam-Alegri
Avanade	Cisilion (Group) Limited	DISYS
Avco Systems Limited	CMPTL	DXC
Aveva Group PLC	Cocus	e-Core
Axians	Coforge	Eficode Praqma
Bacancy Technology	Cognizant	Endava
Base2 Tecnologia	Columbus	EPAM
Bechtle	Compasso UOL	Equal Experts UK Limited
Birlasoft	Computacenter	Ewave do Brasil
BJSS	Concentrix	Expleo

Partial list of companies being invited for the survey

Are you on the list, or do you see your company as a relevant provider that is missing from the list?
If so, feel free to contact us to ensure your active participation in the research phase.

Fcamara	Investis Digital	N-iX
Flux7	ITC Infotech	Northdoor PLC
FOXBEGIN	Iteris	NTT DATA
Fujitsu	Keeggo	Objective Group
GAVS	KiwiTech	Oracle
Geeks Ltd	KMD	Pactera
Getronics	Kyndryl	Perficient
GFT	LeadingAgile	Persistent Systems
Globant	Logicalis	Planit Testing
Happiest Minds	LTI	Prime Control Consultoria LTDA
HCL Technologies	Lumen Technologies	Probrand Limited
Hexaware Technologies	Magna Sistemas	Pythian
HPE	Marlabs Inc.	QA Consultants
HTC Global Services, Inc	Materna	QAMentor
iBeta	Meta	QASource, Inc.
IBM	MI MONTREAL INFORMATICA	QCENTRIS
Ignitho	Micro Focus	Qintess
iLAB	Mindtree Ltd.	Qualitest
ilegra	Minsait	Quality Professionals
Imbus	Monitora Soluções	QualityLogic
Infinite Computer Solutions	Mphasis	Quallis
Infogain	msg group	Quinnox
Infosys	Nasstar PLC	Release42
Inmetrix	NCC Group	Reply
Innominds	Nebulaworks	Resultant
Innovations ON	NetApp	RPerformance

Partial list of companies being invited for the survey

Are you on the list, or do you see your company as a relevant provider that is missing from the list?
If so, feel free to contact us to ensure your active participation in the research phase.

SAKSOFT	Spread Technologia	TietoEVRY
SCC	SQLI	TIVIT
ScienceSoft	Squadex	TO THE NEW
Sempre IT	Stefanini IT Solutions	TQI
Senacor	SVLabs	Trianz
Shippable	Synopsys	T-Systems
SIG	Syntax Systems	Unisys
Sigma Software	SysMap Solutions	UST
Siili	T&M Testes	Valuelabs
SLK Software	Tavant	Veracode
Smart IT	TCS (Tata Consultancy Services)	Veritis
Sofist	Tech Mahindra	Virtusa
Softserve	Telefonica Tech UK&I	Wipro Technologies
Softtek	Testbirds	xceptance
Solvd, Inc	Testfabrik (Test Factory)	Yaman
SONDA	Testing Company	Yash Technologies
Sopra Steria	TestingXperts	Zeiss Digital Consulting
South System	ThoughtWorks	Zensar Technologies

Contacts for this study

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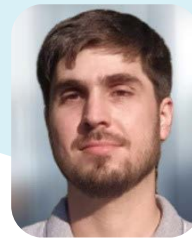Research Analyst – U.S.,
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Do you need any further information?

If you have any questions, please do not hesitate to contact us at ISG.ProviderLens@isg-one.com.

ISG Provider Lens™ QCRT Program Description

ISG Provider Lens™ offers market assessments incorporating practitioner insights, reflecting regional focus and independent research. ISG ensures advisor involvement in each study to cover the relevant market details aligned to the respective service lines/technology trends, software vendor presence and enterprise context. ISG has expert thought leaders and respected advisors that know each region's provider portfolios, offerings, enterprise requirements and market trends. Three advisors participate in each study's Quality & Consistency Review Team (QCRT). The QCRT ensures that each study reflects ISG advisors' experience in the field, which complements the analysts' primary and secondary research. ISG advisors participate in each study as part of the QCRT group and contribute at different levels, depending on their availability and expertise.

The QCRT advisors:

- Help define and validate quadrants and questionnaires

- Advise on service providers' inclusion and participate in briefing calls

- Give their perspectives on service provider ratings and review report drafts

The ISG Provider Lens™ QCRT program helps round out the research process, supporting comprehensive research-focused studies.

Quality & Consistency Review Team for this study

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Do you need any further information?

If you have any questions, please do not hesitate to contact us at isglens@isg-one.com.