ISG Provider Lens™

2019

Digital Business - Solutions and Service Partners

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 700 clients, including more than 70 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, Connecticut, 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.

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Definition

Digital technologies are permeating all aspects of the traditional business. Using information technology to change the customer journey, or to improve business agility, or to deliver digital products causes a digital disruption that spans over all business processes, including sales, trading, production, supply chain, product design and human resource management, among others.

Enterprise agility goes far beyond software development and encompasses how organizations can adjust business, development and operations workstreams to survive and thrive when competition and customer requirements are constantly changing. This adjustment and the speed at which it happens is relevant and critical for increasing business value.

This year, ISG introduced the ISG Digital Cube™, an interactive model of the enterprise capabilities required for digital transformation. The ISG Digital Cube illustrates the six capabilities any business must have to fully realize its digital ambitions: digital backbone; emerging technologies at scale; enterprise agility; digital ecosystems; insights, and business model innovation.

ISG Digital Cube™ is the main reference model ISG will be using to guide clients in their digital transformation. This ISG Provider Lens™ study focuses on identifying the service providers that can support clients in these digital capabilities.

Digital ready service providers understand the full scope of digital services to provide constant innovation that improves user experiences, accelerates business delivery and incorporates intelligent solutions. They partner with leading technology vendors and can articulate the use of cognitive computing and learning systems to digitize any client organization.

The ISG Provider LensTM study offers IT decision makers:

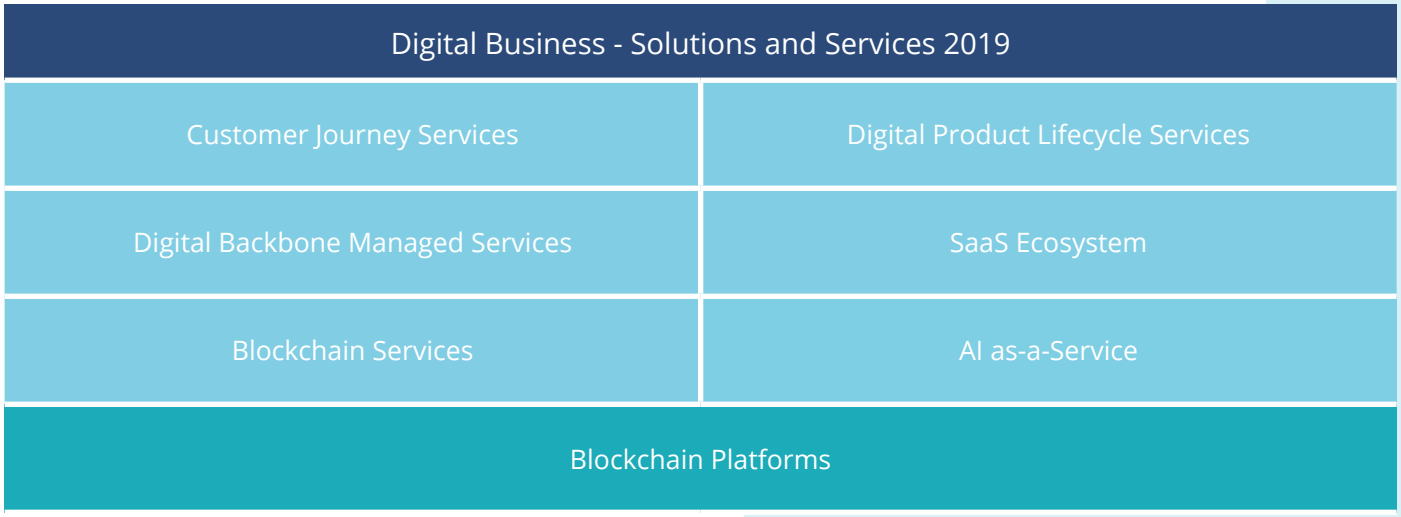
- Transparency on the strengths and weaknesses of relevant providers;
- A differentiated positioning of providers by segments;
- Focus on different markets, including global, the U.S., the U.K., Germany, Brazil and the Nordic countries.

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

Quadrant Research

As part of this ISG Provider Lens™ quadrant study, we are introducing the following seven quadrants on the Digital Business Solutions and Services:

Simplified illustration



Source: ISG, 2019

Customer Journey Services

The Customer Journey Services quadrant assesses a service provider's portfolio and capacity to deliver business model innovation, enabling enterprises to build competitive differentiation in today's digital economy.

Customer journey design is transforming how companies organize marketing, sales, delivery and post-sales processes. Consequently, it changes all of an enterprise's business processes around the customer. It is a customer-centric approach.

The customer journey is how digital companies design differentiation. New customer journeys create new business models, demanding new technology and business ecosystems.

These companies design how an ideal customer (or persona) interacts with a product and a brand. The design process includes technology experts, sales, marketing, designers and clients in a collaborative process. Design thinking and lean are common methodologies in use. Leading firms use analytics to extract insights from user data. Cognitive computing extracts data from conversations, texts and social media. The experience is measured with simple A/B tests as well as complex sentiment analysis captured from customer interactions.

The customer journey is not a project or event. Daily monitoring and measuring the customer experience drives changes to the journey, the supporting technology and business processes. The customer journey team produces a continuum change of digital businesses, delivering business model Innovation and enabling enterprises to build competitive differentiation in today's digital economy.

Eligibility criteria:

- Consulting firms, service providers and digital agencies that focus on user experience to design apps, web and product/services with an omnichannel approach;
- A participating company employs design thinking or alternative methodologies to involve the customer in designing products and services;
- The company provides services with local expertise in the assessed region or country.

Digital Product Lifecycle Services

The Digital Product Lifecycle Services quadrant assesses a provider's capacity to adapt its delivery model to each digital product with required speed, enabling a client enterprise to adopt agile and adaptive operating models. A provider's portfolio includes agile, testing and DevSecOps to rapidly deploy or transform products and services according to market changes.

Service providers' professionals are organized in squads with multi-functional teams that use design thinking, real-time analytics, product and service performance data, benchmarking, social network feedback, agile development and many specialized tools to change products and offerings in a short timeframe for nearly immediate deployment. Two to four weeks of release cycles are frequent goals. That also requires continuous integration, continuous testing and DevSecOps, for continuous delivery. All these processes need discipline, governance and automation; otherwise, the delivery process becomes costly, ineffective and slow.

The participating companies may be using development platforms that allow applications to be seamlessly deployed in multiple clouds. The consistency of one application running in multiple clouds elevates the availability, security and business continuity, at lower costs as compared to deprecated clustering and disaster recovery methods.

Eligibility Criteria:

- The service provider delivery model includes agile and DevOps in organizations with many developers and with clients' product owners in product squads;
- The participating company can provide an organizational change program to transform a client's product and service development process;
- The technology employed includes automation and continuous development platforms comprising trunks synchronization, code repository, version control, release management, automated testing, and automated build and deploy tools;
- The company has CloudFoundry or OpenShift qualified professionals;
- Quality assurance methodologies are assessed for ranking the participating providers.

Digital Backbone Managed Services

The Digital Backbone Managed Services quadrant assesses the providers of robust, secure and reliable operations based on microservices and APIs in a hybrid or a pure cloud platform, and all other digital solutions such as mobile apps, IoT platforms and data services. These providers offer consulting services to transform legacy systems and move to a cloud environment.

The cloud enables serverless computing, infrastructure as code, microservices, Kubernetes and containers for rapid horizontal expansion into multiple geographies or vertical scale of operations. These are crucial elements to reduce time to market and quickly respond to demand changes. Competitors in this segment have robust platforms that integrate to public cloud providers with autonomous, AI-based self-healing, provisioning, auto-scale and performance optimization.

Leaders in this market comply with zero outage goals. They monitor real-time digital product usage and transaction volumes, dynamically changing the backbone capacity to optimize business performance. They are accountable for API and microservices response time and availability, data access speed, connectivity and application performance. Optionally, they comply with outcome-based contracts.

Eligibility Criteria:

- Consulting and managed service providers that can transform legacy applications to run in the cloud. Simple lift-and-shift is excluded. The participant should demonstrate the capacity to rewrite applications to include API and microservices to enable the use of native cloud services;
- Managed services include business process monitoring and digital product performance. Outcome-based contracts are rated but not mandatory;
- The service provider operates the digital platform to optimize business performance including dynamically changing the configuration to reduce costs and improve performance; the provider uses AI-powered tools to automate the digital platform;
- The provider supports digital product development, co-participating in DevOps;
- Providers monitor security and resolve incidents, including data breaches and hacker attacks. They provide consulting on security and compliance.

SaaS Ecosystems

Enterprise clients looking for alternative ways of building a robust digital backbone may consider the software-as-a-service option. SaaS is ready to use and can support end-to-end business processes such as market-to-order, recruitment-to-hire and procurement-to-pay. The market is moving rapidly toward SaaS specialization and commoditization. By combining several SaaS specialized solutions, enterprises can build a best-of-breed digital backbone, in the cloud, with reduced capital expenditures.

A robust SaaS provider offers a marketplace of extensions, apps, APIs and microservices that ease the integration and improve the functionality. Using a SaaS developer and partner network, enterprises can integrate and optimize their digital backbone. These elements define a SaaS ecosystem.

Eligibility criteria:

- The software solution covers at least one end-to-end (E2E) business process. The solution runs in the cloud. It offers self-service client registration. Its commercialization model includes pay-as-you-go, and it has no exit penalties;
- The solution has a robust marketplace where clients can find apps, plugins or extensions that easily integrate into the solution;
- The SaaS company accredits many consulting, integration and operating partners that can be hired directly;
- The API documentation is available to independent developers, who can self-subscribe to enable their custom developed apps.

Blockchain Services

The Blockchain Services quadrant assesses a service provider competence in consulting, designing, deploying and operating blockchain.

Blockchain's decentralized, open and cryptographic nature allows enterprises to transact on a peer-to-peer basis, reducing the need for intermediaries. The technology is open source, providing full transparency and long-term continuity despite the corporation behind the platform. Every transaction is registered in multiple databases, encrypted by a common hash code that changes every few minutes, forming a data block chained in multiple databases. Rather than having one database as the sole source of truth, blockchain provides multiple sources for validating a single transaction.

Blockchain has proven viability with numerous use cases available from service providers. The banking, financial services and insurance sector is using blockchain to share information, improve security and reduce transaction costs such as in money transfers. Besides the banking sector's interest in blockchain, viable use cases are found in the supply chain, tracking, payment services and document and contract processing. ISG estimates that the global market value of blockchain could exceed $300 billion by 2025 and more than $2 trillion by 2030.

Eligibility criteria:

- Blockchain service providers are members of at least one blockchain consortium;
- The provider has developed consulting expertise to design viable solutions;
- Participating companies have tested several blockchain use cases, providing a library that accelerates new deployments;
- The provider has qualified and trained practitioners to deploy and operate the platform for their customers;
- The company provides services with local expertise in the assessed region or country.

Blockchain Platforms

The Blockchain Platforms quadrant assesses each platform's capability to support enterprise client needs. ISG has identified more than 70 consortia that offer blockchain solutions, platforms, education, training or events. This quadrant report filters the most relevant options for enterprise clients.

This report will identify and rank platform offerings to increase client choices. This quadrant measures a platform ecosystem on the basis of funding, openness, case studies, providers' adoption and relevance of the corporations supporting the platform roadmap. A leading platform should provide viable use cases, robust development tools, easy access for developers and quality assurance measures to keep the platform safe, reliable and compliant to its coding standards.

Eligibility Criteria:

- The platform source code is accessible and can be audited by any client or consortium participant;
- The platform has a robust ecosystem where clients can exchange use cases. The API documentation is available to independent developers, who can self-subscribe to enable their custom developed apps;
- Many consulting, integration and operating partners are qualified to use the platform.

AI as-a-Service

The AI as-a-Service quadrant compares SaaS providers of artificial intelligence, machine learning and cognitive solutions that can be consumed through APIs with a clearly defined pay-as-you-go model.

AI/ML and cognitive computing are in the public domain, as students and professors developed neural networks knowledge on their master and doctorate studies. This knowledge is embedded in many open source software packages. TensorFlow is a software library for dataflow and differentiable programming, a key ML element. It is available in every public cloud marketplace. However, open source tools are empty of data. Several providers have trained ML models with real data to provide these models as a service. Developers and enterprise clients can download SDK/libraries to include AI/ML/cognitive calls in their software. AI/ML can be put into any application in day-to-day client operations.

AI aaS is about building, testing and deploying IT models, services and algorithms with a high degree of automation. Potential sources include text, language, images, voice, video and sensor data. In most cases, these services require robust GPU computing capacity, readily available in the cloud. While expanding their GPU installations, some providers are also investing in quantum computing to extend their AI capacity even further.

Eligibility criteria:

- Data science platforms with pre-configured templates that include frameworks such as TensorFlow, Microsoft CNTK, Apache MXNet, Caffe and Torch;
- Machine learning API for using deep learning and neural networks – used to transform data into knowledge and develop predictive models for predictive analytics, default risk, customer behavior, and more;
- Cognitive services APIs for vision, speech, translation, text analytics and search via REST endpoints and APIs for metaprogramming;
- Conversational AI services API for chatbot engineering platforms.

Quadrants by Region

As part of the ISG Provider Lens™ Quadrant Study, we are introducing the following seven quadrants (market) research on Digital Business - Solutions and Service Partners 2019 by region:

Quadrants	Global	USA	Germany	Nordics	UK	Brazil	LATAM
Customer Journey Services	√	√	√	√	√	√	CPQ
Digital Product Lifecycle Services	√	√	√	√	√	√	CPQ
Digital Backbone Managed Services	√	√	√	√	√	√	CPQ
SaaS Ecosystems	√	√	√	CPQ	CPQ	√	CPQ
Blockchain Services	√	√	√	√	√	√	CPQ
Blockchain Platforms	√						
AI as a Service	√						

Note: We have highlighted some regions that do not have a quadrant report. The data for these regions is being collected for the Candidate Provider Qualification program.

Archetype Report

In this report, we identify and classify the typical buyers of digital business solutions and services which nowadays look for transformational capabilities. We have identified five major segments of buyers:

- **Ad-hoc Transformers –** These clients usually have a legacy-heavy enterprise IT function that has multiple silos and is disjointed from the business. For these organizations, enterprise IT is usually a cost center, not a value generator. These clients undertake the digital transformation journey because of an ad-hoc requirement, such as an acquisition, merger, divestiture, competitive reaction, or an initiative to enter a new geography or adopt a completely new solution. A digital transformation program would represent a significant improvement for such organizations, but they often are not well prepared to leverage digital transformation methods, processes or technology. A digital incubator function has proven relatively effective to get them organized and starting to inch slowly towards strategically implementing digital solutions. These clients require basic expertise in digital transformation and assistance in the transition.

- **Strategic Implementers –** These clients want to embark on their digital journey; however, they have not approached any digital contracts yet. These clients typically have the vision and mission for digitalizing their company and want the help of service providers to take them through it. These organizations are starting with baby steps toward the digital transformation and want to implement it, but do not know where to start. These companies are looking for new revenue streams to achieve a competitive advantage, improve customer relations and improve operational efficiency. For these clients, forming a digital transformation office with a broad scope is helpful to ensure governance, effective execution, value and progress measurement and management. These companies look to implement a digital contract across one business function or one aspect of the entire business and are in an exploratory stage on the tools and methodologies that could be adopted for the transformation. These clients need a strategy, consulting, implementation and managed services from the provider for their digital journey.

- **Ecosystem Modernizers –** They are companies that are born digital, are very customer-centric, or create competitive advantage by utilizing current and emerging digital transformation methods, processes and technologies. These companies will often have multi-channel customer touchpoints. The focus for these companies is on generating more revenues by using IT, rather than simply reducing costs. Increasing revenue is the major driver behind their strategy, coupled with improving flexibility, agility, competitive positioning and speed of reaction to competitive pressure. They are comfortable with crowdsourcing and crowdfunding, user micro service creation, continuous development and improvement, etc. They are happy to form partnerships and engage in profit sharing or pay-as-used relationships with providers, rather than simply buying sourcing contracts. They are prepared, in some specific circumstances, to adopt disruptive or new solutions, relatively rapidly, through proofs of concept s or pilot projects, but typically will limit these to specific targeted solutions, especially if deploying enterprise-wide.

- **Disruption Embracers –** These clients intend to adopt niche technologies such as blockchain, augmented reality, virtual reality and 3D printing and are very innovative in nature. Digital technologies and innovation are in their DNA, and cost implications are not a major showstopper for these clients. Such companies have a high R&D investment and want to collaborate to develop a truly next-generation innovative solution. Disruption embracers want to partner not only with the service providers but also with the hardware vendors and look for a holistic partnership that can help them in their journey toward being the most innovative enterprise. These companies are happy to form partnerships and collaborations with providers (from small to large) on a seed payment, no success/no fee, profit sharing or pay-as-used basis. They create or defend competitive advantage by using emerging, potentially disruptive, methods, processes and technologies (such as blockchain) as early as possible.

Schedule

The research phase falls in the period between **July and November 2019,** during which survey, evaluation, analysis and validation will take place. The results will be presented to the media in **December 2019.**

Milestones	Beginning	END
Survey Phase	July 4, 2019	Aug 19, 2019
Sneak previews	Sep 19, 2019	Oct 25, 2019
Content provisioning	Nov 28, 2019	
Press release	Dec 05, 2019	

Please refer to the link below to view/download the ISG Provider Lens™ 2019 research agenda:
https://isg-one.com/docs/default-source/default-document-library/isg-provider-lens-annual-plan-2019.pdf?sfvrsn=c323cc31_0

Research production disclaimer:

ISG collects data to write research and create 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 only to 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 the 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.

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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.

Partial list of invited companies for the survey

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

Accenture
Advania
AppliedBlockchain
Arvato Systems
Atos
Avanade
AWS
Axians
Blockchain Expert
Boston Consulting Group
CANCOM
Capgemini
CGI
CI&T
CIMdata
Ciphrex
Cisco
Claranet
Clearmatics
codecentric
Cognizant
Computacenter
Corda (R3 Corda)
Cornerstone OnDemand
d.velop
Deloitte Digital
Deutsche Telekom
Digia
direkt gruppe
DXC Technology
Elastic Stack
Ensono
Evry
Exioms
Fujitsu
GBS
GE
Getronics
GFT
Globant
Google Cloud Platform
HCL
Hello Future
Hexaware
IBM
ilegra
Infinite
Infosys
Intellectsoft
Itadel
Joors & Joorschain
JPmorgan
Klarna
KMD
kony
LTI
Materna
Mendix
Microsoft
Mphasis
Netcompany
Nets
NNIT
NTT DATA
Octal IT Solution
OpenLedger
Oracle
Orange Business Services
Outsystems
Pegasystems
Percifient
Phillips Blockchain Labs
Protiviti
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PwC

Redcentric
Salesforce
SAP
SAS
ServiceNow
Snow Software
Softlabs
Softtek
SopraSteria
SOTI
Stefanini
Tatvasoft
TCS
Tech Mahindra
Tele2
Telenor
Telia
The App Business
Tieto
TIVIT
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Unisys
UOL Diveo
UST Global
Visolit
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Zensar
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