

IDC MarketScape

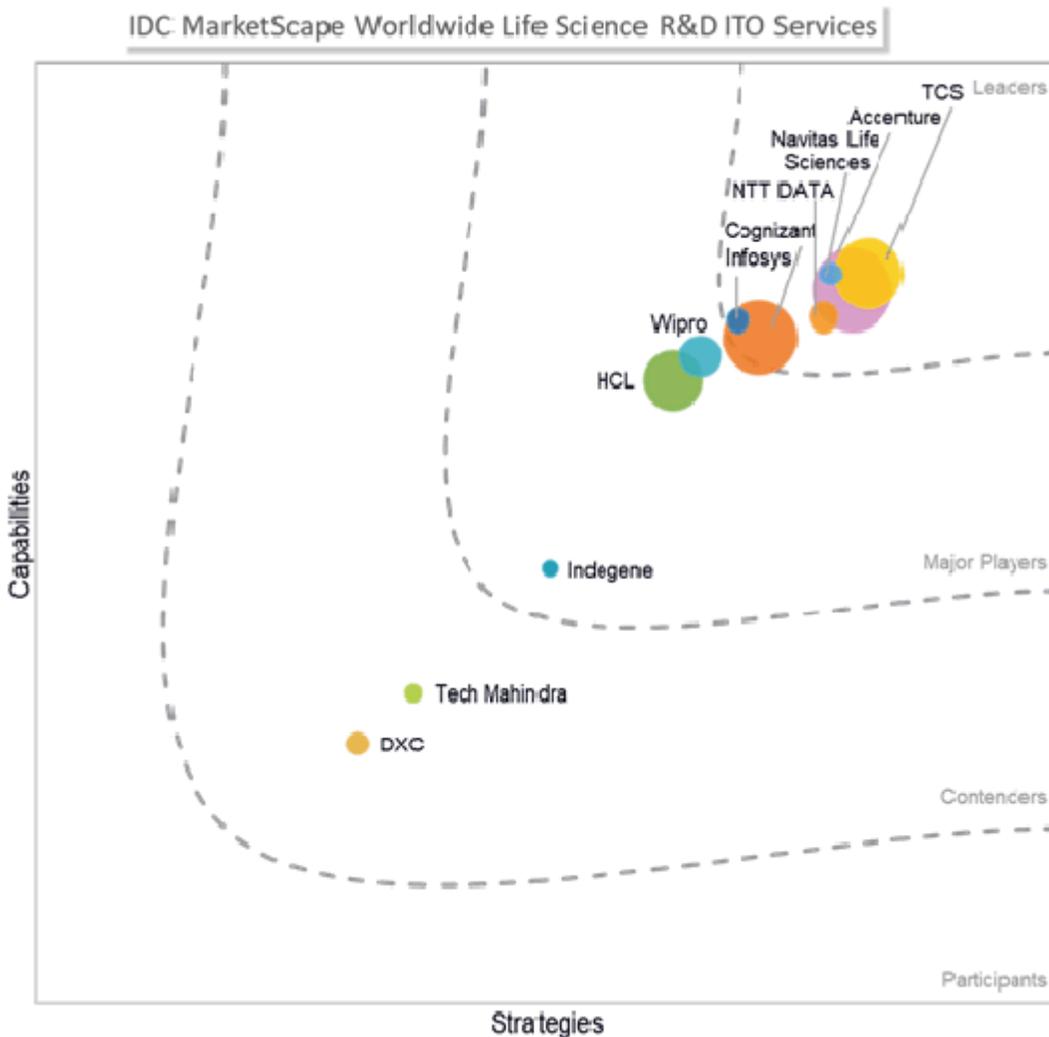
# IDC MarketScape: Worldwide Life Science R&D ITO Services 2018 Vendor Assessment

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## 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.

## IDC OPINION

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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

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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 MarketScope 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

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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 PROFILES

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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 each vendor's strengths and challenges.

### Accenture

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

Established in 1989, Accenture has been serving the life science industry for more than 30 years and is headquartered out of Dublin, Ireland. The company has offices and operations in more than 200 cities in 120 countries around the world. Although Accenture does not report revenue by industry, IDC estimates that Accenture derives roughly 6% of its revenue from the life sciences, and we further estimate that 30% of this comes from R&D-focused engagements. Accenture employs about 425,000 people worldwide, including 15,000 dedicated to its life science practice.

Accenture carries a legacy of strong IT services to the industry, including a broad portfolio of BPO, ITO, and strategic consulting engagement experience; a broad customer base; and significant success in engaging prominent pharmaceutical companies. These capabilities and the company's strong commitment to innovation in this important industry sector will routinely position Accenture as a formidable competitor in RFPs and RFIs it responds to in the ITO and broader R&D IT services market.

## **Strengths**

Accenture has extensive experience working with life science companies across all three sections of the industry: pharmaceutical, biotech, and medical devices. Building on an aggressive growth and acquisition strategy, Accenture has diversified significantly beyond its traditional big pharma focus and has grown its presence among emerging and midsize life science companies in recent years. Accenture's customer base is well represented across North America, Europe, and Asia/Pacific. Accenture also has a considerable number of delivery centers located across these three regions as well as in Latin America. Relative to other vendors discussed in this study, and based on feedback from multiple customer references, Accenture received high marks for its ability to challenge sponsor project managers intellectually, deliver on complex projects, work collaboratively, and respond effectively to feedback.

## **Challenges**

Accenture has a strong history of delivering IT services to the life science R&D market. With deep relationships in place, Accenture is well positioned to expand its work within its existing client base as the industry trend toward outsourcing noncore competencies continues unabated. With outsourced services increasingly available to life science companies of all sizes and types, Accenture should continue to expand and customize its offerings to make the company more attractive to emerging and midsize companies, which should allow the company to continue to grow its influence in the industry. From a service offering perspective, ITO services positioned for further development by Accenture should include its technology-centric patient engagement-oriented offerings and capabilities supporting industry efforts to more effectively leverage healthcare resources.

## **Cognizant**

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

Established in 1994, Cognizant has been serving the life science industry for more than 24 years. The company, headquartered out of Teaneck, New Jersey, has over 150 delivery and operations centers in 50 countries. IDC estimates that Cognizant derives 29% of its revenue from combined healthcare and life science efforts, and we further estimate that 35% of life science efforts focus on R&D-related engagements. Cognizant employs more than 260,000 people worldwide, including more than 22,000 dedicated to its life science practice.

Cognizant is strong in delivering IT services across the full IT outsourcing services spectrum, ranging from data and application integration, analytics, management, and maintenance to clinical IT and training. The company's broad portfolio of life science-specific IT services makes Cognizant a strong competitor in providing a broad spectrum of IT capabilities to large and midsize life science companies seeking to engage a few key preferred IT vendors.

## **Strengths**

Cognizant has extensive experience working with life science companies across all three sections of the industry: pharmaceutical, biotech, and medical devices. Roughly 90% of Cognizant's life science customers are large corporations with revenue over \$1 billion, with the remaining 10% being primarily midsize companies. The majority of Cognizant's customer base is spread across North America and Europe, and the company has a considerable number of delivery and operations centers located across both these regions with additional capabilities in both Asia and Latin America. Relative to other

vendors discussed in this study and based on feedback from customer references, Cognizant received high marks for its understanding of its clients' business needs, strong client team leadership, ability to rapidly staff projects to minimize business disruption, and ability to deliver high-quality services to its clients.

## **Challenges**

While Cognizant has already begun to expand its offerings beyond big pharma, there is a continued opportunity for the company to grow its client base in the emerging and midsize spaces. In addition, Cognizant should seek to better leverage its cross-industry expertise to strengthen its more strategic services capabilities. From a service offering perspective, ITO services positioned for further development by Cognizant include further expansion of its life science R&D ITO services portfolio, including regulatory operations support, and social media development offerings.

## **DXC**

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

With a history spanning more than 25 years, DXC Technology was formed on April 1, 2017, with the merger of CSC with the Enterprise Services business of Hewlett Packard Enterprise. The merged company, headquartered in Falls Church, Virginia, has clients in more than 50 countries. IDC estimates that while DXC derives less than 2% of its revenue from the life sciences, we further estimate that a significant percentage of the company's revenue comes from R&D-focused engagements. DXC employs more than 60,000 people worldwide, including about 600 dedicated, life science-focused employees.

Within the life science R&D ITO services space, DXC is particularly strong in delivering technology and collaborative infrastructure implementation and support, testing and validation services, and regulatory information management services to its clients. With its targeted focus, DXC is a strong competitor in providing targeted ITO services to a broad spectrum of life science industry clients.

## **Strengths**

DXC is an experienced vendor providing its services across all three sections of the industry: pharmaceutical, biotech, and medical devices. IDC estimates that while 75% of DXC's clients are large corporations with revenue over \$1 billion, the company has a substantial client base ranging from small biotechs through the midtier biopharma space. DXC's customers are spread across North America, Europe, and Asia/Pacific, with North America representing slightly more than 60% of the company's industry services. DXC has a considerable number of delivery centers located around the world, with major centers in the United States and India. Relative to other vendors discussed in this study, DXC's targeted strengths in technology and platform infrastructure and regulatory services as well as the company's targeted small company focus help differentiate the company from its competitors.

## **Challenges**

With its highly diversified client base, DXC should be able to increase its influence in the industry by growing its existing client relationships as well as by adding new clients. With its differentiated service offerings, DXC will greatly benefit by expanding its industry-specific capabilities to increase the value of its technical ITO offerings. As the company grows, it may also be necessary to expand the

company's delivery capabilities as well as position more life science-specific resources in emerging regions.

## HCL

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

Established in 1991, HCL has been serving the life science industry for more than 12 years. The company, headquartered out of Noida, India, has offices in 31 countries. IDC estimates that HCL derives over 11% of its revenue from the life sciences, roughly 36% of which comes from R&D-focused engagements. HCL employs more than 120,000 people worldwide, including more than 8,700 people dedicated to its life science practice.

Within the life science R&D ITO space, HCL is particularly strong in delivering data and application development and management, testing, and technology infrastructure support services to its clients. With its targeted focus, HCL is actively growing its services to the industry with a goal of becoming a full-service resource to premier life science companies.

### *Strengths*

HCL has extensive experience working with life science companies across all three sections of the industry: pharmaceutical, biotech, and medical devices. Nearly all of HCL's life science customers are large corporations with revenue over \$1 billion, with a significant base of customers spread across North America, Europe, and Asia/Pacific. HCL also has a considerable number of delivery centers located across these three regions as well as in Latin America. Relative to other vendors discussed in this study, and based on feedback from customer references, HCL received high marks for its industry knowledge, differentiating resources in emerging regions, ability to effectively balance onshore and offshore resources, and ability to work across the full clinical life cycle.

### *Challenges*

As an experienced global service provider to the life science industry, HCL has historically focused its efforts on clients with revenue above \$1 billion. As the industry continues to expand through external collaboration, there is a significant emerging opportunity from the emerging and midsize sector of the industry. HCL has a significant continuing opportunity to expand and deliver its ITO services by creating targeted solutions for emerging and midsize life science companies. From a service offering perspective, ITO services positioned for further development by HCL include its predictive modeling, process automation, and regulatory information management services.

## Indegene

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

Established in 1998, Indegene has been serving the life science industry for the past 18 years. The company, headquartered out of Bangalore, India, has seven delivery centers located in the United States, India, and China. IDC estimates that Indegene derives 100% of its revenue from the life sciences, with 32% of this revenue coming from R&D-focused engagements. Indegene employs more than 1,500 employees, with more than 1,300 dedicated specifically to the life science industry.

The company's broad portfolio of service offerings, combined with aggressive investment for growth, has maintained Indegene as a solid Major Player since the last publication of this R&D ITO services study in 2016.

### **Strengths**

Although a majority of Indegene's customers are pharmaceutical companies, Indegene has expanded its presence across all three sections of the industry: pharmaceutical, biotech, and medical devices. The company has further expanded its focus to include smaller life science companies while continuing to expand its presence in Asia/Pacific. Relative to other vendors discussed in this study, Indegene's broad portfolio of offerings and strong clinical data and application management, technology infrastructure, and social listening services should help differentiate the company from its competitors.

### **Challenges**

With its global presence, Indegene should be able to increase its influence in the industry by continuing to grow its capabilities and experience as well as continue to expand its focus on global opportunities in emerging and midsize spaces. With its focused service offerings, Indegene will also benefit by expanding its discovery IT, predictive modeling, and drug safety ITO services into more comprehensive integrated offerings.

### **Infosys**

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

Established in 1981, Infosys has been serving the life science industry for more than 13 years. The company, headquartered out of Bangalore, India, has 73 offices and 94 development centers and employs more than 176,000 people worldwide, including more than 5,000 people dedicated to its life science practice. IDC estimates that Infosys derives about 6% of its revenue from the life sciences, roughly 10% of which comes from R&D-focused engagements.

Within the life science R&D ITO space, Infosys is particularly strong in delivering data and applications development and management, technology infrastructure and cloud implementation and support, and testing services to its clients. With its strong global focus, Infosys is continuing to grow its ITO services to strengthen its opportunities within the life science industry.

### **Strengths**

While continuing to grow its efforts with the most prominent pharmaceutical companies, Infosys has developed a broader industry footprint that appeals to companies of all sizes. In contrast to many of its peers, the company conducts more of its efforts in Europe than in the United States. With its extensive network of delivery centers distributed around the world, Infosys is well positioned to provide its customers with significant flexibility in sourcing their project engagements. Relative to other vendors discussed in this study, and based on feedback from multiple customer references, Infosys received high marks for the value it delivers customers relative to cost, quality of its ITO work, and willingness to contribute strategically to operational efforts when needed.

### **Challenges**

With the strength of its global delivery infrastructure, commitment to grow its life science business, and breadth of service offerings, Infosys is well positioned to grow its ITO business and should be competitive in all RFPs that the company competes for. Infosys should continue to gain more

experience in all of its ITO offerings and grow beyond its core relationships with core clientele. From a service offering perspective, ITO services positioned for further development by Infosys include social technology development, discovery IT services, and risk-based monitoring services.

## **Navitas Life Sciences**

Based on Navitas Life Sciences' 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 2000, Navitas Life Sciences Life Sciences has been serving the life science industry for more than 31 years (including its WCI acquisition experience and more than 17 years as Navitas Life Sciences, a TAKE Solutions Enterprise). The company, headquartered out of Chennai, India, has 22 offices in 12 countries around the world. IDC estimates that Navitas Life Sciences derives all of its revenue from the life sciences, and we further estimate that more than 50% of its life science efforts are focused on R&D-related engagements. Navitas Life Sciences employs more than 1,200 people, with more than 900 people with specific life science experience.

With its foundational focus on the life sciences, Navitas Life Sciences has built a strong list of clients based on its deep domain knowledge, willingness to engage customers as partners, IP-based solutions, and thought leadership in clinical, regulatory, drug safety, and other areas. Navitas Life Sciences' diverse client base and the company's full spectrum of ITO services, IT services, and drug safety strategic consulting services continue to differentiate it from its competitors.

Navitas Life Sciences' legacy brands, aggressive commitment to growth building on a cloud-based BPaaS model, and continued dedicated focus on life sciences should help the company remain a savvy industry competitor for years to come.

### ***Strengths***

Navitas Life Sciences has extensive experience working with pharmaceutical and biotechnology companies of all sizes and across multiple geographies. Navitas Life Sciences is strongly differentiated from its more traditional market competitors by its broad portfolio of clients, ranging from small and midsize organizations to large global pharmaceutical companies. Deep, task-level client experience over a wide variety of specific ITO services also separates Navitas Life Sciences from its peers in this IDC MarketScape. Relative to other vendors discussed in this study and based on feedback from customer references, Navitas Life Sciences received high marks for its technical skills and capabilities, deep bench and proactive approach to project work, and ability to contribute as a strategic partner when needed.

### ***Challenges***

With the ongoing transition of clinical development from sponsors to CROs, Navitas Life Sciences is seeing increasing direct competition from CROs for its ITO services. Continued investment in analytics, process automation, risk-based management, and RWE ITO capabilities should help Navitas Life Sciences maintain its market leadership into the future.

## **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.

## **Tech Mahindra**

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

Founded in 1986, Tech Mahindra has been serving the life science industry for the past 21 years. The company, headquartered out of Mumbai, India, works in 90 countries and has 12 global delivery centers. IDC estimates that Tech Mahindra derives roughly 3% of its revenue from the life science industry, with 28% of this revenue coming from R&D-focused engagements. Tech Mahindra employs more than 117,000 people worldwide, including 1,974 people dedicated to its life science practice and 100 people focused on life science R&D services.

Within the life science R&D ITO services space, Tech Mahindra is working to grow its capabilities across the full R&D life cycle. The company's strong technical focus and expanding portfolio of life science-specific IT services make Tech Mahindra a vendor to look out for as the company continues to reestablish itself in the industry.

## **Strengths**

While Tech Mahindra has experience working with life science companies across all three sections of the industry, its R&D ITO services are delivered primarily to small and midsize companies in the United States and Europe. At 80%, Tech Mahindra has a very high percentage of technically focused life science staff. Relative to other vendors discussed in this document, Tech Mahindra's strong technical team, competitive pricing, and aggressive focus on smaller industry players helps differentiate the company from its competitors.

## Challenges

With its global presence and ability to work with all types of life science companies, Tech Mahindra is well positioned for continued growth based on its strategic focus on emerging companies. As a viable alternative to other vendors in the emerging and midtier spaces, Tech Mahindra will need to rapidly expand its offerings and solutions to maintain competitive advantage over its major competitors. With its differentiated perspective on drug discovery and clinical development, Tech Mahindra has the potential to provide a viable alternative to much larger competitors, which have historically not focused on attracting emerging and midsize (to a lesser extent) clients. From a service offering perspective, ITO services positioned for further development by Tech Mahindra include its technology infrastructure, patient engagement, and regulatory information management services.

## Wipro

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

Founded in 1945, Wipro has been serving the life science industry for the past 16 years. The company, headquartered out of Bangalore, India, has offices in 57 countries. IDC estimates that Wipro derives roughly 14% of its revenue from the life sciences, with 18% of the revenue coming from R&D-focused engagements. Wipro employs more than 160,000 people worldwide, including 6,435 dedicated to its life science practice.

Within the life science R&D ITO space, Wipro is particularly strong in delivering data and application management services, technology infrastructure services and support, social listening, and testing services. The company's strong global presence, focused portfolio of services, competitive pricing, aggressive growth strategy, and strong customer focus have made Wipro a solid contender for current and future life science ITO opportunities.

## Strengths

While historically recognized for its strong engineering expertise in support of the medical device industry, Wipro has developed experience working with all types of life science companies. Wipro's life science customers are typically large corporations with revenue over \$1 billion, with a smaller portion spread across midsize and small firms. While more than half of its client base is based in North America, Wipro does have a significant client base across all regions of the world, including Europe, Asia, and Latin America, with multiple delivery centers in each region as well. Relative to other vendors discussed in this study and based on feedback from multiple customer references, Wipro received high marks for its strong technical team, solid account relationships, willingness to adapt as needed, ability to deliver high value for the money, and collaborative approach to problem-solving.

## Challenges

As an experienced global service provider to the life science industry, Wipro is well positioned for continued growth with its strategic focus on emerging companies. As a viable alternative to other vendors in the emerging and midtier spaces, Wipro will need to gain more experience and expand its offerings and solutions to maintain competitive advantage over its major competitors. From a service offering perspective, ITO services positioned for further development by Wipro include its discovery IT, data management, risk-based monitoring, and IDMP service offerings.

## APPENDIX

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### 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.

## Strategies and Capabilities Criteria

Tables 1 and 2 provide key strategy and capability measures, respectively, for the success of life science R&D ITO service providers.

**TABLE 1**

### Key Strategy Measures for Success: Worldwide Life Science R&D ITO Services Vendors, 2017

Strategies Criteria	Definition	Weight
Cost management strategy	The cost structure for this offering is competitive yet supports the flexibility required to adjust to the pricing models that customers will want over the next three to five years.	8.0
Customer satisfaction strategy	This offering provides customer assessment of vendor performance, both now and going forward.	9.0
Customer service strategy	Service options for the vendor's offerings will be aligned with priority customer segments' wants and needs over the next three to five years.	9.0
Delivery model	Current and planned offerings will be delivered in ways that match customer preferences for resource allocation, cost agility, and so forth over the next three to five years.	8.0
Employee strategy	The company is expected to hire employees and organize itself optimally to create market value for customers over the next three to five years.	3.0
Financial/funding model	The company will generate, attract, and manage capital well over the next three to five years to create and expand market value.	3.0
Functionality or offering road map	Current and planned offerings are expected to match directly to current customer needs to deliver maximum customer benefit over the next three to five years.	8.0
Growth strategy	The company is expected to have a substantial customer base over the next three to five years.	8.0
	The company is knowledgeable on the life science industry and will be well informed on the current and emerging market needs and desires over the next three to five years.	6.0
Innovation	The pace of continued investment is expanding the company's life science R&D offerings/capabilities over the next three to five years.	7.5
Marketing strategy	The vendor's marketing organization is expected to be aligned with the priority customer segments and execute well over the next three to five years.	7.5
Portfolio strategy	The offering is developed and delivered in ways specific to the industry/company's current and evolving needs over the next three to five years.	8.0
Pricing model	The pricing model, and the related pricing options, will be aligned with customers' preferences over the next three to five years.	9.0
Sales/distribution strategy	The future sales/distribution structure is aligned with the way customers, especially those in high-growth market segments, want to buy over the next three to five years.	6.0
Total		100.0

Source: IDC, 2018

**TABLE 2**

**Key Capability Measures for Success: Worldwide Life Science R&D ITO Services Vendors, 2017**

Capabilities Criteria	Definition	Weight
Cost management capabilities	The cost structure for this offering is competitive yet supports the flexibility required to adjust to the pricing models that customers want today.	8.0
Customer satisfaction	The vendor has strong customer references.	9.0
Customer service	The vendor's customer-facing delivery skills and capabilities satisfy market wants and needs.	9.0
Delivery	Current offerings are delivered in a way that match customer preferences for adoption/consumption.	8.0
Employee management	The company hires employees and organizes itself optimally to create market value for customers.	3.0
Financial/funding	The company is generating, attracting, and managing capital to create market value.	3.0
Functionality or offering	Current offerings match directly to current customer needs to deliver maximum customer benefit.	8.0
Growth	The company has a substantial customer base.	8.0
	The vendor is knowledgeable of the life sciences and is well informed of R&D IT needs and wants.	6.0
Innovation	The pace of continued investment is expanding the vendor's life science R&D service offerings.	7.5
Marketing execution	The vendor's marketing organization is aligned with the priority customer segments and executing well.	7.5
Portfolio benefits	Current offerings are developed and delivered in ways specific to the industry, matching varying company needs.	8.0
Pricing	The pricing model and related pricing options are currently aligned with customers' preferences.	9.0
Sales/distribution execution	The current sales/distribution structure is aligned with the way customers, especially those in high-growth market segments, want to buy.	6.0
<b>Total</b>		<b>100.0</b>

Source: IDC, 2018

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### 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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