

IDC MarketScape

IDC MarketScape: Worldwide Professional Services Firms for Mining Operational Process Optimization 2020 Vendor Assessment

Benjamin Kirkwood Emilie Ditton

THIS MARKETSCAPE EXCERPT FEATURES: INFOSYS

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: Worldwide Professional Services Firms for Mining Operational Process Optimization, 2020



Source: IDC, 2020

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

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Professional Services Firms for Mining Operational Process Optimization 2020 Vendor Assessment (Doc #US44801219). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Advice for Technology Buyers, Vendor Summary Profile, Appendix, and Learn More. Also included is Figure 1.

IDC OPINION

This IDC study assesses the capabilities and strategies of IT services and professional services firms providing services to mining companies within their operations worldwide and is based off services provider interviews and reference calls conducted in 2019. This research is a quantitative and qualitative comparative assessment of eight services providers based on a comprehensive assessment framework that includes parameters that provide the greatest likelihood of success delivering value to mining organizations in the short and long term. Mining companies are increasingly digitizing their operations, resulting in the requirement for organization-wide integrations of operational technology (OT) and IT and the optimization of transformative digital use cases across the mining value chain. As part of this assessment, the perceptions of buyers of their operational optimization solutions were included, covering the key characteristics and capabilities of the solutions provided.

Firms that excel in this market are those that create the greatest value with their mining customers, particularly in the following areas:

- Enabling innovation at a strategic level for their client's businesses
- Enabling transformational capabilities across the value chain of their clients
- Bringing industry-leading technology capabilities to the transformative use cases within operations that their customers are tackling
- Demonstrating that they are working with their mining clients on the basis of partnership
- Being able to demonstrate depth of mining capabilities in multiple locations globally
- Actively bringing a diverse and industry-specific partner ecosystem to engagements

This IDC MarketScape provides insight and guidance into the current capabilities and future strategies of professional services and IT services providers to operations in the mining industry. Key findings from this assessment include:

- Clients praised suppliers for their ability to successfully deliver projects and engage on a strategic partnership basis, delivering beyond the initial expectation.
- The suppliers that performed well in this assessment are those most effective at providing a clear strategy, extending the ideas of their customers, demonstrating industry-leading technology skills and capability, encouraging positive engagements as part of the team, and effectively delivering services while creating value within and between operational siloes.
- Mining companies are maturing in their ability to identify requirements and engage IT and digital-led services providers within their operations. The IT services providers assist in increasing the depth of the capabilities at a technology and industry expertise level.
- The mining customers interviewed for references identified four core traits of leading vendors: excellent execution capability; customer-centric and adaptable; industry-leading and disruptive approaches to digital and advanced technologies; and a comprehensive partner ecosystem for support.

The dominant vendors identified in this assessment have achieved supremacy through the provision of successful solutions aided by their ability to drive change management practices while following road maps. This is a market that is constantly evolving, with new skills being regularly adopted, resulting in a highly competitive marketplace.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

For this IDC MarketScape, IDC Energy Insights included firms that have an established reputation in providing professional services and IT services to support their client to optimize their operational environment. To participate in this study, vendors were short-listed based on the following criteria:

- Market share. A minimum market share is not required. However, a vendor must have an established reputation in working with the mining industry, specifically in providing technology-led process optimization services to different operational functions within the mining ecosystem.
- **Revenue**. A minimum revenue threshold is not mandatory, but the company must have a presence in the market and can demonstrate revenue in at least two regions globally.
- Range of services. The vendor must provide mining companies with at least three of the following key services: business consulting, IT consulting, systems integration, application development, IT outsourcing, business process outsourcing (BPO) (including horizontal and industry-specific BPO services and industry-specific managed services), IT deployment support, and IT education and training.
- Industry- and operational-specific. The vendor must be able to demonstrate a variety of unique and vertical-specific offerings designed to support core mining business processes.

Deloitte, DXC Technology, and PricewaterhouseCoopers (PwC) did not actively participate. In the case of these three vendors, their assessments were undertaken based on IDC's knowledge, previous engagement, and understanding of their capability to the mining sector.

ADVICE FOR TECHNOLOGY BUYERS

Mining companies looking to further develop their digital capabilities should utilize this IDC MarketScape as a starting point to identify potential services providers to use within their operations. When identifying a potential services provider, mining organizations should assess what they are looking to achieve. From a capability perspective, whether for optimizing processes, creating data excellence capabilities, introducing new innovation, or outsourcing, they need to identify what their operational objectives are (e.g., performance improvement, increased efficiency, or safer operations). Mining companies should target the services providers best placed to deliver these outcomes. In mining operations, the objectives are always increased tonnage production, better product grade, and safer operations while improving production cost per unit. Thus, vendors that streamline operations within and across siloes and successfully deliver innovation, digital capabilities, and new ways of working to support the business to deliver these outcomes more consistently are the most highly desired.

The mining industry is in the midst of a digital transformation, and there is a great deal of variance in digital maturity levels throughout the industry. Although many larger mining organizations are well developed, many smaller operations are still at the beginning of their digital transformations. These variances require varied approaches from professional services providers as mining companies have differing ideas on how vendors are capable of providing assistance and varying abilities to take advantage of the capabilities that the suppliers have to provide. This means that both miners and suppliers must understand the development road map required for each operation

as it will differ with maturity and strategy. Mining companies will require partnerships as their requirements change over time as the operations digitally transform and look to implement more advanced use cases with greater levels of value chain, process, and technology integration.

The nature of operational optimization capabilities available to mining companies is developing rapidly. This IDC MarketScape includes prominent suppliers impacting the market, but there are many much smaller providers servicing this market from different perspectives (e.g., professional services companies, IT services companies, IT hardware companies, software companies, telecommunications companies, and engineering services companies). IDC has completed this MarketScape for a second time. IDC has noted how much the market has developed and how much the capabilities of individual providers to the market has advanced this time. The providers are deepening and broadening their capabilities, while mining companies are becoming more sophisticated in their ability to take advantage of these IT-led technology and digital optimization capabilities in the context of their operations.

The specific capabilities provided by the individual vendors assessed in this IDC MarketScape are developing rapidly in their digital and technological offerings and how they come together to support the optimization of operational processes and value chains for their clients. Services providers are developing a greater understanding of the mining industry as a whole and the creation of the skill sets required to appropriately engage mining companies and work with them to create the greatest value. In many instances, this value creation is being shared in partnership between miners and suppliers, further consolidating the relationship and capabilities between them. Most mining companies are seeking to create a group of core partnerships with their key suppliers to support the digital transformation of their operations and the optimization of their processes. In this IDC MarketScape, vendors that have optimized the value provided across siloes within mining operations have the best position.

When selecting a supplier for operational optimization, mining companies must be clear about what their requirements are. Given the mix of stakeholders often involved in identifying the problems that operations are facing and what the technology/digital solutions are, this can often be more difficult than it sounds. Mining companies should consider the following when selecting a professional services and IT services provider to support operational optimization capabilities:

- Assess a vendor based on its integration capabilities. Digital-led offerings available to improve and optimize mining operations are rapidly developing their abilities to create value and ease of implementation. Ensuring the vendor of choice is capable of working with the solutions available and can integrate them with existing systems is paramount to successful implementations.
- Look at a vendor's research and development record. Vendors with a consistent research and development (R&D) history will be more capable of increasing their offerings over time and creating custom solutions. In the process of developing new innovations, they are often well placed to disrupt their own offerings and enable their customers to embrace their latest products.
- Work with an agile vendor. Operational requirements will inevitably change over time. This
 will require the supplier's technology road map to evolve alongside the business. Ensuring
 the partnership has flexibility ingrained in it is important as the time taken for the supplier to
 understand specific mining organizations can be long. Imbuing flexibility in the partnership
 will enhance the ability to optimize mining operations, even as entire operational
 ecosystems change over time.
- Look at the geographic support footprint. Although the services providers assessed are present around the world, they are not necessarily in every country and very often have varied depths of capabilities in different countries. Identifying vendors with the geographic

footprint that matches the organization's operational regions will enable the organization to draw the most value from the partnership.

- Develop your list of business objectives. Be clear from the start about your goals in engaging an operational optimization services provider. This will enable you to narrow your vendor selection. The vendors assessed excel in different areas based on strategic requirements and desired technological advancements.
- **Investigate existing customer value creation.** Prior to developing a strategic partnership with a vendor, ensure that the vendor has delivered on value for its existing customers.
- Determine the effectiveness of the strategic relationship. The strategic partnership should be expected to last for a long time. To ensure it is a happy relationship, asses how the vendor manages existing customers and how they deal with engaging all stakeholders across the business. Demonstrating value in regular and small increments to the business will be critical.

VENDOR SUMMARY PROFILE

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

Infosys

Infosys is positioned in the leaders category in IDC's 2020 MarketScape Worldwide Professional Services Firms for Mining Operational Process Optimization.

To support engagements and bring agility in mining operations, Infosys applies its Digital Navigation Framework, which is centered around digital platforms for IT–OT integration, manufacturing execution system (MES) automation, remote operation, decisions support, digital procurement and integrated supply chain, digitally connected assets, and next-gen safety and sustainability. Infosys provides capabilities across the mining value chain, encompassing engineering services, supply chain, mining operations, and field service management. IoT, data platforms, mobility, cloud, cybersecurity, and artificial intelligence (AI) are major focus areas of its technology capabilities, delivered through its consulting and advisory, implementation, and managed services. These services are delivered through its "closer to mine" delivery hubs in Toronto, Phoenix, Monterey, Santiago, Sao Paulo, London, Frankfurt, Perth, and Brisbane, as well as global delivery centers in India, United States, and Europe, the Middle East, and Africa (EMEA).

Infosys' strategy is to leverage a deep partner ecosystem that includes both horizontal- and mining industry-specific partners in a broad range of areas, and a focus on R&D, industry forums, and training with academia, such as the Indian Institute of Technology (Indian School of Mines) (IIT), University of Chile, and the University of Western Australia. Its R&D investments include acquisitions, such as Brilliant Basics, Wongdoody, Noah Consulting, Fluido, and Simplus, and innovation development supported by a US\$500 million fund to invest in start-ups. Infosys' go-to-market strategy is to leverage ready-to-deploy industry-specific capabilities (across exploration, inbound and outbound logistics, mine operations, and mine safety) and cross-industry capabilities, such as KRTI 4.0, Infosys' industrial AI platform solution applicable to mining operations.

Strengths

Buyers were positive about Infosys' focus on R&D, level of innovation capability, and reliability. IDC analysts noted Infosys' growth in success in the operations side of the mining sector and its improved messaging in supporting its credibility in this area.

Challenges

Although Infosys has created delivery hubs in major mining hubs around the world, there are parts of its geographic footprint that receive less support because of locality. Infosys should focus on expanding its mining sector–specific expertise as part of scaling this business further and improve its ability to support its geographical footprint more evenly.

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.

The 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.

The 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 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 this IDC MarketScape, IDC Energy Insights reviewed professional services firms that provide the following services to mining companies to optimize their operational processes. The processes that are included within this assessment are:

- Supply chain
- Asset management and maintenance
- Health and safety
- Mining operations
- Logistics and transportation
- Energy management

Services provided by the vendors reviewed in this IDC MarketScape include:

- Business consulting. Business consulting involves advisory and implementation services related to management issues. It involves defining an organization's strategy and goals and designing and implementing the structures and processes that help the organization reach its goals. Business consulting includes four main areas: strategy consulting, operational improvement consulting, internal audit consulting, and change and organization consulting.
- IT consulting. IT consulting is a professional services activity around IT. It is the delivery of advice to customers aimed at managing their IT organization and improving an organization's IT performance, infrastructure (including IT security), and related processes. IT consulting includes two main areas: IT strategy consulting and IT operations consulting.
- Domain expertise combined with technical capabilities. Most companies have indicated that in the future, they will select vendors that have good combined consulting and technical skills. Many projects require a combination of oil and gas knowledge and technical skills to implement an initiative. For example, subsurface data management requires a certain level of knowledge about geosciences as well as the technical skills to cleanse and manage data within a repository. Managing production is another example in which both domain expertise and technical skills are required to perform meaningful allocations and reports.
- Systems integration. These services include the plan, design, implementation, and project management of a technical solution that addresses an organization's specific technical or business needs. Systems integration (SI) projects typically involve different platforms and technologies. The solutions may include hardware, software, and services and are consumed on-premises, on demand, or in a cloud-based environment. An SI project is formalized by a contract that is constructed around solution specifications and often demands certain levels of performance against technical or business goals. The end result of an SI project is the delivery of a system that meets a stated objective and fulfills solution specifications.
- IT outsourcing. IT outsourcing services involve a long-term, contractual arrangement in which a services provider takes ownership of and responsibility for managing all or part of a client's information systems (IS) infrastructure and operations based on a service-level agreement. Typically, IT outsourcing engagements involve contracts for which a large portion of the IS environment is outsourced, usually over a 5- to 10-year period, although the length of these engagements can be much shorter.
- BPO and managed services. BPO involves the transfer of management and execution of one or more complete business activities, business processes, or entire business functions by a customer to an external (third-party) services provider or an outsourcer. BPO contracts may involve the transfer of fixed assets and personnel from the customer to the services provider. BPO may also involve the use of a provider's own technology environment (or platform) from which the business process services are provisioned. Contract terms for business outsourcing engagements may range anywhere from 1 year to more than 10 years.

LEARN MORE

Related Research

- IDC FutureScape: Worldwide Mining 2021 Predictions (IDC Energy Insights #US45820121, October 2020)
- IDC TechBrief: Mine Site Based LTE for Mining Globally (IDC Energy Insights #US44595219, September 2020)
- IDC PeerScape: Practices for Asset Performance Management Implementation in Worldwide Mining (IDC Energy Insights #US44594019, September 2020)

- IDC's Worldwide Digital Transformation Use Case Taxonomy, 2020, Mining (IDC Energy Insights #AP46625120, July 2020)
- Building Resiliency for Mining: Technology Priorities for Recovery (IDC Energy Insights #AP46398720, June 2020)
- IDC Market Glance: Mining AI Systems, 2Q20 (IDC Energy Insights #AP46395920, June 2020)

Synopsis

This IDC MarketScape assesses the capabilities and strategies of professional service vendors that work alongside their mining customers to optimize operational processes across the entire mining value chain by crossing siloes and creating organizational value. Vendors do this by assisting in the development of strategic technology road maps and implementation of data-driven technologies, such as automation, artificial intelligence, streamlined operational processes, cloud, and analytics platforms.

"As digital transformation becomes an increasingly important focus for mining companies, particularly the integration of IT and operational technology (OT) systems, mining companies are seeking the support of IT and digital-led IT services and professional services companies in the optimization and transformation of their operational processes," says Emilie Ditton, associate VP, IDC Energy and Manufacturing Insights. "This market has developed significantly in the two years since IDC last completed this IDC MarketScape, and it will continue to do so as mining companies become more able to take advantage of IT, digital, and data-related services applied within operational value chains and processes," says Ditton.

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.

IDC Australia

L11, 160 Sussex Street Sydney, NSW 2000 Australia +61.2.9925.2298 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 2020 IDC. Reproduction is forbidden unless authorized. All rights reserved.

