

IDC MarketScape

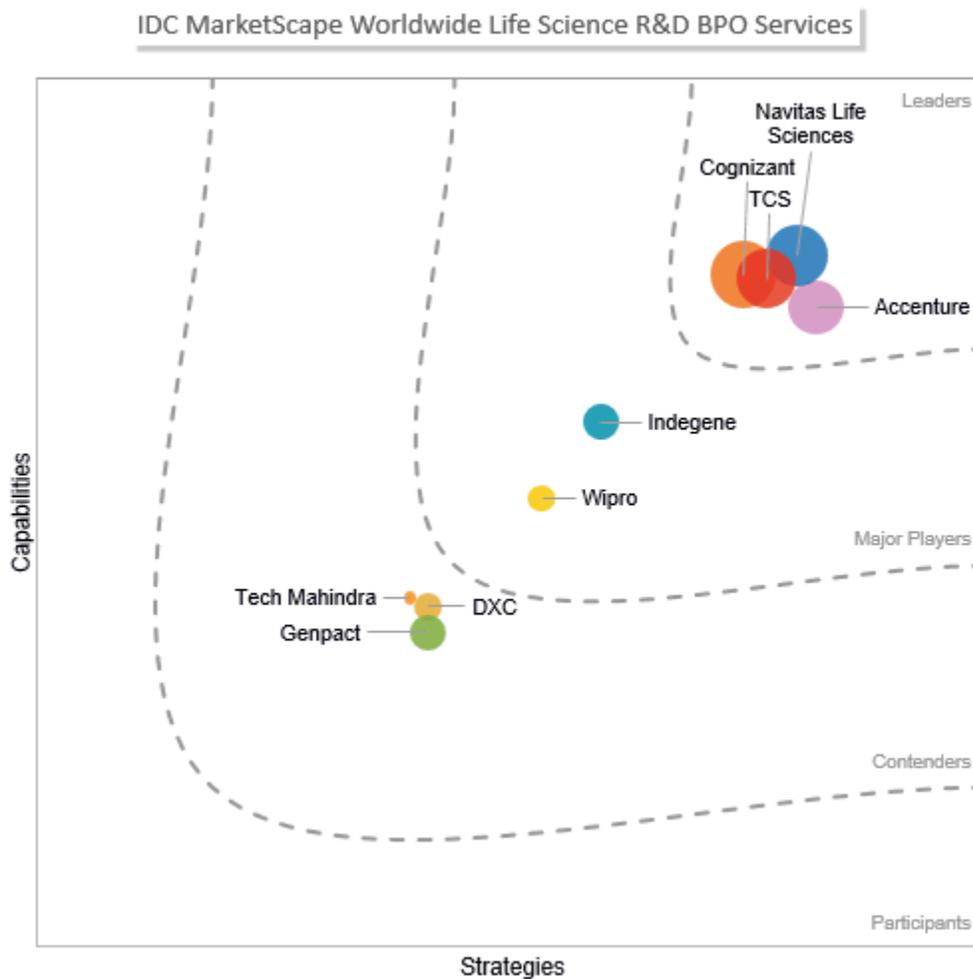
IDC MarketScape: Worldwide Life Science R&D BPO Services 2018 Vendor Assessment

Alan S. Louie, Ph.D.

IDC MARKETSCAPE FIGURE

FIGURE 1

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



Source: IDC, 2018

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

IDC OPINION

Having now tracked the science R&D IT outsourcing (ITO) market in three prior studies over the past seven years, it remains clear that the life science R&D IT services market continues to grow and evolve as companies regularly review and optimize process operations. Drivers of change include both ongoing cost take out and process transformation in pursuit of long-term sustainability. While industry efforts to externalize noncore competencies are largely complete, the need to revisit existing legacy and organizational best practices is now more regularly in the spotlight as technological innovation and industry consolidation continue to transform the industry.

Prominent IT service providers in this space continue to experience double-digit annual growth as both life science companies extend services enterprisewide (and across organizations based on M&A) and service efforts extend beyond large life science companies to increasingly include emerging and midtier life science companies. With the industry continuing to evolve, successful vendors are finding new ways to grow, including through building new offerings in response to new needs (e.g., risk-based monitoring and more comprehensive clinical data management). While the preferred provider approach to services remains strongly the norm, risk mitigation strategies have ensured that multiple vendors will continue to be the norm within life science companies for the foreseeable future.

While many business process outsourcing (BPO) efforts have become commoditized, the continuing evolution of BPO services and the complexity of life science R&D have ensured that it remains possible to differentiate IT service providers by the relative strength of their offerings. While there are routinely multiple vendors with sufficient experience to effectively compete for available 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 company-specific requirements and needs. Successful selection of a single (or a limited number of preferred) IT service provider depends on careful consideration of key criteria. Building on contributions from nine major life science R&D BPO service providers, this study examines the life science R&D IT BPO vendor landscape today with a view toward expected growth over the next three to five years.

When evaluating vendors, the key criteria IDC believes that life science companies should consider include:

- Breadth of life science R&D business process outsourcing services offered, depth of related 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 capabilities
- Life sciences' industry-specific expertise, 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 BPO services space. Nine life science R&D IT BPO vendors were selected to participate in this study:

- Accenture
- Cognizant
- DXC Technology
- Genpact
- Indegene
- Navitas Life Sciences
- Tata Consultancy Services (TCS)
- Tech Mahindra
- Wipro

ADVICE FOR TECHNOLOGY BUYERS

Outsourcing in the life science industry continues to grow as the life science company-specific definition of core competency continues to contract and process needs continue to expand. Externalization is increasingly the norm, based on a transformational and foundational new organizational mantra focused on both cost optimization and organizational agility. This rapidly maturing change coincides with the efforts of life science companies to consolidate their vendor ecosystem into a limited number of preferred providers. In responding to this growing opportunity, many IT service providers are actively and aggressively working to rapidly expand their offerings through either organic growth or acquisition of new service capabilities in anticipation of more work.

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

- Deep, proven life science-specific BPO capabilities
- Understanding of the life science business at company-specific, strategic, and tactical levels
- Flexibility in resourcing on a global basis, including the availability of onshore/onsite/offsite resourcing in response to performance or cost considerations
- The ability to effectively scale up engagements in a timely fashion and minimize the ongoing impact of attrition on project efforts
- Practical understanding of when industry-agnostic knowledge is appropriate to life science BPO engagements
- Strong referenceable clients

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
- 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 move beyond transactional activities into more strategic efforts
- Compatible corporate cultures

VENDOR SUMMARY PROFILES

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 BPO 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 approximately 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 top-tier 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 BPO 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 midtier 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 transparent integration into client teams, working as a vested partner, and helping the client improve operational efficiencies across a widening portfolio of efforts.

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 midtier companies, which should allow the company to continue to grow its influence in the industry. From a service offering perspective, BPO services positioned for further development by Accenture should include its training and HEOR offerings.

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 BPO 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 particularly strong in delivering clinical data management, drug safety case processing, biostatistics, medical writing, and training BPO services. 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 top and midtier 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 of these regions with additional capabilities in both Asia and Latin America. Relative to other vendors discussed in this study and based on feedback from multiple 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 midtier space. In addition, with rapid industry growth in Asia/Pacific, Cognizant should be able to leverage its strong R&D services portfolio to grow its presence in this market. From a service offering perspective, BPO services positioned for further development by Cognizant include further expansion of its life science R&D BPO services portfolio, regulatory operations support, and statistical modeling 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 BPO 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 Enterprises. 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 approximately 600 dedicated life science-focused employees.

Within this space, DXC is particularly strong in delivering regulatory support (including medical writing, regulatory publishing, dossier creation and management, and regulatory intelligence) and biostatistical resources to its clients. With its targeted focus, DXC is a strong competitor in providing targeted BPO 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 regulatory support and biostatistical 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 analytics capabilities to increase the value of its technical BPO 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.

Genpact

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

Genpact was established in 1997 as GE Capital International Services and became an independent company in 2005. The company is headquartered out of New York City, New York, and has 24 delivery centers specific to its life science efforts distributed all around the world. IDC estimates that Genpact derives 12% of its revenue from its life science efforts, and we further estimate that 13% of life science efforts focus on R&D-related engagements. Genpact employs more than 75,000 people worldwide, including more than 7,300 dedicated to its life science practice.

Outside of its strong commercial life science services efforts (including strong post-market surveillance offerings), Genpact delivers pharmacovigilance and regulatory services (including regulatory strategy, regulatory operations, regulatory consulting, and regulatory information management) to its clients.

Strengths

Genpact as an R&D BPO provider is particularly strong in areas that overlap with its commercial life science BPO services. Genpact primarily focuses on large life science companies, with long-term engagements with 32 life science companies and additional project-centric efforts with other companies. Relative to other vendors in this study, Genpact received high marks for its robust regulatory affairs efforts and commercial mindset.

Challenges

With its long-standing client relationships, Genpact should be able to grow by expanding into adjacent service offerings within its client base. Specifically, Genpact is well positioned to expand its BPO offerings in biostatistics, pharmacovigilance, HEOR, and regulatory affairs.

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 BPO 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.

Within this space, Indegene is strong in delivering clinical data management, pharmacovigilance, regulatory operations support, HEOR, and medical writing services. 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 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 management, pharmacovigilance, and medical writing capabilities 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 expand its focus on global opportunities in emerging and midtier spaces. With its focused service offerings, Indegene will also benefit by expanding its existing drug safety, analytical, and HEOR BPO services into more comprehensive integrated offerings.

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 BPO services.

Established in 2000, Navitas Life Sciences has been serving the life sciences 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 100% of its revenue from its life science efforts, and we further estimate that all of its life science efforts focus 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 BPO services, IT services, and drug safety strategic consulting services continue to differentiate it from its competitors.

Navitas Life Sciences' legacy brands and own long-standing experience in the life science services space, 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 BPO 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 multiple 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 BPO services. Continued investment in pharmacovigilance and RWE BPO capabilities as well as expansion of next-generation technology-based BPO offerings help Navitas Life Sciences maintain its market leadership into the future.

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 BPO 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 this 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 top-tier life science companies, and broad service offerings make the company a formidable competitor for companies seeking a preferred vendor to address their IT BPO 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, 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 BPO services beyond the company's traditional client base. From a service offering perspective, BPO services positioned for further development by TCS include expanding its regulatory support, regulatory intelligence, and remote monitoring 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 BPO 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-focused services.

Within the life science R&D BPO 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 BPO services are delivered primarily to small and midsize companies in the United States and Europe. At 80%, Tech Mahindra has the highest percentage of technically focused life science staff of all companies reviewed. 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, BPO services positioned for further development by Tech Mahindra include its pharmacovigilance call centers and case processing, biostatistics, and RWE 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 BPO 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 BPO space, Wipro is particularly strong in delivering discovery research operations support, pharmacovigilance services, clinical and regulatory publishing, and training 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 BPO 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, Wipro received high marks for its strong technical team, solid account relationships, 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 rapidly expand its offerings and solutions to maintain competitive advantage over its major competitors. Wipro also has a significant opportunity to expand and deliver its BPO services by leveraging its existing, preferred relationships in the life science ITO space. From a service offering perspective, BPO services positioned for further development by Wipro include its clinical data management, medical writing, regulatory, and RWE services offerings.

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, BPO 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 BPO within the life science R&D segment and includes both industry-agnostic and industry-specific BPO. 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 expand the list of activities that can be effectively performed by partners as well as reorganize based on the need to integrate duplicate functions resulting from company reorganizations and M&A. This shift has also driven concurrent consolidation in the IT service provider ecosystem as companies increasingly look to a small number of preferred vendors to perform the bulk of their outsourced activities. From the vendor point of view, the increased outsourcing has also created new growth from providing these same services to emerging and midtier life science companies.

As part of the drive to change, life science companies have recognized that the current approach to new drug development will be unable 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. With a focus on technology, it is clear that this paradigm shift has been long in the making. From a technology perspective, IDC believes that the life science industry has largely embraced the tenants of the 3rd Platform and is actively moving forward toward digital transformation in those cases where clear value can be identified. While multifaceted and built on an evolving set of innovation accelerators, digital transformation anticipates a more operationally efficient, fully integrated ecosystem that embraces data and processes with a sharpened focus on business outcomes. Technological innovation remains a key external driver, with the industry's perpetual concerns over regulatory oversight, perceived risk, and willingness to change being increasingly accommodated as leaders seek more immediate improvements.

IT service providers have actively supported the life science industry for more than 31 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.

BPO remains an important R&D area within the life science industry, based on the ongoing operationalizing and de-risking of processes across the complete life science life cycle. While initially focused in the areas of call centers, case processing, and clinical data management, the breadth of BPO offerings continues to expand as previously defined core activities become better characterized and likely outcomes better defined. Key R&D areas where BPO has expanded include pharmacovigilance safety surveillance, HEOR support, regulatory intelligence, and standards-based data mapping. Areas anticipated for BPO growth will likely include more complex implementation of

risk-based monitoring, AI-enhanced BPO (e.g., machine learning-based drug safety case processing), and real-world evidence-enhanced clinical data management and analysis.

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, BPO is expected to contribute more than \$1.28 billion. IDC expects that when combined with IT outsourcing 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 BPO service providers.

TABLE 1

Key Strategy Measures for Success: Worldwide Life Science R&D BPO Services Vendors

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 looking forward.	8.0
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.	6.0
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.	6.0
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.	9.0
	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.	9.0

TABLE 1**Key Strategy Measures for Success: Worldwide Life Science R&D
BPO Services Vendors**

Criteria	Definition	Weight
Innovation	The pace of continued investment is expanding the company's life science R&D offerings/capabilities over the next three to five years.	3.0
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.	6.0
Portfolio strategy	The offering is developed and delivered in ways specific to industry-specific/company-specific 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.	12.0
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
BPO Services Vendors**

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.	8.0
Customer service	The vendor's customer-facing delivery skills and capabilities satisfy market wants and needs.	6.0
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.	6.0

TABLE 2**Key Capability Measures for Success: Worldwide Life Science R&D BPO Services Vendors**

Criteria	Definition	Weight
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.	9.0
	The vendor is knowledgeable on the life sciences and is well informed of R&D IT needs and wants.	9.0
Innovation	The pace of continued investment is expanding the vendor's life science R&D service offerings.	3.0
Marketing execution	The vendor's marketing organization is aligned with the priority customer segments and executing well.	6.0
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.	12.0
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
Total		100.0

Source: IDC, 2018

LEARN MORE**Related Research**

- *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 Health Insights study is the first of a three-part life science R&D IDC MarketScape series focused on IT outsourcing. With a specific focus on life science R&D IT BPO, this study seeks to determine how the major IT vendors compare with each other, building on criteria that should be important to life science companies when considering the selection of an external service provider to take over noncore business processes. 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 Strategy and Technology research, noted, "While still somewhat smaller than its traditional IT outsourcing counterpart, BPO in the life sciences remains an important contributor to industry success. The scope of life science R&D BPO continues to expand as more and more processes are operationalized and preferred IT partners are tasked with implementing and maintaining new processes and procedures. As a result, leading IT service providers are increasingly working as partners with their industry sponsors to deliver operational excellence while contributing to ongoing industry transformation that will ultimately automate well-defined, highly repetitive tasks. While IDC continues to expect that IT outsourcing overall will continue to grow by double digits over the next 5-10 years, we also believe that BPO spending has stabilized and should remain relatively constant over the near term."

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.

Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-community.com
www.idc.com

Copyright and Trademark Notice

This IDC research document was published as part of an IDC continuous intelligence service, providing written research, analyst interactions, telebriefings, and conferences. Visit www.idc.com to learn more about IDC subscription and consulting services. To view a list of IDC offices worldwide, visit www.idc.com/offices. Please contact the IDC Hotline at 800.343.4952, ext. 7988 (or +1.508.988.7988) or sales@idc.com for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or web rights. IDC and IDC MarketScape are trademarks of International Data Group, Inc.

Copyright 2018 IDC. Reproduction is forbidden unless authorized. All rights reserved.

