

IDC MarketScape

IDC MarketScape: Worldwide Life Science R&D ITO Services 2018 Vendor Assessment

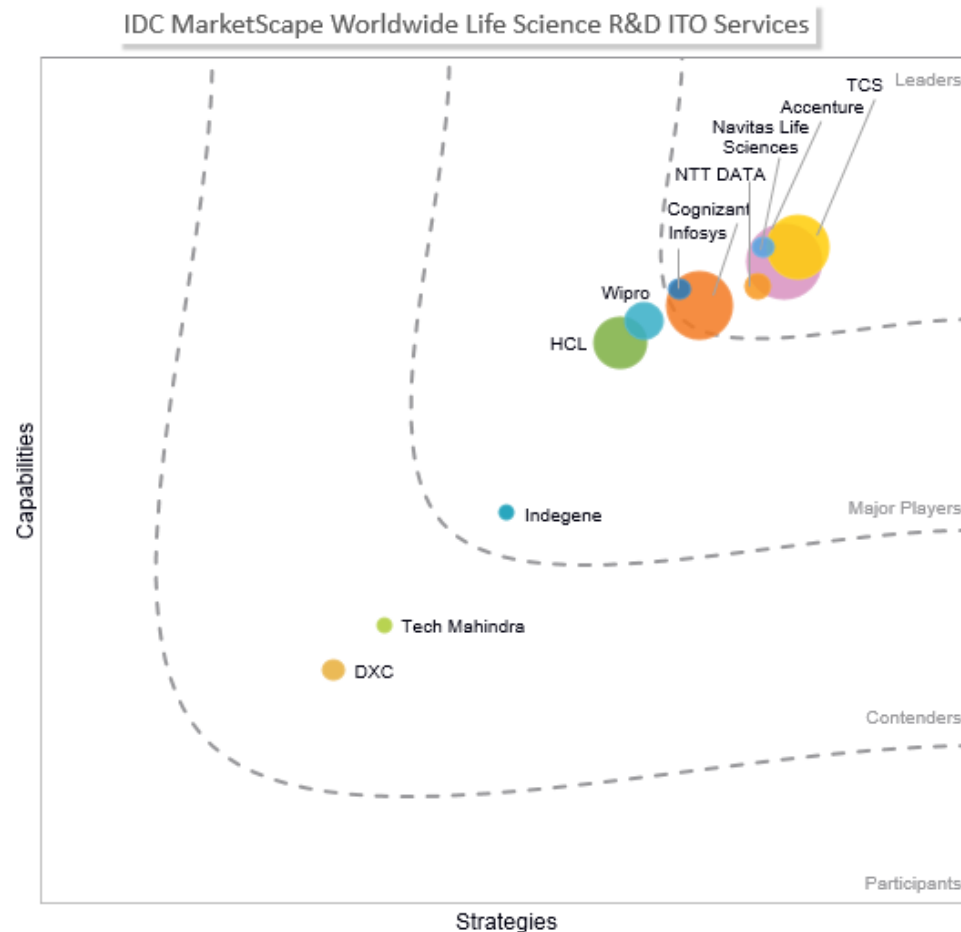
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THIS IDC MARKETSCAPE EXCERPT FEATURES NTT DATA

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Life Science R&D ITO Services Vendor Assessment



Source: IDC, 2018

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly IDC MarketScape: Worldwide Life Science R&D ITO Services 2018 Vendor Assessment (Doc # US44023818). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

While several key IT service providers have supported the life science industry for more than 30 years, the ongoing transformation of the industry has been strongly enabled and empowered by concerted efforts to shift much of the day-to-day IT infrastructure management and support efforts to external service providers. As organizations continue to bring new drugs and devices to market and expand geographically, IT service providers are expanding their efforts in proportion and in many cases taking on the role of partner. In addition, the continuing evolution in industry best practices have allowed innovative IT service providers to expand their service offerings and further grow their life science R&D practices. Repackaging of capabilities and new, specifically targeted efforts have also allowed savvy service providers to further expand their existing client base to increasingly include emerging and midsize life science companies delivering top-tier services to companies that previously would not be able to access or afford such services.

While the industry has continued to consolidate its vendor pool to a limited number of full service, preferred service providers, it remains a common best practice for multiple service providers to coexist within life science companies. Also, because of the complexity of life science R&D, it remains clear that the relative strength of IT services providers in delivering specific offerings varies from vendor to vendor. While there are routinely a number of vendors with sufficient experience to effectively compete for RFIs, RFPs, and other service requests, it is important for companies to shrink the broad list of prospective vendors to a short list of three to five finalists based on a balanced scorecard that accurately captures specific company requirements and needs. Successful selection of a single (or limited number of preferred) service providers depends on careful consideration of key criteria. Building on contributions from eleven major life science R&D IT outsourcing (ITO) service providers (including the top 5 vendors by R&D ITO market share), this study examines the life science R&D IT outsourcing vendor landscape today with a view toward expected growth over the next three to five years. This is the second of three documents (BPO, ITO, and strategic consulting) examining IT outsourcing in the life science R&D space. When evaluating vendors, the key criteria IDC believes that life science companies should consider include:

- Breadth of life science R&D ITO services offered; depth of related application, platform, and project experience; and number of customers the vendor has served
- Geographical footprint and global delivery capabilities, level of priority and focus by the vendor on the life science R&D sector, and the vendor's pace of investment in related life science-specific capabilities
- Depth of business-related, industry-specific knowledge and the ability to apply this knowledge to improving client performance and success
- Foundational IT service capabilities, corporate financial stability, and ability to accommodate different types and sizes of life science clients

- Diligent vetting of customer references to examine vendor capabilities surrounding project management, IT technical skills, account management, and overall value delivery to clients

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

IDC frequently has unique visibility into vendor selection processes within life science companies through clients and contacts in the industry. For a vendor to be considered for inclusion in this study, the vendor's services must have been significantly evaluated for the potential to engage clients within the target IDC MarketScape space. Further research and due diligence were then conducted to narrow the list of vendors to only those that IDC views as legitimate contenders for future deals within the life science R&D ITO services space. Eleven life science R&D ITO vendors were selected to participate in this study:

- Accenture
- Cognizant
- DXC Technology
- HCL
- Indegene
- Infosys
- Navitas Life Sciences
- NTT Data
- Tata Consultancy Services (TCS)
- Tech Mahindra
- Wipro

ADVICE FOR TECHNOLOGY BUYERS

IT outsourcing in the life science industry continues to grow as the life science companies continue to grow their businesses. Continually evolving business models, new product development, globalization, and increasingly complex, growing regulatory compliance requirements are all contributing to double-digit annual growth of industry-specific IT service provider revenue, a trend that shows no signs of slowing. While many life science companies have largely consolidated their vendor ecosystem into a limited number of preferred providers, the incumbent vendors are actively investing in next-generation offerings (often with sponsor support) to ensure that they are ready to expand their footprint as the need arises.

Concurrently, shrewd service providers continue to actively repackage and further develop their services into packaged service offerings that are attractive to emerging and midsize life science companies. IDC expects that these new offerings will provide smaller organizations with the ability to more effectively compete with their much larger peers, while further negating the need to acquire and maintain IT and application infrastructure.

In IDC's view of the ITO ecosystem, key attributes that life science companies are looking for in their preferred service providers include:

- Deep, proven life science-specific ITO capabilities

- Understanding of the life science business at both company and tactical levels
- Flexibility in resourcing on a global basis, including availability of onshore/onsite for some needs and shadow resources to accommodate anticipated attrition
- The ability to effectively scale up engagements in a timely fashion (both onshore and offshore)
- Strong referenceable clients
- Practical understanding of application, platform, and infrastructure best practices that can be quickly translated into engagements to efficiently and effectively develop, maintain, and advance both industry-agnostic and life science-specific data, application, and platform needs

At the next level, additional factors that life science companies may consider during their vendor selection include:

- The ability to regionally source external outsourcing resources in emerging regions as life science companies expand globally
- The ability to work effectively with multiple stakeholders (including competing service providers) to drive IT operational efficiency and effectiveness across organizational boundaries
- Emphasis on quality over cost at a foundational level
- The ability to deliver a unified service capability over multiple service or geographical areas
- Commitment to growing partner relationships with companies through investment and flexibility as processes change and evolve
- The potential to seamlessly expand services delivered across the broader business process, IT, and strategic consulting outsourcing landscape as part of preferred vendor relationships
- Compatible corporate cultures

VENDOR SUMMARY PROFILE

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of the vendor's strengths and challenges.

NTT DATA

Based on NTT DATA's assessment in this IDC MarketScape, IDC has positioned the company in the Leaders category in this IDC MarketScape for worldwide life science R&D ITO services.

Established in 1967, NTT DATA has been serving the life science industry for more than 25 years (including the addition of significant life science R&D service capabilities with its acquisition of Dell Services in 2016). The company, headquartered out of Tokyo, Japan, has offices in 20 countries around the world. IDC estimates that NTT DATA derives 20% of its revenue from its life science efforts, and we further estimate that 30% of its life science efforts are focused on R&D-related engagements. NTT DATA employs more than 40,000 people, with more than 3,000 people with specific life science experience.

With its combination of organic resources and specific healthcare and life science experience from the acquisition of Dell Services, NTT DATA brings a broad portfolio of ITO capabilities that span the full life science and healthcare life cycle. With a focus on process automation and platform collaboration, NTT

DATA offers a differentiated offering that spans the full spectrum of ITO services. With its strong interconnected life science/healthcare focus, NTT DATA is positioning itself to benefit from the ongoing blurring of lines between the life science and healthcare industries.

Strengths

NTT DATA has extensive experience working with pharmaceutical and biotechnology companies of all sizes and across multiple geographies. NTT DATA's portfolio of clients expands beyond traditional ITO service providers, with a significant percentage of emerging and midsize clients and measurable presence in markets outside of Europe and North America. The company's targeted focus on process automation and platform partnerships also differentiates the company from its peers in this IDC MarketScape. Relative to other vendors discussed in this study and based on feedback from customer references, NTT DATA received high marks for its strong project leadership, high satisfaction for work quality, and willingness to contribute insights from best practices across its sponsor ecosystem.

Challenges

While its ITO experience spans the full spectrum of services, NTT DATA derives most of its revenue from its targeted focus on process automation and platform partnerships. With other IT service providers deeply focused on R&D-specific market segments, the company may have difficulty competing for traditional ITO RFPs, where deep area expertise is required.

TCS

After a close evaluation of TCS' offerings and capabilities, IDC has positioned the company in the Leaders category in this IDC MarketScape for worldwide life science R&D ITO services.

Founded in 1968 as a division of Tata Sons, TCS has been serving the life science industry for the past 29 years. The company, headquartered out of Mumbai, India, has offices in 49 countries. IDC estimates that Tata Consultancy Services derives over 7% of its revenue from its health and life science business unit (half of which IDC estimates comes from life sciences), with roughly 35% of this revenue coming from R&D-focused engagements. TCS employs more than 390,000 people worldwide, with IDC estimating more than 18,300 specifically dedicated to its life science practice.

Within the life science R&D ITO services space, TCS brings a full spectrum of capabilities with particular strength in discovery research, clinical data management, pharmacovigilance, biostatistics, standards compliance, and training. TCS' strong technical focus, success with prominent life science companies, and broad service offerings make the company a formidable competitor for companies seeking a preferred vendor to address their R&D ITO needs.

Strengths

Tata Consultancy Services has extensive experience working with life science companies across all three sections of the industry: pharmaceutical, biotech, and medical devices. Nearly all of Tata Consultancy Services' life science customers are large corporations with revenue over \$1 billion, although a small percentage of the company's customers are midsize companies. Most of TCS' customers reside in North America and Europe, with a few scattered across Asia/Pacific and Latin America. Tata Consultancy Services also has a considerable number of delivery centers located across all four of these regions. Relative to other vendors discussed in this study and based on feedback from multiple customer references, Tata Consultancy Services received high marks for its technical skills, deep industry knowledge, competent end-to-end project delivery capabilities, and ability to take greater project responsibility as more of a partner than a vendor. In addition, TCS' Advanced Drug Development

platform, which provides BPaaS solutions based on cognitive computing, artificial intelligence (AI), and robotics automation, is an innovation offering that foreshadows the future of IT service providers in the industry.

Challenges

As an experienced global service provider to the life science industry, TCS has historically focused its efforts on clients with revenue above \$1 billion. As the industry continues to expand through external collaboration, there continues to be a significant opportunity to deliver TCS' strong discovery research, clinical data management, and pharmacovigilance ITO services beyond the company's traditional client base. From a service offering perspective, ITO services positioned for further development by TCS include expanding its predictive modeling and IDMP ITO capabilities.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of a review board of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

For the purposes of this study, ITO includes outsourcing of all services, including call centers, customer support, and any other ongoing, well-characterized repetitive processes that occur within the R&D ecosystem. The scope of this study examines broad ITO within the life science R&D segment and includes both industry-agnostic and industry-specific ITO. However, the most commonly cited

areas within this segment specifically include enterprise content and document management, clinical data management, drug safety call centers, drug safety case processing and drug safety aggregate reporting, medical writing, biostatistics and statistical programming, clinical and regulatory document publishing, regulatory affairs dossier creation and management, and statistical/biostatistical modeling.

Market Overview

The loss of significant blockbuster drug revenue to patent expirations has driven the life science industry to eliminate excess capacity and increase organizational agility over the past several years. A major component of life science company organizational change has been the shift to externalize noncore competencies to external service providers. While much of this transformation is complete, companies are continuing to optimize and fine-tune their vendor relationships as they further standardize and integrate their data and platform resources, including ongoing integration of duplicate functions resulting from ongoing company reorganizations and M&A. This shift has also driven concurrent consolidation in the IT service provider ecosystem as companies continue to look to a small number of preferred vendors to perform the bulk of their outsourced activities. From the vendor point of view, the industrywide growth of life science-specific IT services has also created new growth from delivery of these same services to emerging and midsize life science companies.

As part of the drive to change, life science companies have recognized that the current efforts are unlikely to deliver sufficient new revenue to replace revenue lost to patent expirations. While a variety of new business models are being considered and evaluated, companies are concurrently looking to better exploit both technological innovation and best practices from outside of the industry. As a result, IDC believes that the life science industry will move toward operational efficiencies already present in other industries (e.g., manufacturing and retail). However, the unique requirements of drug discovery, development, and approval will always ensure that this industry remains "higher risk/higher reward," with unmet medical needs and an increasingly aging first world population driving ongoing spending growth. While technological innovation will always remain a key external industry driver, scientific discovery and the need to prove efficacy and safety will be key to industry success and growth over the long term, with appropriate drug pricing (especially in the United States) as a major risk factor.

IT service providers have actively supported the life science industry for more than 30 years, delivering BPO, ITO, and strategic consulting services on a regular basis. The shift to externalize efforts, as well as the move to transform supporting IT infrastructure, has provided new opportunities for these vendors to expand their delivery footprint with companies. As a result, life science-focused IT service providers are continuing to grow and are increasingly taking on more responsibility for both IT- and industry-specific process delivery efforts on behalf of their industry sponsors. While decision-making and risk-associated activities remain as core competencies within life science companies, more commoditized, tactical, and operational activities have become the domain of a limited number of preferred IT service provider partners in the industry.

ITO remains an important R&D area within the life science industry, based on the ongoing adoption of digital transformation. Digital transformation has driven industry innovators to consolidate previously isolated data across the enterprise into common data lakes, interconnect laboratories and collaborations to more efficiently collect and process data, build platform overlays to better enable researchers and key decision makers to leverage data in pursuit of improved outcomes, and work more effectively in an increasingly collaborative ecosystem. Key R&D areas where ITO services have expanded include discovery IT, clinical data management, regulatory compliance and intelligence, HEOR (including more effective utilization of real-world evidence), and M&A. Areas anticipated for ITO

growth will likely include AI-enhanced ITO (e.g., robotic process automation) and regulatory-compliant collaborative IT infrastructure.

Of the estimated \$23.5 billion worldwide IT outsourcing life science services market for 2018, life science R&D is expected to contribute \$6.7 billion. Within the life science R&D space, ITO is expected to contribute more than \$4.2 billion. IDC expects that when combined with BPO and strategic consulting services, the total IT services market will continue to grow at double-digit rates over the next five years, with an average annual growth rate of 10%. IT outsourcing services increasingly support the entire life science R&D value chain with offerings ranging from drug discovery to clinical drug development to drug safety to regulatory compliance and beyond.

LEARN MORE

Related Research

- *IDC MarketScape: Worldwide Life Science R&D BPO Services 2018 Vendor Assessment* (IDC #US42144618, June 2018)
- *IDC MarketScape: Worldwide Life Science Drug Safety Services 2017 Vendor Assessment* (IDC #US42595616, June 2017)
- *IDC MarketScape: Worldwide Life Science R&D Strategic Consulting Services 2016 Vendor Assessment* (IDC #US41126416, March 2016)
- *IDC MarketScape: Worldwide Life Science R&D ITO Services 2016 Vendor Assessment* (IDC Health Insights #US40502516, February 2016)
- *IDC MarketScape: Worldwide Life Science R&D BPO Services 2016 Vendor Assessment* (IDC Health Insights #US40961616, January 2016)
- *IDC MarketScape: Worldwide Life Science R&D Risk-Based Monitoring Services 2015 Vendor Assessment* (IDC Health Insights #HI255628, April 2015)
- *IDC MarketScape: Worldwide Life Science R&D Strategic Consulting Services 2014 Vendor Assessment* (IDC Health Insights #HI246518, February 2014)
- *IDC MarketScape: Worldwide Life Science R&D ITO 2013 Vendor Assessment* (IDC Health Insights #HI245309, January 2014)
- *IDC MarketScape: Worldwide Life Science R&D BPO 2013 Vendor Assessment* (IDC #244934, December 2013)
- *IDC MarketScape: Worldwide Life Science Drug Safety Services 2013 Vendor Assessment* (IDC Health Insights #HI239221, February 2013)

Synopsis

This IDC study is the second of a three-part life science R&D IDC MarketScape series focused on IT outsourcing. With a specific focus on life science R&D ITO, this document seeks to compare major IT service providers with each other, based on operational, business, and market-centric criteria that should be important to life science companies when considering the selection of an external service provider to take over noncore IT activities. IDC MarketScape assessment of IT outsourcing in life science R&D was previously performed in 2011, 2013, and 2015.

Alan Louie, research director of IDC Health Insights' Life Science R&D Technology, and Strategy research, noted, "ITO remains a key element in delivering IT infrastructure support and evolution in the life sciences today. Leading life science companies fully rely on external IT service provider partners to help them grow and transform while concurrently delivering ongoing operational excellence. While AI and robotic process automation will likely change the IT services space over the longer term, growth in ITO will be needed to accommodate that change. As a result, IDC expects that IT outsourcing will continue to grow at high single-digit rates over the near term as industry transformation continues."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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