IDC MarketScape

IDC MarketScape: Worldwide Professional Services Firms for Mining Operational Process Optimization 2018 Vendor Assessment

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THIS IDC MARKETSCAPE EXCERPT FEATURES IBM

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: Worldwide Professional Services Firms for Mining Operational Process Optimization 2018

Source: IDC, 2018
IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Professional Services Firms for Mining Operational Process Optimization 2018 Vendor Assessment (Doc # US41908017). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

This IDC study represents the vendor assessment model called IDC MarketScape. This research is a quantitative and qualitative assessment of the characteristics that explain a vendor’s current and future success worldwide. The valuation is based on a comprehensive framework and set of parameters expected to be most conducive to success in providing optimization within and across those mining operational processes in both the short and long terms. As mining companies move toward creating digital mining operations, it is critical to look at how these processes and their interconnections can be optimized through strategy, organization, and technology. Within this assessment, a significant and unique component of this evaluation is the inclusion of mining operational process optimization buyers’ perception of both the key characteristics and the capabilities of those providers. As one would expect, those firms that performed well on this assessment are those that are most able to create value for their customers across and between processes.

This IDC MarketScape is intended to provide mining companies with insight into the future strategies and current capabilities of professional services firms working within mining operations to optimize operations. It provides guidance on how to approach building professional services engagements and partnerships that will deliver value to the business. Key findings include:

- Mining clients are generally very positive about their engagements with their vendors. Clients reported consistent positive experience and outcomes from working with all the vendors included in this IDC MarketScape.
- Those companies that have performed well in this IDC MarketScape are those that are most effective through their strategy, skill, engagement, and delivery models in delivering value to clients not only within operational siloes but also between siloes.
- This market — IT services within operational process optimization — is a developing one. The mining sector has attracted IT services companies that five years ago were a much less significant part of this market, if at all. Mining companies are becoming better in identifying their requirements: how they are seeking to engage with these vendors and to understand how they must engage to maximize the value that these vendors bring to the business.
- The following success factors highlighted by mining companies included: 1) the capacity to execute, 2) the quality of account management, 3) the willingness to be flexible and customer-focused, 4) the technology insights and capabilities, and 5) the ability to bring an ecosystem that can provide value to the business.
- The dominant suppliers in the industry have come out strongly in the results of this IDC MarketScape. A number of reasons appear why these organizations performed well, including mastery of change management or the breadth of their skills and road maps. Several
challenging organizations are hot at their heels; however, this is a market that will develop a great deal over the coming years.

**IDC MARKETSCAPE VENDOR INCLUSION CRITERIA**

For this IDC MarketScape, IDC Energy Insights included firms that have an established reputation in providing professional services, companies optimize their operational environment. To participate in this study, vendors were shortlisted based on the following criteria:

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

**ADVICE FOR TECHNOLOGY BUYERS**

This IDC MarketScape is the starting point for mining companies in their selection of service providers that can help them look at creating digital mining capabilities to optimize their processes and operations. For mining companies, the selection will be primarily based on what these firms can do to improve performance, efficiency, productivity, and safety. For this industry, this means creating visibility that improves the capacity to cost per tonne, thus optimizing production, creating interconnections across the siloes of a mining operation, preventing incidents, streamlining the operation, and driving operational excellence.

Mining companies are looking for support in moving to a digital mining environment. The mining sector is an industry at the beginning stages of a transformation, where currently the levels of maturity are quite varied. This maturity affects how companies think about how to engage with IT professional services vendors, the role those partners need to play in their organization, and the objective they are trying to achieve. More mature mining companies recognize that this is about moving from an environment where a mining operation is the sum of several siloed parts, to one where the operation is integrated and dynamic as a whole. Mining companies must take certain steps to get this holistic approach — this means the way they engage with services vendors and what they require in terms of skill will change.

This IDC MarketScape provides an assessment of a market that is experiencing significant change, in terms of the capability that professional services vendors have and how these vendors position against each other for different parts of their skill set, as well as in terms of how mining companies understand, engage, and articulate their requirements from the partners that they choose to work with. In this IDC MarketScape, the vendors that are most able to maximize the value they can deliver across operational siloes within mining operations have scored the highest.
In their engagement with professional services firms, mining companies should pay attention to the following decision factors:

- **Be clear about your business objectives.** Determine the business objectives, strategies, and key metrics first and determine what attributes are most important for the indicatives that you are considering.

- **Establish success metrics and performance indicators.** This will provide focus for the operational improvements that you are trying to achieve and create an analytics base for decision making. It will also make it easier to maximize the executive focus on why the initiative matters and how it fits into your digital mining road map.

- **Strategic road maps for chosen vendor partners are important.** Flexibility in building a strategic partnership is particularly important. Few professional services firms have the level of industry expertise that mining companies require, so once you have made the investment of educating and training your chosen professional services partner, you want to ensure that you have chosen one that has the right road map in place. The reality is that flexibility and ecosystems are more important than the current road map itself, because this is an ecosystem that is going to be experiencing a great deal of change over the coming two to five years.

- **Look for vendors with experience in the type of initiative you are seeking to undertake.** This relates to clarity of the objectives that you have.

- **Focus on building your ecosystems.** You want to build networks of innovation and be in a better position to co-innovate with your chosen services partners. It will be very important to create an engagement platform internally that can bring together business stakeholders, technology partners, end users, and start-ups. Building your own ecosystem and understanding this environment will put you in a much better position to assess the effectiveness of the ecosystem of each professional services organization that you might choose to engage with.

- **Creating innovation is important.** Be clear of the kind of innovation that you seek to deliver, and the type of innovation that you expect. Leading innovation that creates value at scale will be impacted heavily by the engagement of stakeholders across the business and by thinking holistically about the problem faced. Understand that there is a price/value equation in the ability of professional services vendors to deliver innovation across multiple processes, so understand what that business case is and how it fits in your digital mining strategy.

- **Benchmark vendors to see how they have helped their customers create value.** There are many kinds of initiatives offered by the vendors present in this market segment.

**VENDOR SUMMARY PROFILES**

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

**IBM**

Based on assessment and market perception, IDC Energy Insights positions IBM as a Leader in this IDC MarketScape.
Vendor Mining Sector Strategy

IBM has a strong strategy for the mining sector that it has been implementing steadily. IBM's strategy to support the optimization of operational processes is centered around its cognitive value chain offerings. Core to IBM's strategy for the mining sector is the premise that, to transform, mining companies must reinvent themselves, and cognitive capabilities are required to do that.

Vendor Offering in This Space

IBM has developed well a wide-ranging set of services targeting the optimization of operational processes for the mining sector. This includes leverage across enterprise resource planning (ERP), health, safety security and environment, supply chain management, mining operations management, and asset management maintenance. These services are built on the foundational skills and platforms that IBM brings to market including connectivity, IBM Cloud, and the IBM Watson IoT platform. All these come together to form what IBM describes as the Cognitive Value Chain for mining.

Across the Cognitive Value Chain for mining, IBM’s solution offerings seek to bring together digital and physical capabilities and systems for its clients — through digital twin; integrated operations centers; cyberphysical systems; data integration and IoT platforms; connected operations through onsite equipment and plan; and automated process, equipment, and systems. The solution offerings are across health security and environment (e.g., worker wellness, worker safety, physical security); supply chain management (e.g., cognitive procurement, geo inventory, mine to ship scheduling, predictive analytics for rail logistics and transformation); mining operations management (e.g., cognitive ore body discovery, fleet efficiency, handover app); asset management/asset maintenance (e.g., cognitive maintenance, maintenance scheduling, cybersecurity). The breadth of the offerings is substantial, touching on masteries within and across the entire mining value chain.

IBM recognizes that it wants to play a central role in the ecosystem mining companies operate in. An ecosystem where mining companies are the operators of things and the industrial manufacturers as the providers of things. IBM identifies itself and its partners (e.g., Siemens, Schneider Electric, Microsoft, ABB, OSIsoft, Cisco, SAP) as being the services providers that can bring together the ecosystem.

IBM's investments in research and development (R&D) are a critical part of its strategy success in the mining sector. IBM invests 6–7% of revenue annually in R&D. IBM research scientists conduct pioneering work in AI, analytics, security, nanotechnology, cloud computing, and blockchain. Its R&D addresses customers' business and technical challenges by developing systems that combine data and the physical through mathematical optimization using cognitive computing techniques built on top of a flexible, resilient, and integrated platform based on cloud and high-performance resources.

Strengths

- Cloud, analytics, IoT, and cognitive are built into IBM's solutions targeting the entire mining value chain and the critical problems that mining companies are trying to solve. IBM expertise addresses a range of mining challenges, enabled by a foundational platform powering connectivity, cloud, and security. It has a broader and deeper range of capabilities compared with its competitors.
- IBM's R&D and Watson are strong components of its strategy for mining customers. Customers have reported very strong positive experience and outcome of working with these aspects of IBM.
The strategy that IBM has built around the Cognitive Value Chain is compelling because of its ability to bring transformation to the existing value chain and structure of the industry by providing customers the resources to transform.

Like many large organizations, IBM is challenged with conveying simplicity in its engagement with customers. Even so, IBM’s customers reported their pleasure at the willingness of IBM’s account and delivery teams to push boundaries within IBM and drive stakeholder engagement with them for the best possible outcomes.

IBM’s cognitive value chain strategy is very strong. One customer interviewed expressed this quality well, saying, “The reality at the end of the day is that IBM can really do anything.”

Challenges

IBM struggles with providing a single view of the company to the customer. Associated challenges regarding this exist across delivery, go to market, and marketing, which must be tackled by IBM for it to continue to improve its competitive positioning. It must do a better job at shielding the customer from complexity. One customer commented, “When you meet with IBM, you meet with ten people every time.”

IBM has been through many reinventions over the years, which means that the experience customers have varies significantly depending on the part of the business they have engaged with. IBM will do better with a consistent single brand to market.

Delivery and go-to-market efficiencies from different parts of the business are highly variable. IBM must do a better job at marketing its capacity to provide value creation through the optimization of operational technology processes of its mining customers. This is one area where the IT giant trails behind less established competitors.

To continue its excellence in technology and strategy, IBM must present its skills, engagement, and delivery in terms of business value and transformational outcomes, rather than the technology problem that it is solving.

Consider IBM When

You need a partner that can provide a broad base of transformative IT-related technology capabilities across the whole value chain.

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, or the capabilities category, reflects the vendor’s current capabilities and menu of services and how well aligned the vendor is to customer needs. It focuses on the capabilities and product of the company 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 the strategies axis, indicates how well the vendor’s future strategy aligns with what customers will require in three to five years. It 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 to give 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 are providing the following services to mining companies for optimizing their operational processes. The processes that are included within this assessment include:

- 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 often includes defining an organization’s strategy and goals and designing and implementing the structures and business processes that help the organization reach its goals. Business consulting includes three main areas: strategy consulting, operational improvement consulting, and change and organization consulting.

- **IT consulting.** IT consulting services include advisory services around information technology. Examples include evaluating an IS organization’s help desk operation or determining the most suitable technology to meet a company’s order fulfillment process. IT consulting can also include product-specific consulting.

- **Transformational consulting.** Transformational consulting refers to understanding the business objectives and strategies of the company and requires special knowledge and skills for evolving the IT environment to the 3rd Platform, meaning the talent required to understand the business needs and the technology and approaches to optimize the development of the 3rd Platform.

- **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 where both domain expertise and technical skills are required to perform meaningful allocations and reports.

- **Systems integration (SI).** SI services include the planning, design, implementation, and project management of a solution that addresses a customer's specific technical or business needs. SI involves systems and custom application development, as well as implementation and integration of enterprise packaged software. An SI contract is a large-scale project contract that can range from a few hundred thousand dollars to tens of millions of dollars, depending on the extent of the project.

- **IT outsourcing.** IT outsourcing services involve a long-term, contractual arrangement in which a service provider takes ownership of and responsibility for managing all or part of a client's IS infrastructure and operations. These are broad engagements that typically include responsibility for the systems, network, and application components of the IS infrastructure.

- **Business process outsourcing and managed services.** Business process outsourcing services involve a long-term, contractual arrangement in which a service provider takes over the entire process, including running this process on its own hardware and software as well as delivering services. Typically, BPO contracts support outsourced finance and accounting, procurement, and customer service. Companies are even managing services for domain-specific environments, and IDC Energy Insights expects this trend to continue as companies are focused on outsourcing noncore areas of the business to reduce costs and move to the 3rd Platform.

### LEARN MORE

**Related Research**

- *Perspective: Mining Industry Transformation* (IDC #AP42252117, February 2017)

**Synopsis**

This IDC MarketScape assesses the capabilities and strategies of technology vendors that work with their mining customers globally to optimize operational processes across extraction, mining, supply chain, and retail, by bringing together technology accelerators such as automation, data management and 3rd Platform technology (mobility, cloud, augmented reality, analytics, edge computing, robotics).

"Mining companies are facing the challenge of enabling agile operational environments delivering insight, control, and responsiveness. They are looking to their service providers to help consult about and implement high-impact, innovative approaches and solutions to digitally transform, create the required agility, enable adaptive operational processes, and improve production," according to Emilie Ditton, associate vice president, Worldwide Mining, IDC Energy Insights. "The challenge is selecting the right vendor for the right requirement by understanding the strengths and capabilities of each vendor. As the mining sector faces change and looks to technology to digitally transform, providers are
continuing to invest and grow their knowledge and skills targeting the mining sector so that they can better support their customer and deliver transformative value."
About IDC

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