

Digital Business – Solutions and Services

U.S. 2021

Quadrant Report



A research report
comparing provider
strengths, challenges
and competitive
differentiators

Customized report courtesy of:

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The research and analysis presented in this report includes research from the ISG Provider Lens™ program, 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 ISG believes to be current as of December 2021, for providers who actively participated as well as for providers who did not. 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

Enterprises and IT Leaders in the U.S. Have now Shifted from Reactive to Proactive Phase in their Digital Transformation Initiatives

ISG rated 55 providers for the Digital Business Solutions and Service Partners 2021 report across five quadrants for the U.S. market. More vendors have participated in this year's study compared to last year, with almost 60 percent demonstrating expertise across quadrants, indicating a stronger push for digital services. The changing priorities of businesses during the COVID-19 pandemic and during the current recovery phase are a major factor that drives the overall growth of digital services in the U.S. In addition to analytics, automation, cloud and cybersecurity, other trends such as the connected ecosystem, implementation of digital solutions using low-code/no-code platforms, immersive experience technologies, digital technology-enabled sustainability services and multi-cloud environments will further fuel the growth of digital transformation in the region. Data from the ISG Index™ finds that global demand for technology and business services reached a record high in the second quarter of 2021. ISG forecasts that the global market for cloud-based services (IaaS and SaaS) will grow 21 percent in 2021 and 9 percent for traditional managed services. ISG data shows that interest in cloud solutions grew significantly in the first half of the year, with the number of Forbes® Global 2000 companies indicating an increased buying intent more

than doubling since December 2020, especially among larger companies. This signifies a strong push for digital business services that will continue to grow, as enterprises in the U.S. will now see digital service providers as core partners for achieving their digital transformation objectives.

The pandemic has accelerated digital transformation by three to five years and has created a robust demand environment for IT and service providers. Enterprise clients are looking to build IT ecosystems that are not only secure, agile and cost effective, but also capable of driving growth, innovation and an improved customer experience. In the U.S., there are still significant opportunities remaining, such as migrating and upgrading the significant legacy enterprise systems and applications as well as providing the edge computing necessary to collect and analyze operational data to improve decision making, performance and continuous innovation.

Digital transformation is one of the key trends in modern business. It refers to both the digitalization of existing processes and the development of new and digitally enabled ways of doing business. It is a broad term that encompasses many technologies and business processes. Many technology enablers such as automation, analytics, cloud and mobility will continue to dominate the trends for digital business transformation services, considering the demand for process efficiency and data-driven customer experience. But many new and evolving technologies, such as

machine learning, digital twin, 5G and IoT, are accelerating these trends and leading to exponential changes in many areas such as supply chain, customer and employee experience and sustainability.

Digital transformation became important for enabling remote working, enhancing collaboration workflows, and streamlining operations from supply chain management to customer experiences. In 2020, the objective was to quickly deliver collaboration, workflow and analytics capabilities in the cloud. This trend will continue to dominate in 2021, but will witness a new phase and approach. IT leaders will shift from a reactive attitude to more engaging strategic digital transformation initiatives. Enterprises in the U.S. will become more dependent on digital service providers for building and refining digital business models, fostering a culture that prioritizes experimentation and using technology and data to establish competitive advantages.

Some notable trends in the U.S. market are as follows.

- **Agile to remain key for reshaping business model:** The move to agile practices and DevOps is the start of the enterprise journey to establish an agile business model that supports digital transformation. Enterprises are expected to invest more in agile management tools, adopt experimentation cultures and expand agile to their data science teams. There will be a multidisciplinary agile team consisting of people from various business functions, and change management programs will be a crucial part of the agile strategy.

- **Use of low-code platforms for offering a better experience:** Low-code platforms help in rapidly developing workflow applications, customer engagement applications, line-of-business applications and integration of automation. They play a crucial role in modernizing legacy applications and moving more workloads to the cloud for a better employee and customer experience and improved collaboration.
- **Data-driven approach to continue mainstream:** Most providers are leveraging analytics and AI to analyze data and provide a new-age customer experience for digital consumers in the new future. This approach is being leveraged to understand the changes in consumer behavior and not only adjust existing digital services for customer requirements but also to capture any new market opportunities.
- **Outcome-based pricing model:** Many providers are adopting outcome-based pricing models to deliver digital services to clients. Approximately 10-15 percent of service provider contracts are based on outcome-based pricing. With more enterprises adopting digital services, there has been huge percentage growth in demand for contracts in this pricing segment. This also indicates that providers are ready to put their profit in the game.
- **Providers to continue investing in building in-house digital tools:** The combined use of tools and accelerators for digital services as well as ready-to-deploy platforms helps providers position themselves uniquely in the market. They are investing in building industry-specific tools with proven use cases, and function-specific solutions. These tools help providers create the required differentiation in the competitive digital business transformation service market.

- **MLOps is here to stay:** The machine learning operations (MLOps) approach is modeled with machine learning, DevOps and data scientists. It offers users the opportunity to reduce deployment time and monitor machine learning models for model drift in production. It also provides a management and operational framework, allowing data scientists to focus on developing and testing datasets as well as creating AI models to carry out the analysis.

To better understand how suppliers are delivering digital services to clients, ISG has developed a framework with five broad service delivery areas:

- Digital business consulting services
- Digital customer experience services
- Digital supply chain transformation services
- Sustainability and decarbonization services
- Blockchain services

Digital Business Consulting Services

Consulting service providers have now modified their pandemic-specific offerings to help clients remain sustainable and capture new opportunities that arose during the crisis. They offer services such as digital strategy design, organizational change management (OCM), collaboration tools, digital culture consulting, process automation and omnichannel experience, along with support for digitalizing the supply chain and maintaining cash flow.

To achieve this and accelerate digital transformations, providers are adopting accelerators such as DevOps and DevSecOps methodologies for agility and security, and application programming interfaces (APIs) to boost efficiency and facilitate innovation. ISG observes that more consulting players are building greater capabilities in AI, machine learning, analytics, security, IoT, design thinking and prototyping to support clients in their digital transformations. Other services include benchmarking, digital maturity assessments and strategic research around market dynamics. Supply chain design, supply chain consulting, supply chain analytics, predictive analytics and related technologies such as blockchain and IoT are in high demand among clients.

Digital Customer Experience Services

With many businesses moving to online channels, service providers have been nimble and agile while building these applications for their clients in a shorter time. Such customer experience services have helped businesses to reach their clients and sustain day-to-day operations in a digital manner. The increased adoption of digital technologies has led to a significant surge in cloud-based implementations. Many providers have deployed customer experience services built on hyperscalers. With a continued focus on customer experience services, there has been a greater emphasis on building direct-to-consumer strategies and applications around them. With many distributors facing challenges in continuing with the physical workplace environment due to public safety precautions, businesses have built direct-to-consumer applications wherein services are directly delivered to consumers through digital channels.

Digital Supply Chain Transformation Services

Supply chain modernization is a central focus across industries in the U.S. To drive growth and business innovation, supply chains must be agile enough to cope with disruptions. This was made clear over the course of global events such as pandemic, Brexit and rising political unrest, as agile supply chains served enterprises by catalyzing new business opportunities in a uber responsive and scalable manner. A rigid or slow supply chain can have the opposite effect, slowing down or even running a business' ability to deliver a strong customer experience into the ground. Advances in supply chain related systems, services and technologies, together with more efficient network orchestration and network capacity, have the potential to solve seemingly uncompromising business problems. Areas where there have been promising advances include network capacity optimization, digital twins, orchestration of data across systems, AI and machine learning, and ethical sourcing.

Sustainability And Decarbonization Services

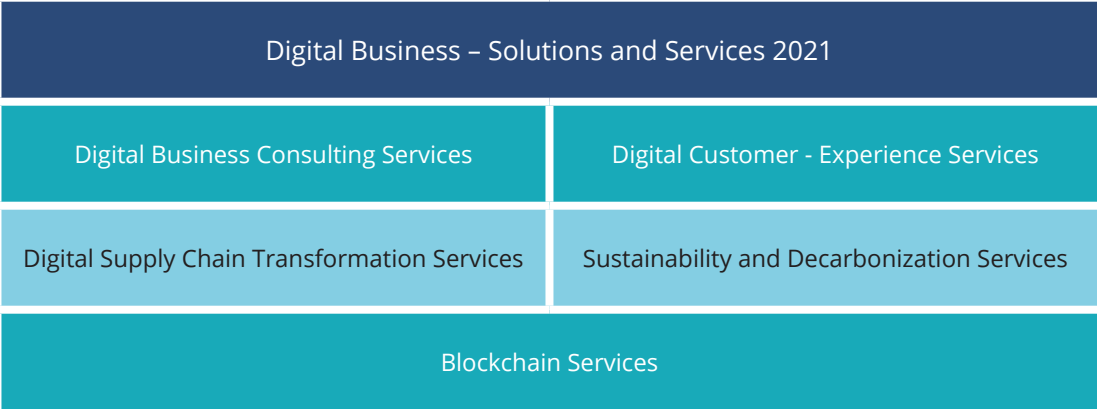
Service providers have specific offerings to help clients in this segment. These include assessing and measuring carbon emissions, identifying aspects/areas where there could be possible reduction/exclusion of carbon footprint, and using digital technologies to strategize and plan decarbonization across business units. Some enterprises are also targeting to achieve circular economy leading to zero waste and to create sustainable supply chains for specific industries.

Blockchain Services

While there is a high dependency on the underlying infrastructure requirements and the complexity of various components working together for a successful blockchain implementation, there have been certain specific areas where there is traction for blockchain. The adoption of blockchain has gradually increased this year, along with many early blockchain initiatives and use cases ranging from proofs-of-concept (PoCs) to pilot and production stages. Based on their qualifications and expertise, prominent platforms in this space are Hyperledger Fabric, Ethereum and R3 Corda. The growth of blockchain services in the U.S demonstrates enterprise readiness and is moving beyond the hype growth phase. The technology is continuing to witness cross-industry adoption, led by many new use cases and application areas for blockchain such as fraud management, counterfeit management, identity management, capital markets solutions and industry-specific use cases such as supply chain solutions for pharmaceuticals, energy management and sustainability.

Introduction

Simplified Illustration



Source: ISG 2021

Definition

The COVID-19 pandemic has accelerated adoption of digital tools and transformation services around the world and led to a surge in new digital transformation initiatives. Many of these initiatives have helped businesses survive and thrive; hence, digital transformation has become the pathway to success for businesses across all industries. The use of information technology to change the customer journey, improve business agility and deliver digital products has helped businesses across all processes, including sales, trading, production, supply chain, product design and human resource management among others, to deliver real bottom-line benefits and has enabled them to maintain the client experience during the pandemic.

Over the past year and a half, many businesses have digitized their customer experience to continue supporting their clients, specifically in industries where brick-and-mortar stores remained inaccessible due

Definition (cont.)

to the COVID-19 pandemic. While some businesses moved their customer journeys to online channels, many have leveraged innovative services such as the use of multiple emerging technologies to deliver better customer experiences by moving from generation 1 customer experience (online channels) to generation 2 customer experience (innovative services).

One of the most disrupted segments during the pandemic has been the supply chain. Its complexity emphasizes the fact that we live in a globally connected and highly interdependent world. The digitalization of the supply chain also brings in the aspect of the resilient supply chain. With the expanding technology and infrastructure footprint as a result of increased digitalization, it is imperative for organizations to embrace sustainability goals for a greener and more livable planet.

Scope of the Report

This ISG Provider Lens™ study is focused on identifying the service providers that can support clients in these capabilities. Digital-ready service providers understand the full scope of digital services to provide constant innovation for improving user experiences, accelerating business delivery and incorporating intelligent solutions. They partner with leading technology vendors and can articulate the use of cognitive computing and learning systems to digitize any enterprise client.

The ISG Provider Lens™ study offers IT decision-makers the following:

- Transparency on the strengths and areas for improvement of relevant providers
- A differentiated positioning of providers by segment
- A perspective on different markets, including the U.S., the U.K., Germany, Nordics, Brazil, Australia

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.

Provider Classifications

The provider position reflects the suitability of IT providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between US\$20 million and US\$999 million with central headquarters in the respective country, usually privately owned.
- **Large Accounts:** Multinational companies with 5,000 or more employees or revenue above US\$1 billion, with activities worldwide and globally distributed decision-making structures.

Provider Classifications

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly.

Leader

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

Product Challenger

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Market Challenger

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

Contender

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/ services and follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Provider Classifications (cont.)

Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star. Number of providers in each quadrant: ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

Rising Star

Rising Stars have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not In

The service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

Digital Business - Solutions and Services - Quadrant Provider Listing 1 of 4

	Digital Business Consulting Services	Digital Customer - Experience Services	Digital Supply Chain Transformation Services	Blockchain Services	Sustainability and Decarbonization Services
Accenture	● Leader	● Leader	● Leader	● Leader	● Leader
Atos	● Product Challenger	● Product Challenger	● Product Challenger	● Product Challenger	● Product Challenger
Bain & Co.	● Product Challenger	● Not in	● Not in	● Not in	● Not in
BCG	● Leader	● Not in	● Not in	● Not in	● Product Challenger
Birlasoft	● Product Challenger	● Product Challenger	● Product Challenger	● Product Challenger	● Not in
Bridgei2i	● Contender	● Contender	● Product Challenger	● Not in	● Not in
Capgemini	● Leader	● Product Challenger	● Product Challenger	● Product Challenger	● Product Challenger
Coforge	● Not in	● Product Challenger	● Not in	● Product Challenger	● Not in
Cognizant	● Leader	● Leader	● Leader	● Leader	● Not in
CSS Corp	● Not in	● Contender	● Not in	● Not in	● Not in
Cybage	● Not in	● Product Challenger	● Product Challenger	● Not in	● Not in
Deloitte	● Leader	● Market Challenger	● Market Challenger	● Product Challenger	● Product Challenger

Digital Business - Solutions and Services - Quadrant Provider Listing 2 of 4

	Digital Business Consulting Services	Digital Customer - Experience Services	Digital Supply Chain Transformation Services	Blockchain Services	Sustainability and Decarbonization Services
DXC	● Product Challenger	● Product Challenger	● Product Challenger	● Contender	● Not in
Ecovadis	● Not in	● Not in	● Not in	● Not in	● Contender
einfochips	● Contender	● Not in	● Contender	● Not in	● Not in
ENGIE	● Not in	● Not in	● Not in	● Not in	● Contender
EY	● Product Challenger	● Not in	● Product Challenger	● Leader	● Contender
GEP	● Not in	● Not in	● Leader	● Not in	● Not in
Group 50 Consulting	● Not in	● Not in	● Contender	● Not in	● Not in
Guidehouse	● Not in	● Not in	● Not in	● Not in	● Contender
HCL	● Leader	● Leader	● Leader	● Leader	● Leader
Hexaware	● Not in	● Leader	● Not in	● Not in	● Not in
HGS	● Not in	● Product Challenger	● Not in	● Not in	● Not in
IBM	● Leader	● Leader	● Leader	● Leader	● Leader

Digital Business - Solutions and Services - Quadrant Provider Listing 3 of 4

	Digital Business Consulting Services	Digital Customer - Experience Services	Digital Supply Chain Transformation Services	Blockchain Services	Sustainability and Decarbonization Services
Infosys	● Product Challenger	● Leader	● Leader	● Leader	● Product Challenger
Innominds	● Not in	● Not in	● Not in	● Contender	● Not in
KPMG	● Market Challenger	● Not in	● Not in	● Not in	● Contender
LTI	● Leader	● Leader	● Rising Star	● Rising Star	● Not in
McKinsey	● Product Challenger	● Not in	● Not in	● Not in	● Leader
Mindtree	● Product Challenger	● Leader	● Product Challenger	● Product Challenger	● Contender
Mphasis	● Product Challenger	● Product Challenger	● Contender	● Contender	● Not in
NTT DATA	● Not in	● Not in	● Product Challenger	● Product Challenger	● Not in
Persistent	● Contender	● Market Challenger	● Not in	● Contender	● Not in
Publicis Sapient	● Not in	● Leader	● Not in	● Not in	● Not in
PWC	● Leader	● Not in	● Market Challenger	● Not in	● Product Challenger
Siemens	● Product Challenger	● Product Challenger	● Not in	● Not in	● Product Challenger

Digital Business - Solutions and Services - Quadrant Provider Listing 4 of 4

	Digital Business Consulting Services	Digital Customer - Experience Services	Digital Supply Chain Transformation Services	Blockchain Services	Sustainability and Decarbonization Services
SLK Software	● Contender	● Product Challenger	● Product Challenger	● Contender	● Not in
Softtek	● Not in	● Not in	● Not in	● Contender	● Not in
Stefanini	● Not in	● Product Challenger	● Not in	● Not in	● Not in
TCS	● Product Challenger	● Leader	● Leader	● Product Challenger	● Not in
Tech Mahindra	● Product Challenger	● Leader	● Product Challenger	● Leader	● Not in
Trianz	● Product Challenger	● Not in	● Not in	● Not in	● Not in
T-Systems	● Contender	● Not in	● Not in	● Product Challenger	● Product Challenger
UST	● Rising Star	● Product Challenger	● Contender	● Product Challenger	● Not in
Visionet	● Not in	● Contender	● Not in	● Not in	● Not in
Vuram	● Contender	● Contender	● Not in	● Not in	● Not in
Wipro	● Leader	● Leader	● Leader	● Leader	● Leader
Zensar	● Contender	● Rising Star	● Leader	● Product Challenger	● Not in



Digital Business - Solutions and Services Quadrants

ENTERPRISE CONTEXT

Digital Business Consulting Services

In this quadrant report, ISG evaluates providers offering digital business consulting services, with the ability to advise clients on the different facets of the digital journey, including strategy, design, data, technology, organizational change management, operations, digital culture and innovation.

In the report, ISG defines the current positioning of players in digital business consulting service in the U.S., with a comprehensive overview of the market's competitive landscape. ISG observes that the U.S. is a mature market for consulting. The industries that are primarily adopting digital business consulting in the U.S. are retail, financial services, technology, media and telecommunication, and the public sector.

Enterprises across industries have been investing in digital transformation to reimagine their business models, deliver unique experiences and improve efficiencies. Business agility, ability to change and technology adoption are now central to the new normal. As customers transition toward more agile practices, there is a need to start thinking in terms of products, rather than projects, to reflect the evolving feature sets and ongoing developments throughout a lifecycle, as opposed to a one-time delivery.

The following roles can use this report to identify and evaluate different service providers :

Chief information officers (CIOs) should read this report to understand the relative positioning and capabilities of providers, which can help them effectively plan and improve the reliability and availability of their digital transformation initiatives. The report also highlights service providers' technical and integration capabilities and their strategic partnerships.

Chief strategy officers (CSOs), through this report, will gain knowledge on providers' product portfolio capabilities, which, in turn, will enable streamlined workflow for enterprises and enhanced functionality.

Chief technology officers (CTO) should read this report to understand how digital services providers undertake transformation initiatives and how they perform when compared with each other.

DIGITAL BUSINESS CONSULTING SERVICES

Definition

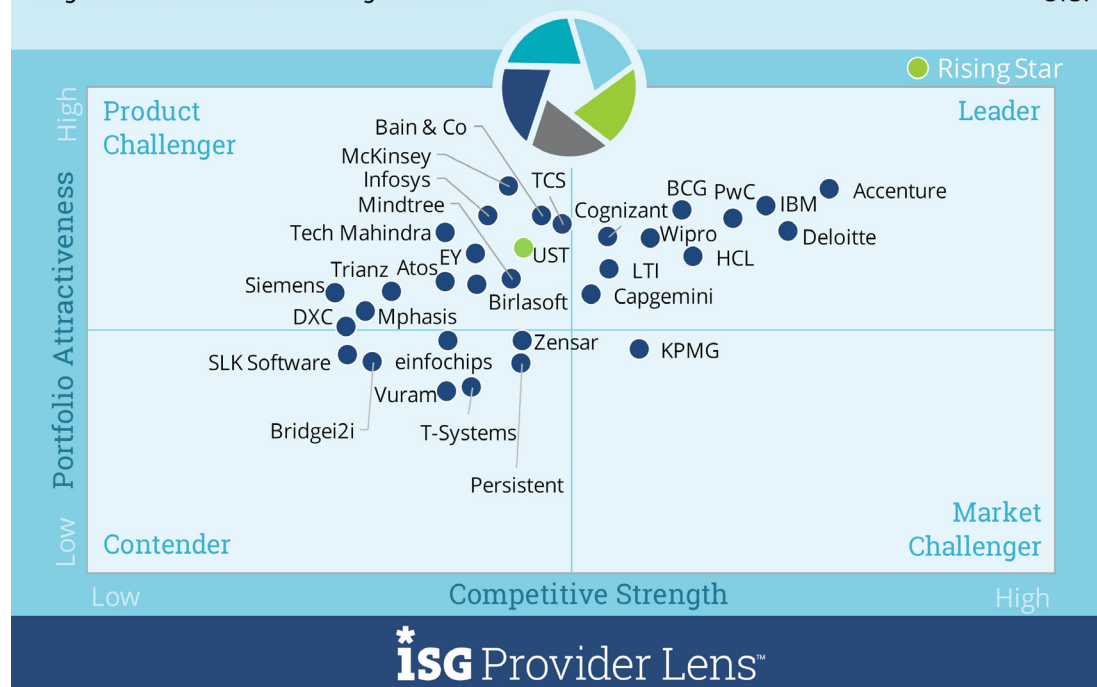
The digital business consulting services quadrant assesses the provider's capability to advise clients on the different facets of the digital journey, including strategy, design, data, technology, organizational change management, operations, digital culture and innovation.

Digital business consulting includes services provided to enterprises across customer and employee journeys, strategy and operations of digital business. These services help enterprises build new business models by capitalizing the existing capabilities across market opportunities. The services provided should create significant benefits for the client and drive growth. Providers in this space should be able to help enterprises transform and optimize their operational environments through research, benchmarking, advisory and consulting with a focus on information technology, business process transformation, program management services and organizational change management.

The participating companies should be capable of helping their clients through the digital journey, from conceptualizing the vision to delivering the actions needed for the transformation across different industries.

Digital Business - Solutions and Services Digital Business Consulting Services

2021
U.S.



Source: ISG Research 2021

DIGITAL BUSINESS CONSULTING SERVICES

Eligibility Criteria

- Offer one or more of the consulting services across the digital journey
- Help clients formulate their digital roadmap and build the digital strategy in the short and long term
- Offer advice and guidance on process optimization to deliver tangible benefits
- Manage a geographically dispersed workforce for its service across geographies

Observations

For most enterprises in the U.S., the key priority during the COVID-19 pandemic was to ensure survival by protecting their cash flows, people, process and supply chains. These priorities will continue to shift once the pandemic is under control. The goals have shifted from survival to enhancing operational efficiency, business model transformation for driving greater agility, improving resilience to deal with rapidly changing business environments, and making their capabilities and culture more digital native. In addition to the use of digital technologies, companies should note that their interaction with customers, employees and partners is pivotal for staying competitive and enabling digital transformation. Focused on business model transformation and operational efficiency, these projects have started gaining strong momentum as organizations have realized that improvements in productivity and customer engagement have become a major need of the hour, especially while implementing the work-from-home model across the enterprise.

Consulting service providers have modified their pandemic-specific offerings to help clients sustain themselves and capture new opportunities that arose during the crisis. They are offering services such as digital strategy design, organizational change management (OCM), collaboration tools, business model transformation, digital product and service innovation, digitization of operations, digital strategy and digital experience strategy, bringing in both customer and employee experience to remain competitive.

DIGITAL BUSINESS CONSULTING SERVICES

Observations (cont.)

As the consulting service industry is highly people centric, providers are investing heavily in developing in-house tools, accelerators and other intellectual property to differentiate themselves. They have also started focusing on enhancing their partner ecosystems to integrate more solutions and services for clients.

Major consulting service providers have been increasingly involved in acquisitions in recent times. Since 2020, there were more than 35 such activities, of which more than half were aimed to bring in the scale and depth of digital service offerings and increase the count of experienced digital consultants to meet the growing demands of clients. Data analytics, cloud and cybersecurity were the largest focus areas of investments, given that they are the core enablers of digital transformation. ISG also observes a greater number of consulting players building their capabilities in AI and machine learning, analytics, security, IoT, design thinking and prototyping to support clients in their digital transformation journeys. They are also offering benchmarking, digital maturity assessments and strategic research around market dynamics.

Digital experience strategy consulting services will continue to dominate, whereas digitization of operations and the development of more digital products and services for newer revenue streams will experience accelerated growth once the pandemic situation subsides.

Most leaders in the quadrant have the capability to support large players in their digital transformation journeys and assist small and midsize companies to remain competitive and operational. More than 50 providers have participated in this year's assessment, out of which 32 were qualified, with 10 identified as Leaders and one as a Rising Star.

- **Accenture** acquired Callisto Integration, Byte Prophecy, Kates Kesler and Sentilis among others to enhance its offerings across design, digital, strategy, technology and industry-specific consulting areas.
- **BCG** acquired companies such as The Simulation Group, Kernel Analytics, AllofUS, Inverto and BrightHouse to expand its capabilities across digital twins, AI and analytics, data science, design consultancy and the digital supply chain.
- **Capgemini's** Invent accelerates the process of turning ideas into prototypes and scalable real-world solutions by leveraging the full business and technology expertise of the Capgemini Group to quickly implement and scale using agile methods.

DIGITAL BUSINESS CONSULTING SERVICES

Observations (cont.)

- **Cognizant** is enhancing its consulting portfolio organically and inorganically through industry- and capability-specific acquisitions to gain more strategic accounts.
- **Deloitte's** Greenhouse Labs are specifically designed to bring Deloitte and client teams together to accelerate decision making and deliver faster, better outcomes to clients.
- **HCL** combines a traditional top-down business best practices approach with a bottom-up data insights-driven methodology to help clients take informed decisions and achieve enhanced levels of performance and customer satisfaction.
- **IBM** translated its inventive process into IBM Garage™, which merges design thinking with labs and rapid prototyping capabilities.
- **LTI** has more than 15 in-house tools and solutions across various industries and functions to deliver digital transformation services at scale.
- **PwC** has robust capabilities for supply chain and process optimization. The company has designed plug-and-play solutions for these challenges by incorporating disruptive technologies to give clients a competitive edge and help strategize in deploying these solutions.
- **Wipro** offers industry advisory solutions for solving complex domain-specific challenges by bundling domain expertise, digital transformation know-how and innovative tech platform solutions for delivering true business outcomes.
- **UST** (Rising Star) offers a robust set of digital transformational platforms to enable digital continuous delivery. Its digital execution framework encompasses four levers, namely, sustainable strategy, human experience, technology and ecosystems.

ENTERPRISE CONTEXT

Digital Customer - Experience Services

In this quadrant report, ISG evaluates providers offering customer experience (CX) solutions and services, with the ability to deliver business model innovation and enable enterprises to build competitive differentiation in today's digital economy.

In the report, ISG lays out the current positioning of customer experience (CX) service players in the U.S., with a comprehensive overview of the market's competitive landscape. ISG observes a growing need among enterprises to harness the advantages of CX to increase brand awareness, customer satisfaction rates and customer retention rates.

By adopting CX services, enterprises are expecting to increase productivity, innovation and change management capabilities to keep pace with competitors' offerings. They also expect to increase revenue, and maintain margins, quality and level of operations.

Customers are looking toward providing a frictionless experience to users. With the number of digital channels increasing, there is a need to provide seamless experience across all channels. The focus is on providing an optimal digital experience to both customers and employees.

Companies are looking at artificial intelligence as the technology to empower every industry imaginable; the result is an increasing number of industries are moving toward digital systems strengthened with AI. It is noted that AI is already playing a pivotal role in industries such as healthcare, automotive, smart devices and apps, and will penetrate further into many other segments in the near future.

The following roles can use this report to identify and evaluate different service providers:

IT leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their businesses.

Digital transformation professionals should read this report to understand a provider's capability to deliver seamless omnichannel solutions, leveraging AI and analytics for superior CX. The report also gives insights into how the providers can be compared with one another.

Business strategy leaders, through this report, will gain knowledge on providers' product portfolio, which, in turn, will enable streamlined workflow for enterprises and enhanced functionality for agents.

DIGITAL CUSTOMER - EXPERIENCE SERVICES

Definition

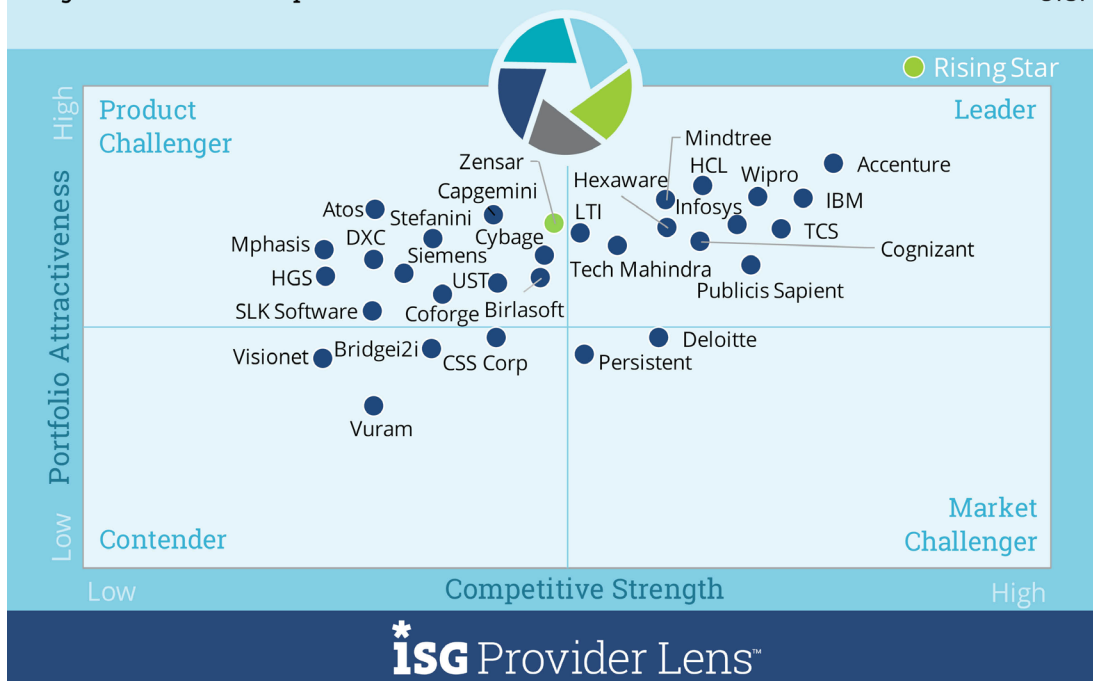
This quadrant assesses a service provider's and digital agency's ability to deliver business model innovation, enabling enterprises to build competitive differentiation in today's digital economy. Providers in this quadrant should be able to provide consulting and implementation services to improve the customer experience for their clients.

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

Digital customer experience indicates how digital companies design differentiation for the end customer journey. This quadrant involves conceiving customer journeys to create new business models and realizing the benefits using new technology and business ecosystems. Companies in this space design how an ideal customer (or persona) interacts with a product and a brand. The design process includes technology experts, sales, marketing and clients in a collaborative process. Leading firms use analytics to extract insights from user data.

Digital Business - Solutions and Services
Digital Customer - Experience Services

2021
U.S.



Source: ISG Research 2021

DIGITAL CUSTOMER - EXPERIENCE SERVICES

Definition (Cont.)

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 experience involves real-time monitoring and measuring of various touch points that drive the customer journey and the supporting technology and business processes. The customer experience 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

- Should focus on user experience to design apps, web and product/services using advanced technologies such as AI, machine learning and IoT
- Should focus on delivering an end-to-end customer journey to provide a differentiated value proposition
- Should offer advisory, integration and managed services for innovative customer experience services
- Must showcase deep industry and customer knowledge for business transformations, changing channels, business structures and cultural shift
- Must have established CX governance framework
- Should have the capability to deliver services using innovative technologies such as augmented reality and virtual reality

DIGITAL CUSTOMER - EXPERIENCE SERVICES

Observations

Projects that deliver digital customer experience services are becoming more complex, requiring providers to demonstrate expertise in diverse disciplines. These include design thinking, experience design strategy, mobility, data modernization and monetization, behavioral analytics, data science, personalization, security, and privacy among others. At the same time, the expanding partner ecosystem and increased adoption of multiple technologies that are reshaping the landscape of these services should be taken in consideration.

All leaders have robust offerings and delivery capabilities, a significant client base maturity, proven partnerships, innovation and investments in developing a portfolio of in-house intellectual property for delivering exponential business outcomes from these services. After analyzing provider responses, ISG observes the complexity of executing and delivering better digital customer experience services has increased when compared to the 2020 analysis. The market trend of demand for the 3 A's (automation, analytics and AI) continues to dominate as

a major requirement from enterprise users, and most capabilities are constantly innovated by providers. These digital frontrunners will continue to capitalize on the growing digital customer experience services market by offering hyper personalization, immersive experience through use of technologies such as augmented and virtual reality, data security and instant access to information.

Vendors offering customer experience services over the last 18 to 24 months have scaled up their acquisition strategies in the U.S., and most of the digital agencies that were acquired by IT service providers in recent years have studios and experience labs in the region to serve relevant brands. These acquisitions are building their internal competencies to strengthen their presence in clients' marketing departments. In addition, marketing agencies are strongly enhancing their digital and IT technology competencies. As most of the large U.S.-based companies are global, customer journey service providers that are prominent in this region are also relevant in others. Providers are expected to develop and deploy customer experience services for their clients in shorter timeframes and at a higher quality, helping them to capture opportunities arising across various sectors. They leverage digital platforms, tools and frameworks as part of their innovation strategy to deliver these services, with most of them offering contactless shopping with mobile-based deliveries.

DIGITAL CUSTOMER - EXPERIENCE SERVICES

Observations (cont.)

As in last year's analysis, ISG again forecasts higher adoption of technologies such IoT and augmented and virtual reality to further drive customer experience initiatives. Providers in this space have demonstrated use cases where they have successfully delivered an immersive experience to clients in the U.S. The adoption of IoT-enabled customer experience initiatives has also increased. Users are now able to offer a more personalized and connected experience, while assisting customers on their journeys across digital and physical environments.

Some of the observations on the leaders in this quadrant are as follows:

- **Accenture** continues to acquire companies to further strengthen its workforce and capabilities, transforming into an experience agency that can design, build and run customer experiences for growing brands and businesses.
- **Cognizant** applies an advisory-led, AI platform-based approach that covers data modernization and AI intellectual property, demonstrating its niche expertise.
- **HCL** brings in a comprehensive portfolio of nearly 15 customer experience tools, accelerators and other intellectual property to help clients in their customer experience transformation journeys. It has both technical expertise and business consulting capabilities to help clients develop, manage and implement digital transformations, from strategy to execution.
- **Hexaware** has a strong discipline for its human-centered approach to experiences. Its experience design pillars include qualitative research and analysis, ideation, concepting and product strategy, prototyping and validation, agile design and product improvement.
- **IBM** has a network of 57 IBM iX studios that facilitate increased collaboration and ideation between developers, researchers and designers with a digital strategy team to assist clients.
- **Infosys** leverages its innovation hubs, experience centers and delivery centers in the U.S. to cater to clients in different industries. It has a strong client base in the banking and financial services and manufacturing sectors.
- **LTI** continues to invest in building sophisticated capabilities across exponential technologies such as AI, machine learning, intelligent automation, IoT and advanced analytics.

DIGITAL CUSTOMER - EXPERIENCE SERVICES

Observations (cont.)

- **Mindtree** has a dedicated experience design practice that delivers both consulting and futuristic point of views around experience design for future technology. It has developed expertise in delivering large-scale digital transformation initiatives for clients.
- **Publicis Sapient**, in collaboration with Elder Research and Tquila, formed PS AI Labs. The data science consulting labs offers capabilities such as data science to extract insights, strategic data assessment, machine learning libraries, and other AI capabilities such as natural language processing (NLP).
- **TCS** offers a range of proprietary industry-specific digital customer experience frameworks, tools, models and accelerators to help clients achieve their digital experience vision, making it one of the leaders in this quadrant.
- **Tech Mahindra's** Personalization Framework (PerCX) offers end-to-end personalization capabilities and largely covers three broad areas hyper-personalization, experience testing and AI- and machine learning-driven recommendations engines.
- **Wipro's** customer experience service leverages design thinking, disruptive insights, future vision, experience roadmap, design and continuous improvement. Its focus is on reducing human dependency with self-service tools such as chatbots and conversational AI.
- **Zensar's** (Rising Star) Digital Experience Accelerator (DEXA), built on Adobe Experience Cloud, delivers a multimodal experience to accelerate customer engagement. Its plug-and-play architecture makes adoption simple for businesses.

RISING STAR: ZENSAR



Overview

Zensar has more than 10,000 associates in 25 offices (with 11 in the U.S.), delivering \$567 million in revenues, including \$425 million from the U.S. It employs 500 digital experts in the U.S. Zensar Digital Customer Experience services are provided through Zensar's Studios that embody experience, engineering and engagement. The services combine Zensar's internal capabilities with those of the acquisitions of Foolproof, Keystone and Indigo Slate. Zensar Studios combines three of the main strategic growth opportunities Zensar has identified, including experience, engineering, and data and analytics. Key capabilities include interactive experience strategy and design services, digital channel delivery services, digital optimization, and customer experience platforms and frameworks.



Strengths

Breadth of offerings: Zensar has an end-to-end offering that integrates delivery capabilities. The services offered are research, experience strategy, creative, digital channels, digital marketing, enterprise experience, post-sales experience, employee engagement, CRM services and platforms and frameworks to deliver digital customer experience services. It also augments its end-to-end offerings with many proprietary CX solutions.

Infinity CRO: Zensar's Infinity CRO matrix takes a holistic customer-centric approach to optimization. Zensar's approach helps clients to understand people and blend that with the wealth of data from tools and best practices to create market-leading experiences that contribute commercially from the get-go.

Multimodal experience platform: Zensar's Digital Experience Accelerator (DEXA) platform helps reduce churn and drives customer engagement for clients, resulting in more conversions. It allows customers to communicate with brands using multiple modes, either on a channel of their choice or via multiple channels simultaneously.

Ruptive human experience platform: Zensar's Ruptive is a leading human experience innovation platform. It was designed to ignite the creation of dynamic personas, unmistakably hard-to-forget experiences, and a culture of innovation from the outside in.



Caution

Zensar should expand its footprint, adding more clients across industries in the U.S. To become a leader, the company should add more digital professionals. It must also focus on other major industries such as telecom and media, followed by energy verticals, to increase its share.



2021 ISG Provider Lens™ Rising Star

Zensar offers a differentiated portfolio, leveraging as-a-service options for accelerated implementation and agility. It offers innovative and specialized customer experience services, supported by relevant and advanced technological accelerators.

ENTERPRISE CONTEXT

Digital Supply Chain Transformation Services

In this quadrant report, ISG evaluates providers offering digital supply chain transformation services, with the ability to deliver business model innovation and enable enterprises to build competitive differentiation in today's digital economy.

In the report, ISG defines the current positioning of digital supply chain management (SCM) players in the U.S., with a comprehensive overview of the market's competitive landscape. ISG observes a rising need among enterprises to harness the advantages of an automated digital supply chain to improve productivity, efficiency and visibility, with accurate demand planning, real-time inventory management and reliable fulfillment.

As companies are responding to changing consumer behavior due to COVID-19, they are focusing on improving visibility, collaboration, agility and optimization across the supply chain, end-to-end. The traditional linear supply chain model is transforming into digital supply networks (DSNs).

The following roles can use this report to identify and evaluate different service providers:

IT leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their businesses.

Digital transformation professionals should read this report to understand a provider's capability to deliver seamless omnichannel solutions, leveraging AI and analytics for supply chain. The report also gives insights into how the providers can be compared with one another.

Supply chain strategy leaders, through this report, will gain knowledge on providers' product portfolio, which, in turn, will enable streamlined workflow for enterprises and enhanced functionality.

DIGITAL SUPPLY CHAIN TRANSFORMATION SERVICES

Definition

The Digital Supply Chain Transformation Services quadrant assesses service providers that offer consulting, integration, support and managed services for the supply chain across planning, execution and insights. Providers in this should space leverage a comprehensive framework or methodology to use digital technologies such as IoT, AI, machine learning and predictive analytics across the supply chain to help clients optimize their entire ecosystem of suppliers, customers, employees and third-party partners to balance their business risk profiles.

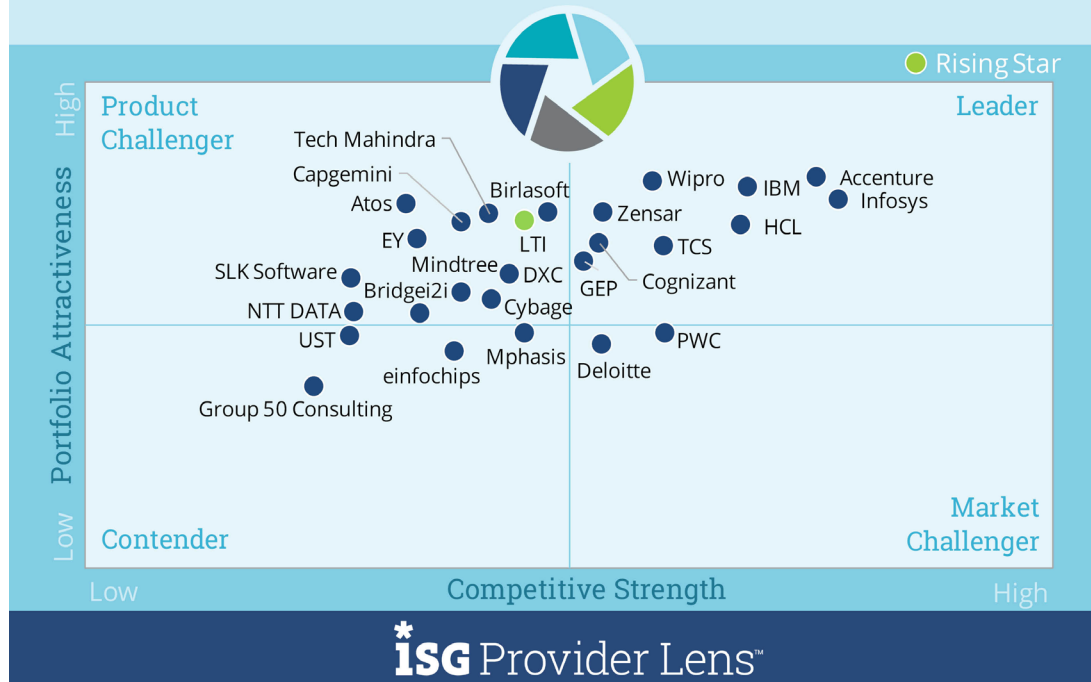
The digital supply chain transforms an enterprise's ability to anticipate and serve customer needs by managing the supply chain efficiently through digital technologies. It enables the enterprise to move from cost savings to monitoring inventory based on customer needs, optimize the supply chain network and create a predictive, self-adapting supply chain. To deliver these advanced features, providers use sensors, predictive analytics, digital twins, blockchain, AI and machine learning solutions, providing end-to-end, real-time visibility across

Digital Business - Solutions and Services

Digital Supply Chain Transformation Services

2021

U.S.



Source: ISG Research 2021

DIGITAL SUPPLY CHAIN TRANSFORMATION SERVICES

Definition (cont.)

its integrated and networked supply chain. Due to the COVID-19 pandemic, many organizations have moved toward the digital supply chain. Providers are also helping clients to not only plan, transform and execute the technology aspect of the entire supply chain, but also optimize operations across the supply chain. In a future where trade wars, political unrest, pandemics and the importance of having multiple production units and preference for domestic manufacturing may become norms, providers should re-architect their digital supply chain offerings to increase resilience and support for leveraging digital technologies and frameworks to enable minimal disruption and loss of economic value to their clients.

Service providers in this quadrant typically offer supply chain analytics, data management, demand and supply planning and forecasting as well as order management integrated with digital technologies to deliver substantial benefits to their clients.

Eligibility Criteria

- Ability to offer consulting and integration services for supply chains
- Focus on more than one specific industry across the country or region
- Should have executed advisory, consulting, or integration for the digital supply chain for one or more clients across the regions or for a specific geography
- Focus on one aspect of the digital supply chain or through end-to-end delivery of services by leveraging digital technologies
- Ability to integrate modern technologies such as IoT, blockchain, automation and deliver a better user experience (UX)
- Strong regional partner ecosystem of independent software vendors (ISVs) and other certified partners
- Offer resilient digital supply chain services supported by local governance, regulation and compliance requirements

DIGITAL SUPPLY CHAIN TRANSFORMATION SERVICES

Observations (cont.)

Supply chain modernization is a central point of discussion across industries in the U.S. To drive growth and business innovation, supply chains must be agile enough to cope with disruptions. This was made clear over the course of global events such as pandemic, Brexit and rising political unrest, as agile supply chains served enterprises by catalyzing new business opportunities in a uber responsive and scalable manner. A rigid or slow supply chain can have the opposite effect, slowing down or even running into the ground a business' ability to deliver a strong customer experience.

Advances in supply chain-related systems, services and technologies, together with more efficient network orchestration and network capacity, have the potential to solve seemingly uncompromising business problems. Areas where there have been promising advances include network capacity optimization, digital twins, orchestration of data across systems, AI, machine learning and ethical sourcing.

- **Network capacity** functionality will enable transportation managers to accurately identify network constraints and available capacity, plan accordingly, and when necessary, adjust with greater agility.
- **Digital twins** capabilities added to supply chain planning can enable users to better understand potential problems and business opportunities. They can proactively mitigate any challenges or volatility such as closed ports, partner issues or climate change impacts.
- **Predictive analytics** continues to get gain traction and prominence. The pandemic has forced organizations to change their operation strategies and diversify their supply chain instead of relying on one major production and supply chain hub. This has elevated the use of predictive analytics to tackle such external risks and has raised the need for a strong governance framework.
- **Orchestrating information** across the value chain will help streamline data and automated processes as well as facilitate ecosystem collaboration involving internal and external stakeholders. Data orchestration capabilities are in high demand, as data orchestration combines and manages siloed data from multiple sources to create a structured data lake.
- **AI, machine learning and blockchain** are revolutionizing supply chain operations. To leverage the potential of these technologies, providers should first help users by modernizing a cloud transportation management platform that can seamlessly integrate the modern technology stack. Blockchain will be a

DIGITAL SUPPLY CHAIN TRANSFORMATION SERVICES

Observations (cont.)

prerequisite to exchanging information between interested parties. Machine learning is used for providing recommendations for next-best action to deal with any scenarios that are known.

- **Data lake repository** is a requirement for every modern technology for rapid, real-time storage of operational and surrounding environmental sensor data.
- **Ethical sourcing** has become an imperative, and providers are expected to consult users on this aspect to help them achieve their environmental, social and governance (ESG) goals.

In addition to technology transformation, the digital supply chain requires stronger collaboration with partners and clients for simplifying and improving the customer experience. Providers use various methodologies and delivery methods such as Agile, DevSecOps, hyper personalization, digital supply chain twin, governance, design thinking and UX to help clients in their digital supply chain transformation.

Some of the observations on the leaders in this quadrant are as follows:

- **Accenture** has a strong focus on digital platforms to deliver customer-centric supply chains. Its digital supply chain platform is a combination of industry knowledge, core platforms, cloud, digital, IoT, AI, machine learning and security.
- **Cognizant** delivers supply chain management transformation by combining industry best practices with the latest supply chain and cloud solutions. It also offers planning to extract additional value from the customer's supply chain.
- **GEP's** comprehensive and integrated portfolio of consulting, proprietary platforms and managed services for the supply chain and purchasing is a key and unique selling point.
- **HCL** leverages its Demand Driven Supply Network (DDSN) framework to help enterprises become more customer centric in their transformation initiatives. This cross-enterprise enabling framework allows inter-locking of operations among channel partners.
- **IBM** has multiple solutions and implementations for blockchain-based supply chain transformations including food supply chain, digital identity for supplier onboarding and frictionless global trade.

DIGITAL SUPPLY CHAIN TRANSFORMATION SERVICES

Observations (cont.)

- **Infosys'** digital supply chain offering, Live Supply Chain, is a transformation framework operating with in-depth execution capabilities. The company delivers these services through an extensive partner ecosystem and continuous innovation.
- **TCS's** solutions in digital supply chain management cover supply chain maturity assessment, business process reengineering, change management and design and deployment of enterprise resource planning (ERP) and customer relationship management (CRM) functions.
- **Wipro's** Connected Supply Chain offering enables end-to-end visibility and a connected and seamless experience. Wipro Cognitive Supply Chain facilitates infrastructure, data analysis and intelligent decision-making using AI and machine learning technologies.
- **Zensar** provides its own supply chain platform and solution, Sierra, a web and radio frequency-based application test automation platform for warehouse management/order management systems (WM/OMS) with rich domain knowledge.
- **LTI** (Rising Star) nurtures a supply chain center of excellence that is focused exclusively on ideating and developing next-generation solutions for supply chain challenges.

ZENSAR



Overview

Zensar is a digital solutions and technology services company. It has more than 10,000 associates in 25 offices (with 11 in the U.S.), delivering \$567 million in revenues globally, including \$425 million from the U.S. Its digital supply chain unit encompasses in-house innovation engineers for custom developments and offers services such as: process consulting; product configuration; platform certification, platform architecture and engineering, customer development, end-to-end testing, custom algorithm slotting and rollout.



Strengths

Proprietary framework: Zensar leverages the Shape IT->Nail IT->Scale IT framework to arrive at the right strategy and solution for addressing business needs. It leverages cloud-native next-generation architecture and tools offering vertical and horizontal scalability. It has also developed the flexible foundation MDM layer to provide a golden source of data for fulfilment, store and order management.

Wide portfolio: Zensar's digital supply chain transformation portfolio includes strategy and consulting for building a new digital supply chain, warehouse management, building a customer data platform (CDP) and data management platform (DMP) enabling 360-degree view and delivery personalized experiences to consumers. It also offers build and rollout services to build a warehouse management system and order management system as part of a robust fulfilment strategy.

Deep domain expertise: Zensar's fulfilment practice is rooted in its deep domain expertise in implementing solutions for some of the world's largest retailers and multi-channel companies. It has expertise in building systems by using market-leading products or custom solutions that leverage existing investments.

Supply chain test data automation and management tool: Zensar provides its own supply chain platform and solution, Sierra, a web and RF application test automation platform for warehouse management and order management systems that is enhanced with rich domain knowledge.



Caution

Zensar focuses on leveraging multiple supply chain solution partner platforms for client deliverables. It can also expand its range of personalized and industry-specific solutions to serve clients from various sectors.



2021 ISG Provider Lens™ Leader

Zensar has strong business relationships and integrator partnerships with multiple leading product vendors, which enable it to offer comprehensive services for the digital supply chain.

ENTERPRISE CONTEXT

Sustainability & Decarbonization Services

In this quadrant report, ISG evaluates providers offering sustainability and decarbonization services with the ability to help clients in achieving carbon neutrality and improving their environmental, social and governance (ESG) performance.

ISG defines the current positioning of sustainability and decarbonization service players in the U.S., with a comprehensive overview of the market's competitive landscape. Enterprises are aligning their sustainable business innovation with the United Nation's 17 Sustainable Development Goals (SDGs) targeted to be achieved by 2030.

Companies are increasingly focusing on long-term objectives rather than short-term shareholder interest optimization. Utility firms, chemical and cement companies, and automakers were among the first to adopt sustainable services. The capital goods industry is catching up by designing its products and services to produce as little emissions as feasible, while also focusing on recycling. Shipping and aviation are expected to follow suit, although these are the industries with the most difficulties in implementing sustainability and decarbonization practices.

The following roles can use this report to identify and evaluate different service providers:

IT leaders should read this report to understand the relative positioning and capabilities of providers that can help them effectively plan and improve the reliability and availability of their businesses.

Digital transformation professionals should read this report to understand a provider's capability to deliver seamless sustainability and decarbonization solutions, leveraging digital capabilities. The report would also give insights into how the providers can be compared with one another.

Sustainability and strategy leaders, through this report, will gain knowledge on providers' product portfolio capabilities and ability to support enterprise ESG goals.

SUSTAINABILITY & DECARBONIZATION SERVICES

Definition

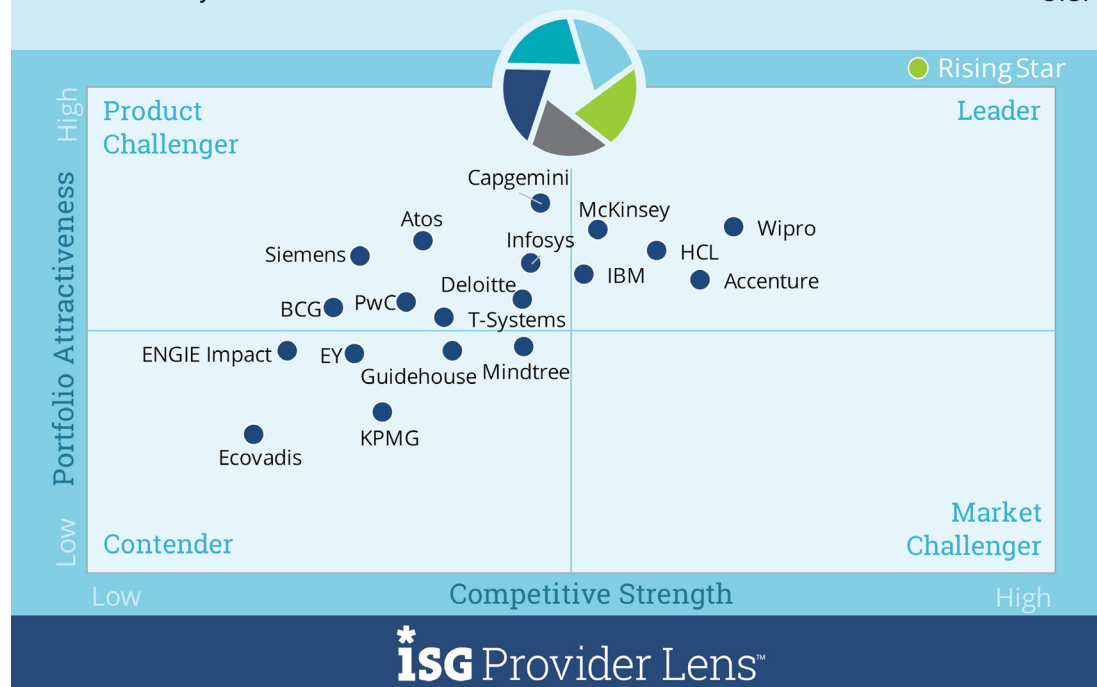
The Sustainability and Decarbonization Services quadrant assesses service providers' ability and capability to deliver sustainability services for their clients either as a standalone service or as a packaged offering for digital contracts.

Technology powering digital transformation generates significant carbon footprint, however digitalization is also a means to achieve sustainability and decarbonization. With world leaders taking a pledge for climate change, it is imperative for the businesses to achieve net neutrality in carbon emission and remain sustainable to achieve the dual impact of sustainability goals and benefits of digital transformation.

Sustainable business innovation across the enterprise is aligned with the United Nation's 17 Sustainable Development Goals (SDG) targeted to be achieved by 2030. The Climate Pledge signed on mitigating climate change, signed in 2016 in Paris by approximately 196 countries has steered organizations to focus on net zero carbon emission and 100 percent renewable energy. With these imperatives, services providers

Digital Business - Solutions and Services
Sustainability & Decarbonization Services

2021
U.S.



Source: ISG Research 2021

SUSTAINABILITY & DECARBONIZATION SERVICES

Definition (cont.)

are helping their clients in their sustainability efforts while addressing their digital transformation initiatives.

The providers in this quadrant should be able to help clients in achieving carbon neutrality and improve their environmental, social and governance (ESG) performance.

Eligibility Criteria

- Providers should have helped their clients in at least one of the SDG and ESG goals
- Should have solutions for businesses to achieve their sustainability goals
- Should offer sustainability services as a separate offering or as a part of their digital services
- Should have helped clients achieve or have a target to achieve sustainability in the region of assessment
- Should be able to measure and report revenue from sustainability services delivered for clients

SUSTAINABILITY & DECARBONIZATION SERVICES

Observations

Providers are covering all major dimensions of sustainability: environmental capital; social capital; human capital; business model; innovation; and lastly leadership. Governance is guiding force for constructing a sustainable and circular business model to create a better future, to solve problems that matters to people, humanize new technologies and craft products, services and systems that are sustainable, intuitive and desirable.

A robust governance framework and ensuring continuous involvement of key stakeholders for appropriate levels of monitoring and decision making is paramount to ensure the success of any sustainability and decarbonization program. Sustainability has started becoming a major part of growth strategy for enterprises and providers in the U.S. More than 80 percent of Fortune 500 companies now do some sort of sustainability reporting, which is significantly higher than a decade ago. There has been a significant rise in investments in sustainability-specific initiatives in the last 12 months, and this is expected to grow significantly in next 18 to 24 months. But the lack of knowledge about

how to envision the investment in ESG strategy, whether to focus on a better rating, brand reputation, offering sustainable products and services or winning the trust of investors, offers sustainability service providers the opportunity to assist users to form a formidable sustainability strategy. They can bring in their expertise and assets such as a certified workforce, tools, solutions and thought leadership.

Here are some of the major findings:

- **Sustainability investments are now mandatory requirement to sustain competition.** The pandemic has forced companies to increase their sustainability initiatives and investments. Sustainability strategies will grow in importance in the next three to five years. In the current scenario, companies in Europe are more involved in increasing sustainability spending compared to companies in U.S., and the expected impact of their investments goes beyond meeting regulatory compliance. There are four major objectives or expected gains that will provoke higher sustainability investment: increasing sales, enhancing brand reputation, offering sustainable products or services, and having better ratings for investor trust.
- **Leveraging emerging technologies will be key to building and scaling sustainability goals.** Many companies in the U.S. are still following traditional approaches such as using renewable energy and eco-friendly lights. When these are implemented with the latest technologies such as sensors, IoT,

SUSTAINABILITY & DECARBONIZATION SERVICES

Observations (cont.)

cloud, AI and analytics, efficiency will be enhanced. AI in particular is enabling users to go beyond the standard capabilities of data collection, reporting and analysis to gain clear and actionable insights. It can not only alert the users on incident management but also provide an update in real time about any potential area of improvement.

- **Digital transformation driving the ESG:** Process digitization continues to undergo many more developments, where technologies such as automation and analytics help enterprise to significantly increase their production levels. Digitization is an approach where technology is a key enabler to help the enterprise follow sustainability norms and goals even while it scales is overall production. The production chain supported by digital technologies is directly connected to objectives of ESG, which address environment, social corporate responsibility and sustainability governance.

Leading companies have now turned their focus on digital technologies to turn environmental challenges into major business opportunities. Data analytics and digital sustainable governance frameworks will continue to be the major areas of demand in the U.S., and sustainability services providers must enhance their capabilities in these areas to penetrate their share in this future growing market.

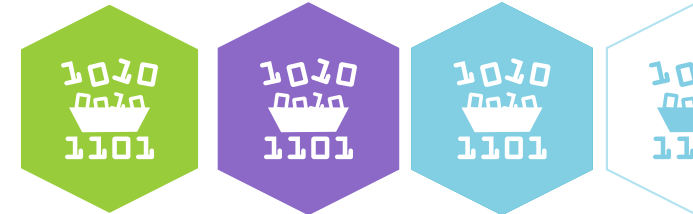
Some key observation about the leaders in this quadrant are as follows:

- **Accenture** brings in a holistic approach to deliver sustainability services to its clients. The approach encompasses strategy, design and execution to increase revenue, reduce cost, manage risk and enhance the brand, reputation and intangible assets.
- **HCL's** ESG services are evolving according to client requirements. Its offers Assess and Advise, which offers an assessment of factors driving ESG impact for clients along with capability maturity assessment based on sustainability parameters.
- **IBM's** Environmental Intelligence Suite offers mobile capabilities supported with intuitive dashboards, maps, charts, alerting and access to weather, earth observations, geospatial data and GPS for streamlined user experience.

SUSTAINABILITY & DECARBONIZATION SERVICES

Observations (cont.)

- **McKinsey** recently acquired Vivid Economics and Planetrics to accelerate its capabilities in sustainability strategy and help clients with insights on climate risk.
- **Wipro** address all dimensions of sustainability that includes environmental capital, social capital, human capital, business model, innovation, leadership and governance. Wipro provides domain-led, responsibly designed and technology-enabled sustainability solutions that are aligned to industries and delivered by best-in-class sustainability experts.



ENTERPRISE CONTEXT

Blockchain Services

In this quadrant report, ISG evaluates the changing dynamics of the blockchain services landscape and assesses service providers with competencies in consulting, designing, deploying and operating blockchain solutions and managed services. ISG highlights the current positioning of blockchain services players in the U.S., alongside presenting their relative strengths and capability gaps.

Blockchain has witnessed widespread industry adoption, with projects moving from proof-of-concept to deployment phases. Ethereum and Hyperledger Fabric are emerging as the blockchain frameworks of choice for enterprise blockchain initiatives. These initiatives are increasingly becoming intertwined with other emerging technologies, especially IoT and AI. Blockchain adoption is led by the financial services industry; however, credible use cases are emerging across almost all industries. During the ongoing COVID-19 pandemic, enterprises are actively adopting blockchain for supply chain operations.

The following roles can use this report to identify and evaluate different service providers:

IT leaders should read this report to understand the relative positioning and capabilities of providers, which can help them effectively plan and improve the reliability and availability of their businesses.

Innovation leaders should read this report to understand a provider's capability to deliver seamless solutions with blockchain, AI and analytics. The report also gives insights into how the providers can be compared with one another.

Business strategy leaders, through this report, will gain knowledge of providers' product portfolio, which, in turn, will enable streamlined workflow for enterprises and enhanced functionality.

BLOCKCHAIN SERVICES

Definition

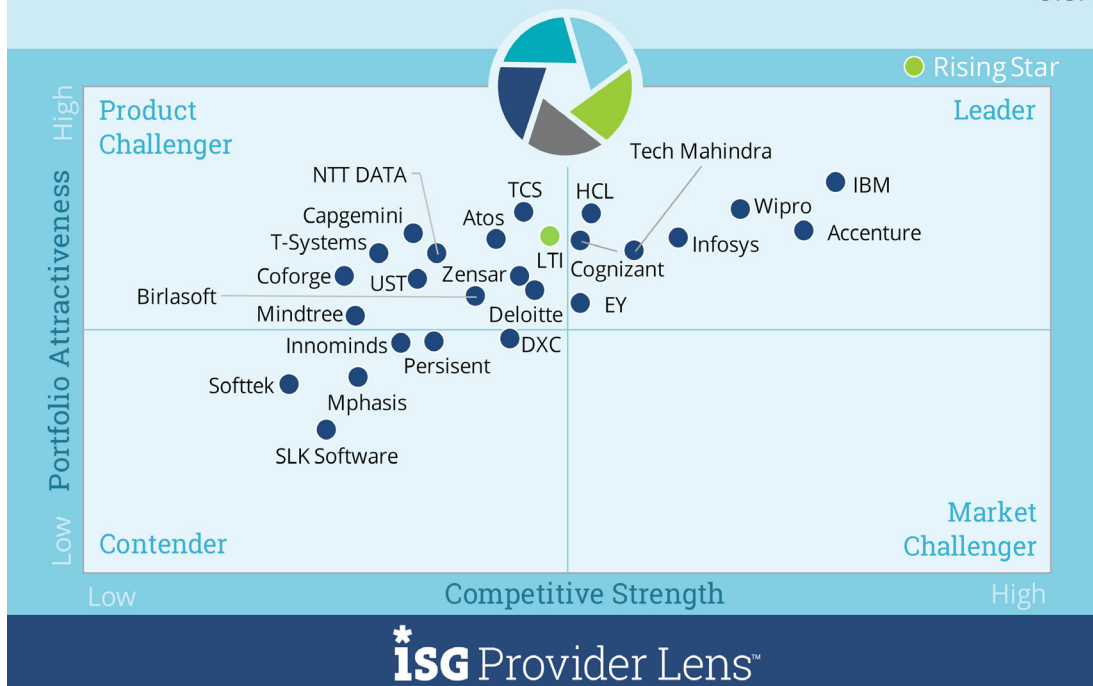
The Blockchain Services quadrant assesses a service provider's competencies in consulting, designing, deploying and operating blockchain solutions and providing services to manage these solutions.

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 irrespective of the corporation behind the platform. Every transaction is registered in multiple databases and is encrypted by a common hash code that changes every few minutes, forming a data blockchain in multiple databases. Rather than having one database as the single source of truth, blockchain provides multiple sources for validating a single transaction.

Blockchain has proven viability with numerous use cases from service providers. The banking, financial services and insurance (BFSI) sector uses the technology to share information, improve security and reduce transaction costs such as in money transfers. Viable use cases are also found in supply chain, tracking, payment services and document and contract processing.

Digital Business - Solutions and Services Blockchain Services

2021
U.S.



Source: ISG Research 2021

BLOCKCHAIN SERVICES

Eligibility Criteria

- Member of at least one blockchain consortium
- Offer consulting expertise to design viable solutions
- Demonstrate several blockchain use cases and provide a library that accelerates new deployments
- Backed by qualified and trained practitioners to deploy and operate the platform for customers
- Provide services with local expertise in the assessed region or country

Observations

Blockchain adoption has witnessed gradual increase this year, along with many early blockchain initiatives and use cases ranging from proof-of-concept (PoC) rollouts to those in pilot and production stage. Based on their qualifications and expertise in platforms, the prominent platforms in this space are Hyperledger Fabric, Ethereum and R3 Corda. The rise in blockchain services adoption in the U.S. is demonstrating enterprise readiness and that the technology is moving beyond the hype to growth phase. Blockchain continues to witness cross-industry adoption. There have been many new use cases and application areas such as fraud management, counterfeit management, ID management, capital markets solutions and industry-specific use cases such as supply chain solutions for pharmaceuticals, energy management, sustainability and others.

Based on responses shared by all vendors qualified for this quadrant, more than 1,000 engagements were tested, of which nearly 50 percent proved to be of value for clients, and nearly 20 percent of these use cases went into production. On average, a PoC exercise costs between \$150,000 and \$200,000. Projects take 24 to 32 weeks on average to go into production, and ROI is obtained in approximately 15 months. There has been a gradual shift in the U.S. blockchain service market, where the number of production-grade blockchain projects has increased nearly by 1.5 times.

BLOCKCHAIN SERVICES

Observations (cont.)

There is increased involvement of government, regulatory bodies and financial institutions for exploring potential benefits blockchain can bring in for governance and regulation applications. Private blockchains are a better fit for enterprise adoption due to several advantages in governance, scalability, data privacy, robust architecture and performance. Key blockchain platforms such as Hyperledger Fabric and Enterprise Ethereum are making larger contribution in building blockchain applications.

Together with AI, blockchain technology can deliver new levels of data access, trust and security. Several organizations are already experimenting and working with this combination of technologies, but initiatives largely remain in test mode. Adoption and use cases have increased across industry verticals, primarily the banking, financial services and insurance (BFSI) sector, which has an early mover advantage, followed by manufacturing, energy and utilities, retail and government. The top service providers are members of multiple consortia and have an established presence across industries, which

help clients to participate in a network where decentralized applications (Dapps) are deployed. Blockchain service providers are offering services to design and develop blockchain applications and manage them after deployment. Most of these service providers have established centers of excellence (CoEs) that are focused on innovation around blockchain applications.

All leaders have accelerated their investments in developing production-ready PoCs and blockchain networks, exploring ways in which blockchain can potentially be used further in governance and regulations. Leaders are looking to increase their contribution to blockchain solutions by working closely with consortia, technology players, government agencies and other institutions to develop more industry-specific and regulation-compliant applications, tools and accelerators.

Despite the above-mentioned encouraging signs, there are also some challenges that the market needs to overcome. These include lack of awareness of distributed ledger technology (DLT), lack of maturity in blockchain platforms and solutions, and lack of standards and regulations. The biggest growth limiters continue to be lack of success stories on the latest use cases and innovation, and quantifying ROI and total cost of ownership.

ISG recommends that enterprise users must consider those blockchain service providers that offers mature solutions, ecosystems and best practices across multiple use cases, most notably in smart

BLOCKCHAIN SERVICES

Observations (cont.)

contracts, supply chain, payments, traceability and identity and access management. Enterprise user must also give higher preference to capabilities such as building the business cases around blockchain implementation, and the vendor's demonstrated ability to support large networks of partners.

Out of the 26 providers that have qualified for this quadrant, eight have been identified as Leaders and one as a Rising Star.

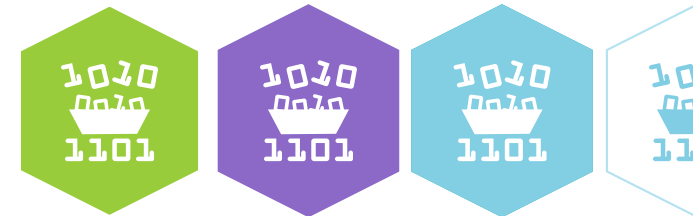
- **Accenture's** blockchain services include strategy assessment, hands-on training and rapid prototyping, solution design, build and implementation, assets and solutions, and ecosystem management. The firm is expanding its blockchain research and advisory, providing deep knowledge to conceive new business applications for the technology.
- **Cognizant** is focused on developing technical accelerators and business toolkits to address cross-industry use cases (e.g. multi-organization data sharing and workflows) and industry-specific use cases that are foundational in nature (e.g. tokenization).

- **EY** continues to commit its focus on blockchain services by additional investment of more than \$100 million in research, engineering and services for blockchain and crypto asset technology.
- **HCL** is developing more use cases under asset securitization and the financial service domain, which leverage both blockchain and machine learning capabilities in collaboration with its AI team. The company has already developed and tested use cases that utilize IoT sensors along with blockchain capabilities to integrate the digital and physical worlds.
- **IBM** has one of the most comprehensive sets of tools and accelerators for supporting its service offerings. Some of its platforms are IBM Blockchain Platform, IBM Blockchain Document Store, IBM Food Trust and IBM Blockchain World Wire.
- **Infosys** has a set of toolkits and frameworks to help businesses identify the right use cases and discover the network imperatives. These toolkits are utilized extensively in the design thinking workshop with network stakeholders.
- **Tech Mahindra** is working on a holistic framework called Block Ecosystem that comprises various levers, Block Studio, Block Engage, Block Talks, Block Geeks, Block Accelerate, Block Access and Block Value, which create industry-leading applications.

BLOCKCHAIN SERVICES

Observations (cont.)

- **Wipro's** uses its blockchain CoE to develop industry solutions, blockchain assets and frameworks and an IP portfolio. In the blockchain innovation lab, Wipro develops blockchain applications and constructs blockchain networks.
- **LTI** (Rising Star) continues to remain focused on creating ready-to-deploy solutions across domains such as supply chain, asset financing, customer profile management and payments.





Methodology

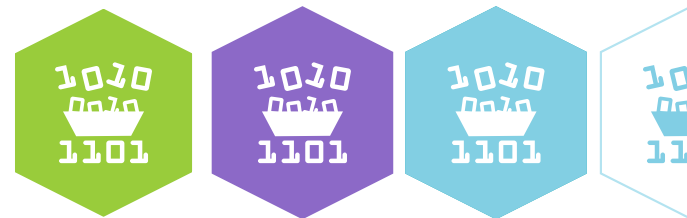


METHODOLOGY

The research study “ISG Provider Lens™ 2021 Digital Business – Solutions and Services, U.S.” analyzes the relevant software vendors/service providers in the Brazilian 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. Definition of 2021 Digital Business – Solutions and Services U.S. market
2. Use of questionnaire-based surveys of service providers/vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities & use cases
4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
5. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
6. Use of the following key evaluation criteria:
 - Strategy & 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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Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor. Now as a research director, principal analyst and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

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