

IDC MarketScape

IDC MarketScape: Worldwide Oil and Gas Upstream Asset Management Digital Services 2021 Vendor Assessment

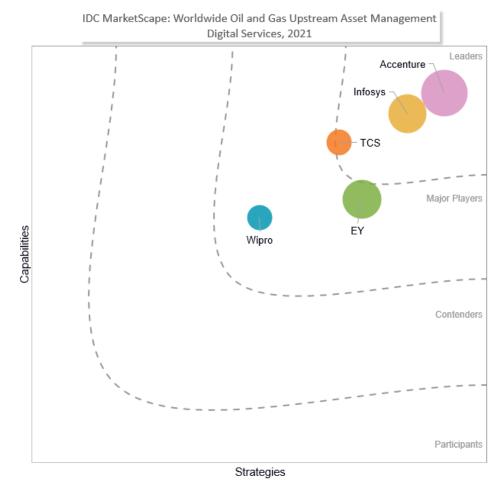
Mukesh Dialani Jonathan Lang Andrew Meyers

THIS IDC MARKETSCAPE EXCERPT FEATURES: INFOSYS

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Oil and Gas Upstream Asset Management Digital Services Vendor Assessment



Source: IDC, 2021

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 Oil and Gas Upstream Asset Management Digital Services 2021 Vendor Assessment (Doc #US47025221e). 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 study represents the vendor assessment model called the IDC MarketScape. This research is a detailed quantitative and qualitative assessment of the digital services vendors' current and future success in the upstream oil and gas (O&G) asset management marketplace. Market volatility and disruption are at an all-time high, compounding existing pressure that oil and gas enterprises were facing with a prolonged global pandemic that reduces market demand and constrains the capabilities and working models of these companies. This volatility is creating urgency for oil and gas enterprises to accelerate their digital transformation (DX) strategies to become more resilient. This resiliency is requiring transformation in asset management capabilities, with a need to become more predictive and efficient in the way they are deployed, operated, and maintained. It is requiring greater levels of control and flexibility with remote operations capabilities and distributed working models. And it is requiring business agility through data-driven decision making through greater integration of data and insight across business applications, organizational roles, and extended supply chains. To achieve this accelerated transformation, oil and gas enterprises are increasingly engaging with third-party service providers to develop their strategy, deploy and integrate technology, and maintain these systems ongoing.

This study assesses the capabilities and business strategies of five digital services vendors serving the oil and gas industry. This evaluation is based on a comprehensive framework and a set of parameters expected to be most conducive to success in providing digital services to upstream oil and gas asset management projects. The goal of this research study is to provide technology buyers a set of objective considerations as they engage with these types of services. A significant component of this evaluation is the inclusion of digital services buyers' perception of both the key characteristics and the capabilities of these providers.

Key findings include:

- Innovation is the primary differentiation criteria for upstream asset management services. On average, references gave their lowest score when asked how differentiated they considered innovation from their consultancy to be from their peers. Firms that had significant investments in domain-specific innovation hubs and labs tended to be favored by buyers. In some cases, bench strength and project turnover were also differentiators of different providers. Services is a very staffing and labor-based business, and consultancies are often recruiting from each other and/or from shared talent pools.
- Digital services providers in upstream oil and gas companies are getting the basics right.
 Reference clients that IDC spoke with were impressed by the quality of the people and

- industry expertise from the digital services vendors in this assessment. On average, reference clients gave consultancies highest scores for people quality, action orientation, and industry-specific insight. The providers assessed are recruiting industry-trained and digital practitioners and are training and developing them well. They are getting to know their clients inside out, and they are producing very valuable outcomes as a result.
- Clients want to be inspired and guided more than ever by their upstream digital services vendors. At a time of extreme market volatility, environmental pressures, and political change, upstream oil and gas companies are keenly aware that they must rethink what they do and how they do it. Most of the organizations that IDC spoke with during the research for this assessment said they want to be challenged more by their digital services partners. Even when they say that their services partner challenges them, they usually add that it doesn't challenge them enough.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

This research includes analysis of providers with digital services offerings worldwide, including those with broad portfolios and specialty services spanning IDC's research coverage. Further:

- This assessment is designed to evaluate the characteristics and buyer perceptions of each vendor, as opposed to its size or the breadth of its services.
- The basic requisite capabilities are dedicated oil and gas resources and experience, IoT and edge computing for industrial deployments, asset management and maintenance strategies, and general information technology (IT) and digital design.
- Providers must offer connections to upstream operational assets and sensors, engineering staff, and digital design capabilities – including design studio locations, activity, and so forth.
- Providers must have a minimum of three upstream operational technology (OT) projects in operation over the past two years.
- Providers' upstream asset management digital services offering should be global in scope with a diversified customer base.
- The vendors should provide a minimum of two customer references (reference customers must have had at least six months' experience with the solution by May 2020).

ADVICE FOR TECHNOLOGY BUYERS

Upstream companies should assess firms based on how mature their solution is and how experienced the vendor is in the specific market segment when selecting a digital services vendor. However, every organization's requirements and maturity vary and should incorporate their unique considerations in addition to the general considerations reviewed in this document. Broadly, the following advice is provided to users seeking services in the upstream oil and gas asset management digital services area:

- Ensure the services firm can strategically prioritize and interlink networking, operational, and business requirements. Managing requirements across stakeholders while ensuring feasibility and integration of requirements into the tactical deployment of technology is a key role of a service provider.
- Bring together disparate stakeholders and influencers to ensure linkage between the business and the technology. Subject matter expertise in oil and gas is key to ensuring those requirements get translated appropriately into capabilities.

©2021 IDC #US47025221e 3

- Select a partner that can deliver the project in a globally consistent manner that may involve a variety of commercial arrangements and consumption models that are appropriate for each business case and organizational structure. Owing to the unique technical requirements of OT-related projects, local resources and partners that can support physical project requirements (e.g., instrumentation, installation) are essential.
- Ensure that the services partner must be able to define and deliver repeatable methodologies for technology, operational, and business outcomes. This requires industry specialization.
- Select a services firm that must execute a closed-loop feedback cycle between consulting and project delivery to keep projects on pace and in scope.
- Select a services firm that must articulate investments in new technologies, processes, and tools for efficient, secure, and intelligent service delivery. References continuously cited the need for their service provider to aid them in driving innovation. Even if this is not within a company's original scope of work, it should be considered when selecting a provider.

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.

Infosys

According to IDC analysis and buyer perception, Infosys is positioned in the Leaders category in the 2021 IDC MarketScape for worldwide oil and gas upstream asset management digital services.

Infosys is a global leader in next-generation digital services and consulting, enabling enterprises across the value chain in the oil and gas industry.

Services include end-to-end asset management – from planning, procurement, design, asset life-cycle management, asset performance management, operations, and integration and advance analytics. Infosys has built solutions that aim to assist clients in running efficient operations across from remote operation centers. Infosys offers a prebuilt analytics engine for asset life-cycle management and asset performance management. Infosys brings the service design concept into the OT space and implements service management principals into OT operations for its customers.

The key offerings for Infosys include:

- Integrated planning
- Procurement
- Design and blueprinting
- Asset life-cycle management and asset performance management
- OT operations
- Network operations including field networks
- Advanced analytics leveraging Infosys Cobalt platform
- Scaling emerging technology and solutions digital twins, intelligent operations, human operating environment detections, HSE with IoT

Quick facts about Infosys are as follows:

- Employees: Globally approximately 260,000 overall; over 6,000 professionals dedicated to the O&G practice
- Globalization: Supports sales in 50+ countries
- Software and technology partners: 70+ technology partners and over 50,000 digital experts in total
- Ideal customer size: Midmarket to large enterprises
- Pricing model: T&M, risk/reward, fixed fee, IT as a service, and so forth

Strengths

- Industry expertise: End-to-end services is provided across the entire O&G value chain (exploration and production, energy trading and risk management, refining and marketing).
 This is supported by technology/OT/IT, IoT, and other services.
- Investment in innovation: AR platform for equipment maintenance, blockchain-powered Proppant solution, smart oilfield services solution, KRTI 4.0 (digital twin, knowledge, and connectivity)
- Ecosystem: Wide range of technology partnerships with top providers to the industry; over 100 strategic relationships with O&G companies, oil field services, pipeline companies, and EPC and chemical companies

Challenges

- Appeal to midmarket: Mostly focused on the midmarket to large enterprise market with largescale projects.
- Bench turnover: Some customers mentioned that at times there can be turnover on the project team, particularly on long-term engagements.
- Project process uncertainty: Customers mentioned Infosys is very prepared with time/process, although it could alleviate some of the uncertainty of the process.

Consider Infosys When

Consider Infosys if you are looking for midmarket to large projects from a company with extensive experience in the industry.

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 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

Digital services for upstream oil and gas are project-oriented services that help clients define how they will use "digital" (3rd Platform) technologies and services to achieve their strategic objectives.

Digital strategy consulting services show the client how to derive business value from deploying 3rd Platform technologies and services, typically including cloud services, big data and analytics (BDA), mobility, cognitive/artificial intelligence (AI) technologies, social business, next-generation security, the Internet of Things (IoT), and other next-generation technologies such as blockchain and quantum computing.

Digital services for upstream oil and gas include the actual implementation of digital technologies and the actual transformation of business processes and organizational structures that invariably accompany the deployment of new digital technologies and services.

LEARN MORE

Related Research

- IDC MarketScape: Worldwide SaaS and Cloud-Enabled Oil and Gas EAM Applications 2021
 Vendor Assessment (IDC #US46743520, July 2021)
- Industrial Internet of Things in Oil and Gas Industry (IDC #AP43671919, April 2021)
- From Siloed to Holistic Asset Life-Cycle Management (IDC #US47446721, February 2021)

Synopsis

This IDC study assesses the capabilities and business strategies of digital services vendors serving the oil and gas industry. The oil and gas upstream asset management digital services area must become much more efficient and streamline development and production much more for companies to earn cost-competitive returns. Services that provide leading digital accelerators are key to the advancement of the upstream sector.

"Upstream operators were overall very pleased with the services provided by all IDC MarketScape participants. It is clear the upstream market is being transformed at a rapid pace and companies trust their technology partners to help lead them into the future." – Andrew Meyers, research director, IDC's Worldwide Oil and Gas program

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

140 Kendrick Street Building B Needham, MA 02494 USA 508.872.8200 Twitter: @IDC blogs.idc.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 2021 IDC. Reproduction is forbidden unless authorized. All rights reserved.

