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Life Sciences Digital Services

Clinical Development Digital Transformation Services

Global. 2021

Quadrant Report

A research report comparing provider strengths, challenges and competitive differentiators

December 2021

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HEXAWARE

About this Report

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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 September 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

Digital: The New Engine Behind The Life Sciences Business

As the world moved into year two of the COVID-19 pandemic, all segments of the life sciences industry showed dramatic strategy and process adaptations to the new normal. The adoption of digital technologies to facilitate the pace of change and deliver competitive-advantage and increased efficiencies provided the foundation for much of this new way of working. Significant mergers and acquisitions focused on enabling rapid scale-up of digital expertise and innovation. Challenges such as the need to rapidly implement telemedicine and enable direct-to-patient data collection while maintaining cybersecurity have put new constraints on technology providers and have increased demands for digital solutions. Added to this are challenges that, while not always specific to the life sciences industry, have a significant impact on business continuity and profitability. These include the implementation of digital clinical trials, dramatically increased levels of patient engagement, supply chain dysfunction and increased dependence on AI, machine learning (ML) and automation to enhance operations in MedTech, pharmacovigilance and regulatory affairs.

The Leaders in each of these quadrants were able to rapidly implement digital solutions as a result of their existing investments and strategies focused on developing digital offerings prior to the pandemic. Some of these firms leveraged solutions they were already providing

in other sectors to support the sudden shift to digital in the life sciences industry. Some providers that are purely life sciences service-oriented, such as the leading global contract research organization (CROs), or those that have developed substantial life science-specific offerings, were already deeply invested in digital roadmaps based on their own understanding of where the market would need to go to achieve necessary efficiencies and economies of scale. The pandemic provided the impetus for the industry to meet these Leaders at a point of delivery that might otherwise have taken several more years to attain.

The increased reliance on digital technologies is associated with other trends across the life sciences quadrants evaluated. There is an increased demand for cloud services in the industry to support the needs of a growing remote workforce and for additional computing power. Changing business needs have also elevated the demand for Software as a Service (SaaS) solutions that can rapidly provide digital power in expert domains and facilitate turning large volumes of data into business intelligence. In addition to investments in technology, services, tools and skillsets, interest and sophistication in the use of advanced analytics, AI and automation is rapidly rising to expert levels across

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the talent continuum, not just within IT. The new face of the customer is a digitally-savvy subject matter expert (SME), and providers that can exceed this customer's expectations are the Leaders in their respective quadrants. The quadrant trends are highlighted below.

Within the **Clinical Development** quadrant two major trends — digital clinical trials and the advantages of implementing advanced analytics — require both CROs and technology providers to offer standardized, but customizable, solutions that clients can rapidly implement. Leaders in this quadrant, such as Accenture, Capgemini, Cognizant, HCL, IQVIA, PPD, TCS and Wipro, also offer strong change management support and active measures of early and ongoing success. Hexaware is a Rising Star.

With the overarching goal of improving patient experience and outcomes, digital services providers in the **Patient Engagement** quadrant have been focusing on remote monitoring, using devices, wearables, sensors and smart pills as some of the direct-to-patient ways to help ensure compliance and patient retention. Leaders in this quadrant, which include Atos, Capgemini, Cognizant, HCL, Hexaware, IQVIA, PPD, TCS and Wipro demonstrate deep knowledge of digital enablement, regulatory requirements and the patient experience. Verizon is a Rising Star.

Well-documented supply chain and logistics challenges have raised the demand for business intelligence in the **Manufacturing Supply Chain quadrant.** The use of sensors to monitor real-time shipping data, combined with expertise in advanced analytics sets apart Leaders such as Accenture, Atos, Capgemini, Cognizant, HCL, TCS and Wipro. LTI is a Rising Star.

Collaborations between traditional IT providers and global CROs, often including representation from industry and academia, continue to grow as the leading providers in these areas leverage their combined expertise. The emphasis on improving patient outcomes by combining deep domain expertise with digital enablers is seen among all the Leaders in these quadrants. The accelerated pace of change demanded as a result of the COVID-19 pandemic has created so many new points of entry that Leaders are increasingly pursuing multiple models to expand their capacity for innovation.

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Introduction

Simplified illustration

Life Sciences Digital Services 2021		
Clinical Development Digital Transformation Services	Patient Engagement Digital Transformation Services	Manufacturing Supply Chain Digital Transformation Services

Source: ISG 2021

Definition

The life sciences industry is under increasing pressure to change. The COVID-19 pandemic and public demand for more effective outcomes are mandating the acceleration of actions needed to better meet care lifecycle requirements and build patient-centric business models. All segments of the industry are being compelled to comply with new regulations and to deal with emerging sources of competition, integrate waves of competitive mergers and acquisitions, and adapt to the needs of an aging population. The efforts required to deal successfully with each of these challenges are expensive. At the same time, consumers are increasingly expecting advanced and convenient digital service delivery. Life sciences companies are increasingly relying on innovation to stay apace with the rising demand for their services and mounting competitive pressures.

Definition (cont.)

As new business approaches take hold, regulatory hurdles and cost pressures will continue to be higher and more complex. The competitive landscape has never been more dynamic and global. In this context, innovation is imperative. Biopharma companies, CROs and other life sciences ancillary suppliers will face increasing pressures to expand and extend current investments. MedTech companies should continue to focus on the efficiency of the supply chain and recognize that innovation is the key to growth and survival.

Successful organizations in the life sciences industry have been meeting these challenges with the following:

- Driving targeted investments and constant cost control

- Using advanced technology and digital operating models as a platform for transformation

- Focusing on improved and innovative patient engagement

- Optimizing supply chain operations

Digital transformation helps address many of the current and anticipated industry challenges. In the life sciences industry, digital transformation services are already playing a key role across multiple areas to help accelerate clinical development. Digital transformation is also making fundamental changes to how pharmacovigilance and regulatory affairs activities are conducted. Furthermore, recent technology trends such as connectivity, including mobile enablement or advanced analytics, provide innovation opportunities for MedTech companies. As the impact of COVID-19 has shifted the concept of "customer" more directly onto the patient, life sciences enterprises are increasingly relying on digital transformation to conduct their operations, support regulatory obligations and help ensure business outcomes.

Definition (cont.)

Scope of the Report

While many organizations may initially pilot digital solutions with internal resources, the need for expertise, scale, innovation, flexibility and cost efficiency often point toward an outsourced solution. This study focuses on accelerated clinical development, patient engagement and manufacturing supply chain services.

Participating service providers are evaluated on how they are an extension of a client's technology organization and involved in creating blueprints, architecture frameworks and management processes. They are also measured on factors such as brand recognition in the markets under study, market reach and the number and quality of clients. They are evaluated on thresholds of annual revenue, assigned professionals (resources) and R&D investments.

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

- Transparency on the strengths and weaknesses of relevant providers

- A differentiated positioning of providers by segments

- Perspective on different markets, including global, the U.S. and EU

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 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 both products and services and a sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

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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.

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Life Sciences Digital Services - Quadrant Provider Listing 1 of 2

	Clinical Development Digital Transformation Services	Patient Engagement Digital Transformation Services	Manufacturing Supply Chain Digital Transformation Services
Accenture	● Leader	● Market Challenger	● Leader
Apexon	● Contender	● Product Challenger	● Not in
Atos	● Market Challenger	● Leader	● Leader
Birlasoft	● Contender	● Product Challenger	● Product Challenger
Capgemini	● Leader	● Leader	● Leader
CGI	● Not in	● Contender	● Contender
Cognizant	● Leader	● Leader	● Leader
Conduent	● Not in	● Product Challenger	● Not in
DXC	● Not in	● Market Challenger	● Product Challenger
Genpact	● Not in	● Product Challenger	● Market Challenger
Harman	● Market Challenger	● Market Challenger	● Contender
HCL	● Leader	● Leader	● Leader
Hexaware	● Rising Star	● Leader	● Not in
IBM	● Market Challenger	● Not in	● Not in

Life Sciences Digital Services - Quadrant Provider Listing 2 of 2

	Clinical Development Digital Transformation Services	Patient Engagement Digital Transformation Services	Manufacturing Supply Chain Digital Transformation Services
ICON	● Market Challenger	● Product Challenger	○ Not in
IQVIA	● Leader	● Leader	○ Not in
LTI	○ Not in	● Product Challenger	● Rising Star
Mphasis	○ Contender	○ Contender	● Product Challenger
NTT DATA	● Product Challenger	● Product Challenger	● Product Challenger
Persistent	○ Contender	● Product Challenger	● Product Challenger
PPD	● Leader	● Leader	○ Not in
Stefanini	○ Not in	● Product Challenger	● Product Challenger
TCS	● Leader	● Leader	● Leader
Tech Mahindra	● Product Challenger	● Product Challenger	● Product Challenger
Verizon	○ Not in	● Rising Star	○ Not in
Wipro	● Leader	● Leader	● Leader
Zensar	○ Not in	● Product Challenger	○ Contender

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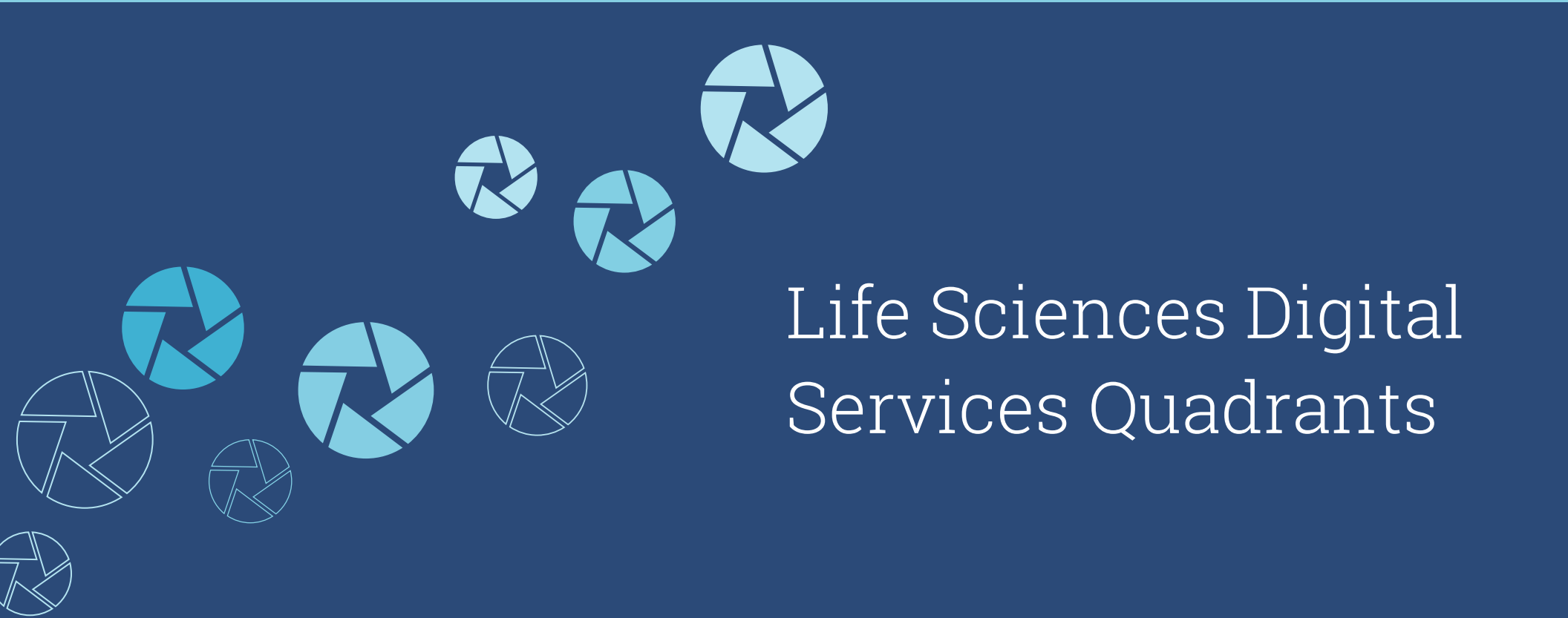
Life Sciences Digital Services Quadrants

ENTERPRISE CONTEXT

Clinical Development Digital Transformation Services — Global

This report is relevant to enterprises across industries and regions for evaluating providers of digital transformation services around clinical development.

In this quadrant report, ISG highlights the current market positioning of service providers that offer digital transformation services in the global clinical development space.

The rapid adoption of digital health technologies in clinical trials during the COVID-19 pandemic is a reflection of their important role in the quick development of vaccines and drugs; it is, concurrently, transforming the way clinicians engage with patients. The use of digital technologies in clinical trials is accompanied by several challenges, including the integration of data collected from patients and from onsite sources. Clinical development organizations are trying to collaborate with healthcare payers and providers to leverage historical and current data and develop new trial protocols to enable patients to participate from remote locations.

With the growing demand for health technologies, new personalized healthcare tools such as wearable devices and other sensor technologies are being embraced, globally. Consumers are increasingly using AI, virtual services, and home-based diagnostics. These tools are enabling patients to gain greater control over their healthcare, wherever possible. Although the benefits of these technologies are widely known, their adoption in the clinical development domain is still limited due to factors such as the need for transparent algorithms to meet drug development regulations, siloed data and data governance-related issues.

By harnessing digital technologies, clinical development will increasingly tap the benefits of these technologies to empower and supplement human judgment, free up clinician time and personalize care. The corresponding increased efficiency and effectiveness will deliver benefits to patients, as well as the life sciences organizations developing new therapies.

Life science leaders should read this report to understand the relative positioning and capabilities of providers, enabling the effective selection of digital services and solutions related to clinical development.

Start-up digital health innovators should read this report to understand the leading and emerging areas of investment, challenges faced by digital innovators and the key to longer-term success for innovators.

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Pharma and MedTech companies should read this report to develop a deeper understanding of end users and create business models that not only help maximize patient outcomes but also create value for key healthcare stakeholders.

Security and R&D leaders should read this report to gain a greater insight into the way service providers address the significant challenges of compliance and security, while maintaining a seamless experience for end users.

IT and digital transformation professionals should read this report to understand how providers of clinical development digital transformation fit into existing initiatives and how they can be compared with one another.

Sourcing, procurement and vendor management professionals should read this report to develop a better understanding of the current landscape of providers of clinical development digital transformation services.

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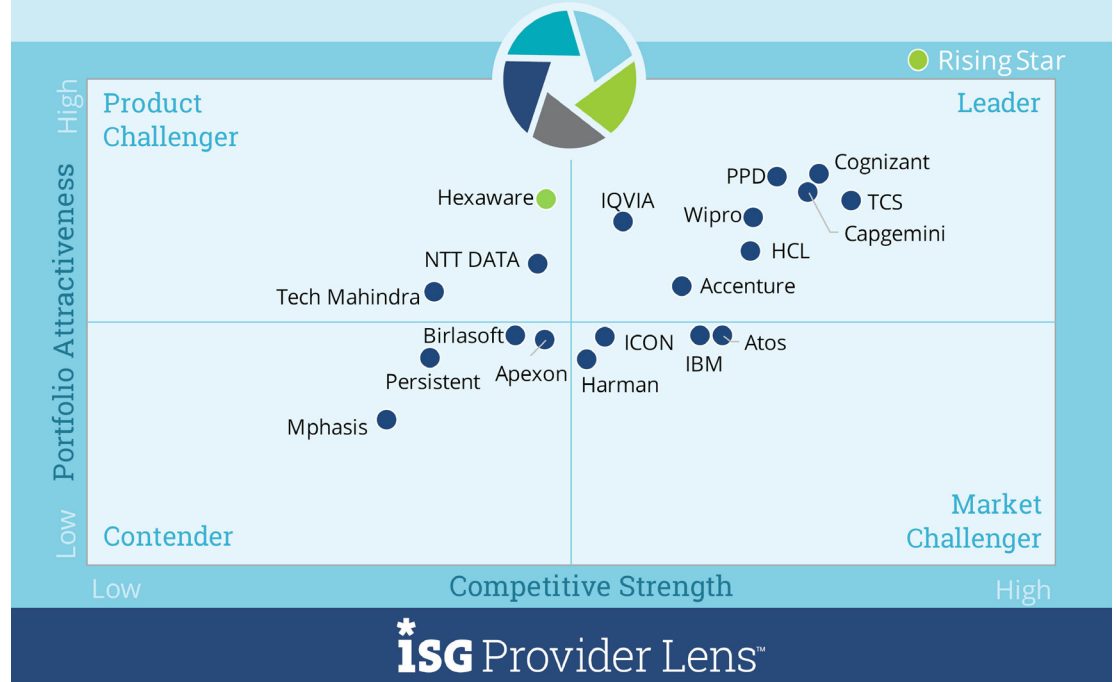# CLINICAL DEVELOPMENT DIGITAL TRANSFORMATION SERVICES

Definition

This quadrant assesses how service providers help biopharma companies hasten the process of developing and bringing products to the market. Clinical trials are expensive and have high failure rates. Life sciences companies must demonstrate the economic and clinical value (ECV) of potential products and constantly seek innovations and services to improve efficiency. As development moves into clinical trials, companies need to rapidly identify appropriate patients and monitor and manage the participant experience in an evolving landscape.

The ability to further support compliance checks, patient safety reporting and complex regulatory intelligence is in high demand. Digital services accelerate many of these processes. Artificial intelligence (AI) further influences all steps in clinical development by helping to access and analyze large data sets, thus driving the value of the data being collected.

Life Sciences Digital Services
Clinical Development Digital Transformation Services

2021
Global

Source: ISG Research 2021

CLINICAL DEVELOPMENT DIGITAL TRANSFORMATION SERVICES

Definition (cont.)

AI has been playing a crucial role in addressing the global challenge of COVID-19. It provides an irrefutable case for innovation and automation throughout the development lifecycle. In addition to escalating the development timelines for tests, vaccines and treatments, AI is providing a mechanism to manage and make robust decisions on the huge volume of data being collected. Service providers help companies align with the latest developments.

Service providers also improve the clinical design process with collaboration platforms. These improvements help engage participants in clinical trials with digital tools for enrollment and motivation management. Also, service providers help implement automation for clinical trials, including innovations such as AI in trial design, digital monitoring using predictive analytics and end-to-end automation for regulatory compliance and patient safety monitoring during clinical trials.

Eligibility Criteria

- Ability to offer alternatives to in-person interactions of researchers and participants such as telephone and internet-connected capabilities

- Established or emerging partnerships with clinical development technology and consulting firms

- Capability to support, integrate and modernize legacy systems

- Competencies in developing plans for deploying appropriate technologies and procedures

- Ability to support, scale and update technology tools and platforms

CLINICAL DEVELOPMENT DIGITAL TRANSFORMATION SERVICES

Observations

The past year has been one of the most dynamic in recent history for clinical development. Although the biopharma industry had conducted numerous pilots involving various digital solutions, mainstream clinical development processes saw little change as organizations are historically late adopters and are often constrained by real or potential regulatory hurdles. The reality of COVID-19 demanded a different way of conducting drug trials, and demanded that it be efficient, effective and rapidly implementable. Technology solutions, maximizing the power of AI, machine learning, automation and advanced analytics — powered and supported by cloud computing — provided the answer. Service providers and leading global CROs that were already deeply invested in digital transformation found they had a ready-made market in biopharma companies that needed to quickly get digital clinical trials up and running. Additional services, such as advanced analytics that turn large pools of unstructured data into business intelligence, and change management to ensure organizational uptake of new processes add significant value to underlying domain and technology expertise.

These demands, and the efficiencies produced by meeting them, are likely to stay relevant as the world returns to "normal." In fact, it's highly likely requirements will become increasingly complex and providers that can combine various types of expertise most effectively will accrue maximum benefits in this new market.

Key characteristics of Leaders in this market:

- **Accenture** continues its investment and innovations in its INTIENT™ platform, which provides an integrated digital solution across the clinical development space. Combining its longstanding engagement and expertise in clinical development with the INTIENT™ platform provides a powerful addition to Accenture's existing offerings.

- **Capgemini** continues to grow and enhance its clinical development solutions portfolio, following its merger with Altran. With offerings that support both traditional and decentralized trials, its solutions are highly customizable.

- **Cognizant** combines its significant expertise in the clinical development domain with hands-on consulting and technology experience to offer a compelling portfolio of solutions, focused on digital transformation.

CLINICAL DEVELOPMENT DIGITAL TRANSFORMATION SERVICES

Observations (cont.)

- **HCL** leverages its suite of core IT capabilities to deliver end-to-end clinical development solutions that cover both trial and operational needs. The company also collaborates extensively with platform and clinical development service providers to increase the value of its customized solutions.

- **IQVIA** brings decades of expertise in being a clinical development global leader to its Connected Intelligence, a unified platform that covers functions across the entire clinical development lifecycle, which it enhances with its deep knowledge of conducting decentralized clinical trials.

- **PPD**, as a leading global CRO, continues to leverage its deep domain expertise and its position as an innovator in the digital clinical trial space. An early adopter of automated solutions for enhancing development quality and efficiency, PPD now offers an integrated suite of cloud-based solutions.

- **TCS** brings its longstanding expertise around clinical development to bear on its innovative applications of automation in clinical development. Its dedicated innovation group is focused on opportunities to transform the development process.

- **Wipro's** product engineering expertise, along with its DICE (Digital Integrated Clinical Enterprise) platform to manage core functionalities of clinical trials and solutions for decentralized clinical trials deliver great flexibility for meeting changing client demands.

- As a Rising Star in this quadrant, **Hexaware** has the potential to achieve a future leadership position. It has invested in digital solutions to support multiple areas of clinical development and has a strategic vision to become a leading digital transformation partner for the life sciences industry.

ACCENTURE

Overview

Accenture, a professional services company, provides strategy and consulting, interactive, and technology and operations services worldwide. Accenture's deep engineering capabilities help companies to leverage digital technologies such as cloud, AI and 5G to transform the way they design, engineer and manufacture their products as well as embed sustainability. In FY 2021, the company generated revenue of approximately US $50.5 billion. The company was founded in 1989 and has grown to employ more than 624,000 people in 2021. Accenture has its headquarters in Dublin, Ireland.

Strengths

The INTIENT™ platform as a comprehensive and flexible solution: Accenture continues to expand INTIENT's capabilities with the goal of creating efficiencies across the entire biopharma lifecycle, from discovery through development and into commercialization. In addition to being scalable, the platform is highly customizable.

Integration with existing systems and external sources of data: The platform leverages systems, technologies and solutions clients have in place to minimize disruption and start-up investment. It also integrates data from external sources such as third-party providers and patient-generated information.

Focus on both quality and compliance: INTIENT's study data tabulation model (SDTM) engine converts data from multiple sources into standardized output, consistent with FDA requirements. It expedites the identification and resolution of data errors and inconsistencies.

Caution

As Accenture works to establish the balance between encouraging clients in the direction of cloud transformation, while providing a "plug-and-play" solution across the biopharma lifecycle, it will be critical to establish a well-defined focus for its INTIENT™ offering.

Showcasing additional real-life examples of INTIENT™ implementations will help Accenture illustrate the strength of this offering.

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With INTIENT™, Accenture is evolving a competitive mechanism for enabling rapid, cost-effective and customizable entry into digital technology for its biopharma clients.

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CAPGEMINI

Overview

Capgemini is a provider of consulting, technology and outsourcing services in North America, France, the U.K., Ireland and rest of Europe, Asia-Pacific and Latin America. With its merger with Altran and increased focus on supporting digital transformation for its clients, Capgemini has demonstrated its focus on making its life sciences business a priority. Headquartered in Paris, France, Capgemini is present in more than 50 countries and employs approximately 290,000 people.

Strengths

Well-structured and comprehensive support for drug development: Capgemini's continued leverage of capabilities acquired through its merger with Altran enhances its comprehensive clinical development solution portfolio. It offers end-to-end customizable solutions that support both traditional clinical operations needs while offering cutting edge support for decentralized clinical trials.

Deep life sciences expertise: A mix of consulting and solutioning services, based on strategic and operational clinical development domain expertise, paired with technology know-how enhances the ability to offer client-specific and efficient solutions.

Focus on leveraging data tools and cloud transformation: Capgemini's emphasis is on deriving full value from data-driven R&D by relying on AI techniques, creating hybrid solutions that make the most of existing data sources, and promoting cloud transformation.

Caution

While the ability to offer highly customized solutions is a plus, Capgemini should consider expanding its portfolio of standardized applications that enable rapid implementation.

The desire to fuel cloud transformation by leveraging existing platforms needs to be balanced against reliance on systems external to Capgemini.

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Capgemini continues to increase the strength and attractiveness of its portfolio of clinical development solutions as well as for multiple other areas in the R&D lifecycle.

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COGNIZANT

Overview

Cognizant, a professional services company, provides consulting, technology and outsourcing services in North America, Europe and globally. It has a strong position in traditional IT services and, in recent years, has been focusing on the digital transformation of its clients' core business processes. The company employs more than 318,000 people in 38 countries. Cognizant was founded in 1994 and is headquartered in Teaneck, New Jersey, U.S. It has a long history of addressing specific requirements of clients in the life sciences industry.

Strengths

Differentiated capabilities combined with deep industry expertise: Cognizant continues to enhance its recognized role as an innovator in clinical development by combining its significant domain expertise and large number of dedicated resources with its hands-on consulting and technology experience in this area.

Focus on digital transformation tempered by delivery on operational needs: With the strategic goal of enabling client digital transformation, Cognizant continues to invest in developing both innovative solutions and extensive partnerships

Significant investment in achieving the digital roadmap: Cognizant is committed to building capabilities through both organic and inorganic growth in the key areas of cloud migration, digital engineering, user experience and user interfaces. It has the critical mass in its life sciences practice to achieve these goals in the short-to-mid-term.

Caution

Cognizant has further opportunities to use AI and machine learning to enhance its offerings in advanced analytics.

Expanding specific offerings that integrate solutions across the development lifecycle would strengthen Cognizant's portfolio.

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Cognizant offers a compelling portfolio of solutions, domain expertise and technologies that support digital transformation of clinical development.

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HCL

Overview

HCL Technologies is a technology company that offers software, IT infrastructure and business process out-sourcing (BPO) services worldwide. The company also offers hybrid clouds, digital workplace and cloud native services, together with service integration and management. It was founded in 1976 and has its headquarters in Noida, India. HCL has more than 187,600 employees across 50 countries and, in recent years, has expanded its footprint in the life sciences industry.

Strengths

End-to-end suite of solutions covering the entire spectrum of clinical development: Solutions support clinical operations, study logistics, decentralized clinical trials and investigator and patient interactions, while being integrated with HCL's core infrastructure services, application development, R&D and engineering capabilities.

Leveraging the value of partnering with clinical development service and platform providers: In addition to strong partnerships with specialized clinical development platform providers, HCL has also engaged in consortium models with entities such as CROs and boutique clinical service providers. These collaborations enable the company to offer innovative, market-driven services.

Focus on strengthening domain expertise of delivery team: HCL's Life Sciences and Healthcare Academy helps ensure that delivery teams across consulting, technology and relationship resources have the requisite domain-specific knowledge.

Caution

HCL has opportunity to enhance its advanced analytics capabilities to help clients leverage the value of data sources.

The broad strategy of supporting digital trial enablement would benefit by clarifying the targeted goals.

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HCL offers a compelling mix of services, solutions and partnerships in support of a digital approach to conducting clinical development, with a high level of investment in innovation and quality.

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IQVIA

Overview

IQVIA is a global provider of advanced analytics, technology solutions and contract research services to the life sciences industry, primarily focused on clinical trials and associated laboratory and analytical services. Its Contract Sales & Medical Solutions segment provides healthcare provider and patient engagement services, and scientific strategy and medical affairs services. The company was founded in 1982 and has its headquarters in Durham, North Carolina, U.S. With approximately 77,000 employees, IQVIA has operations in more than 100 countries.

Strengths

Unified platform for supporting clinical, compliance and commercial needs: IQVIA's Connected Intelligence platform integrates healthcare data, advanced analytics and technology solutions with healthcare expertise to drive operational efficiencies and maximize the value of clinical data.

Broad and deep real-time experience in conducting decentralized clinical trials: The company is currently deploying innovative technologies to conduct multiple global decentralized trials in compliance with local regulations.

Leveraging cloud and AI to derive maximum value from multiple data sources: IQVIA offers a proprietary data cloud and AI capabilities combined with domain expertise to improve efficiencies and outcomes at multiple steps in the clinical development lifecycle.

Caution

As the use of decentralized clinical trials increasingly becomes the industry standard, IQVIA should be in a position to offer predefined use cases and solutions.

IQVIA's access to multiple sources of commercial and marketing data may need to be considered strategically to ensure stringent global regulatory and privacy considerations are maintained.

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IQVIA offers a comprehensive portfolio of solutions that support multiple aspects of the clinical development lifecycle, including strategic portfolio and protocol planning.

PPD

Overview

PPD is a global CRO, providing clinical development and laboratory services as well as patient-centric services for pharmaceutical, biotechnology, medical device, academic and government organizations. The company also provides laboratory services, comprising bioanalytical, biomarker, vaccine science, good manufacturing practice and central laboratory services. PPD was founded in 1986 and has its headquarters in Wilmington, North Carolina, U.S. PPD has more than 30,000 employees in 46 countries.

Caution

PPD has additional opportunity to leverage its data portfolio capabilities to further support an end-to-end advanced analytics offering.

Expanding external partnerships as the clinical development technology marketplace matures may provide PPD with additional advantages.

Strengths

Leadership role in implementing digital clinical trials combined with deep domain expertise: PPD, with its PPD Digital offering, has been an innovator in the digital clinical trial space. PPD already had programs in place for risk mitigation and trial continuation that it was able to rapidly leverage to support client strategy changes resulting from the COVID-19 pandemic.

Integrated suite of full-service offerings supported through ongoing investment: Investments in technologies to improve multiple services across the clinical development spectrum, including the cloud-based Preclarus data portfolio solution, combined with integrated lab operational and data platforms, support expanded flexibility, increased efficiencies, and offer customization for clients.

Vision for redefining the clinical site and the patient experience: PPD's extensive investment in site qualification and patient engagement modalities prior to the COVID-19 pandemic enables it to rapidly start and maintain enrollment in clinical trials.

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PPD has the global scale, depth and breadth of domain expertise to provide innovative and compliant clinical development support across a wide range of client needs.

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TCS

Overview

Tata Consultancy Services (TCS) provides IT and IT-enabled services worldwide. The company is headquartered in Mumbai, India, has more than 528,700 employees and serves numerous industries. TCS has prioritized investments in its life sciences portfolio and has seen strong growth in recent years. Its portfolio covers the entire spectrum of digital transformation — from strategy, design and implementation to managed application services.

Caution

TCS has the opportunity to define "plug-and-play" solutions that will enable it to support clients that are not in a position to implement broad-based solutions.

The need to become more site- and patient-centric, rather than data-centric, will be an area for driving greater efficiencies post-pandemic.

Strengths

ontinued innovation of the highly effective clinical trials platform: TCS Connected Clinical Trials™, a part of TCS ADD (Advanced Drug Development) suite of platforms, leverages AI and advanced analytics to provide an integrated means of managing multiple decentralized clinical trial functionalities, including patient and site engagement, operational management, supply management and regulatory support.

Innovative and effective use of automation delivers cost and productivity efficiencies: TCS ADD data management platform integrates data from multiple sources and provides support for medical coding, query resolution and document generation as a cloud-based offering that requires minimal training to implement.

Significant domain expertise enhanced by investment in a dedicated innovation group: TCS has a strong history of successful delivery to biopharma clients across the clinical development lifecycle. Its focus on innovation and customer centricity illustrates its commitment to providing best-in-class solutions.

2021 ISG Provider Lens™ Leader

TCS provides a high level of technology and domain expertise in the clinical development arena. Its focus on innovation and end-to-end solutions offers clients the means to implement strategies for conducting decentralized clinical trials.

WIPRO

Overview

Wipro is a global IT, consulting and business process services company. It operates through three segments: IT Services, IT Products and India State Run Enterprise Services (ISRE). The company's portfolio of services includes strategy, design, implementation, operational support, infrastructure and platform operation as well as process consulting. Wipro was founded in 1945 and has its headquarters in Bengaluru, India. The company employs more than 200,000 people across 55 countries.

Strengths

Powerful cloud-based and AI-enabled solution to support end-to-end development: The DICE (Digital Integrated Clinical Enterprise platform manages multiple core functionalities of clinical trials. Complemented by solutions for conducting decentralized clinical trials, this solution suite maximizes digital enablement.

Flexibility to support changing models of clinical development: Wipro's technology solutions are well positioned to offer a high level of flexibility to the evolving needs of the post-pandemic clinical development landscape.

Leveraging domain expertise with customizable product engineering know-how: Extensive knowledge of clinical operations, regulations and delivery enables Wipro to utilize its product engineering capabilities to deliver client-specific solutions.

Caution

Wipro's strengths in the platform/solutions realm offer the opportunity for the company to offer a broader range of strategic consulting clinical development support.

The balance between demand for customized solutions versus standard use cases is changing rapidly in the current marketplace. Wipro could benefit from promoting standard aspects of its platforms.

2021 ISG Provider Lens™ Leader

Wipro provides a compelling end-to-end set of solutions for the clinical development ecosystem. It has a deep understanding of the requirements of global clinical research and has developed innovative technology solutions to support those activities.

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RISING STAR: HEXAWARE

Overview

Hexaware is a global IT consulting provider with strong focus on cloud-based solutions. It offers application transformation management solutions, including its Cloudify Everything solution, application programming interfaces (APIs) and integration, delivery, application managed services, business intelligence and analytics services. Hexaware has shown significant growth in recent years, with particular focus on the life sciences segment. The company was founded in 2010 and has its headquarters in Mumbai, India. Hexaware employs approximately 20,000 people across 30 countries.

Strengths

Vision and investment for becoming a Leader in digital clinical trials in the near-term: Hexaware has invested in platform-enabled solutions to support multiple areas of the clinical development lifecycle. With the goal of becoming a leading digital transformation partner for the life sciences industry, the company is committed to continued growth in this area.

Robust industry partnerships in innovative areas of decentralized clinical trials: Co-development of the Human Data Sciences Cloud and other collaborations with industry digital Leaders point to Hexaware's continued ability to achieve and maintain innovation.

Ongoing commitment to automation-enhanced delivery: The focus on leveraging disruptive AI solutions to address challenges across multiple areas within the drug development lifecycle should lead to use cases that emphasize targeted solutions complementing Hexaware's unified decentralized trial offerings.

Caution

As Hexaware continues to expand its portfolio it will be important to retain focus on specific and potentially standardized use cases.

There is additional opportunity to integrate solutions along the clinical development value chain.

2021 ISG Provider Lens™ Rising Star

Hexaware's strategic commitment to becoming a leading digital provider in clinical development, combined with its strong and growing portfolio of solutions to support automation, its decentralized clinical trials solution, and advanced analytics offerings are all positive indicators for market Leadership.

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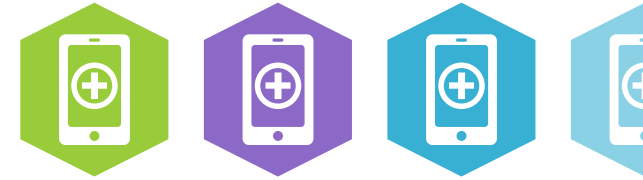
Methodology

METHODOLOGY

The research study "ISG Provider Lens™ 2021 – Life Sciences Digital Services" analyzes the relevant software vendors/service providers in the Global 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 Life Sciences Digital Services 2021 market

2. Use of questionnaire-based surveys of service providers/vendor across all trend topics

3. Interactive discussions with service providers/vendors on capabilities and 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

Authors and Editors

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Frances Grote joined the ISG IPL Life Sciences team in 2021. Prior to this, she led ISG's Life Sciences Digital Drug Development practice, which she helped to design and establish in 2016. Frances has over 25 years of experience in leading global biopharma R&D Strategic Sourcing organizations, prior to joining ISG. She is a recognized innovator in building supplier partnerships in drug development as well as in implementing digital technologies in biopharma R&D. She holds an MBA with a focus on Strategic Planning and has completed graduate training in negotiations.

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Rainer Suletzki brings more than 30 years of experience in various IT Management functions within a global German Life Science corporation. His main areas of expertise comprise IT application management, IT architecture, data modelling as well as IT sourcing strategy and execution. Currently he acts as independent consultant in various projects at ISG with focus upon application management for SAP, specifically for SAP HANA, and for Salesforce. This includes ISG Provider Lens Studies as well as various projects supporting companies in defining IT strategies and the corresponding sourcing decisions.

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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, Partner and Global Head - 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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