



HfS Blueprint Report

Energy Operations Excerpt for Wipro

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Derk Erbé
Research Vice President
derk.erbe@hfsresearch.com

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Executive Summary



Introduction to the HfS Blueprint Report: Energy Operations

- The HfS Research Blueprint Report for Energy Operations provides a comprehensive overview of services for the Oil & Gas industry. This Blueprint looks at business process outsourcing, information technology outsourcing and engineering services across the Oil & Gas value chain areas of Upstream, Midstream and Downstream, and Cross Value Chain BPO and Engineering and ITO services.
- This report analyzes and reviews how the market is evolving towards more business outcomes-focused, flexible, and collaborative services, and how service providers are meeting the needs of Oil & Gas clients.
- The HfS Blueprint includes profiles and assessments of 13 service providers of Energy Operations services.
- Unlike other quadrants and matrices, the HfS Blueprint identifies relevant differentials between service providers across a number of facets in two main categories: innovation and execution. The assessment of the 13 service providers is reflected on the HfS Blueprint Grid.
- The HfS Blueprint Grid recognizes up-and-coming service providers (High Potentials) that are scoring higher on innovation criteria than on execution criteria as the providers build these practices. The Grid includes a group of established, high-execution service providers (Execution Powerhouses) that have built effective delivery operations but need to innovate capabilities and offerings further. They are in addition to the rankings for highest overall performance (Winners Circle), and strong combined innovation and execution performance (High Performers).

Oil & Gas Value Chain: Business Processes, IT and Engineering

UPSTREAM	MIDSTREAM	DOWNSTREAM		
Exploration, Development and Production	Transportation	Refining	Distribution	Marketing & Retail
<ul style="list-style-type: none"> • Asset Management • Asset Integrity Management • Digital Oil Field Management • Drilling and Well Completion Management • Petro Technical Computing Infrastructure • Reservoir Engineering • Upstream Accounting • Upstream Engineering and R&D • Production optimization • Upstream Data Management • Field Development and Planning & Contract Management 	<ul style="list-style-type: none"> • Linear Asset Management (Pipeline Operations, Modelling, Surveillance) • Transportation Operations Management • Supply & Trading 	<ul style="list-style-type: none"> • Emission Management • Integrated Refinery Information Systems • Plant Operations • Refinery Production planning & Scheduling • Supply Planning & Sourcing 	<ul style="list-style-type: none"> • Terminal Operations • Distribution Management 	<ul style="list-style-type: none"> • Energy Marketing Services • Retail and Franchise Operations • Energy Trading & Risk Management

Cross Value Chain BPO and Engineering

Analytics (Customer / Marketing / Asset), Capital Project Management, Customer Experience Management, Digital Transformation Services, Field Force & Workforce Management, Finance & Accounting (including complete Hydrocarbon Accounting), HR & Learning, Knowledge Management, Legal Services, MRO services, PLM Services, Procurement, Product Design & Engineering Services, Sales and Fulfilment Services

Cross Value Chain ITO

Application Development & Maintenance Services, End User Computing Services, Enterprise Content Management, Environmental & Health and Safety Systems, GIS Services, IT Operations, IT Security Management, Mobility and IoT Services, SAP/Oracle Oil & Gas ERP Implementation and Management

HfS Value Chain Definition: Value chain refers to the series of departments that carry out value-creating activities to design, produce, market, deliver, and support a company's product or service. In this usage, we refer to the range of primary processes and support services that providers offer to their clients.

Key Highlights – State of the Energy Operations Market

- **Heterogeneous Providers Focus on Diverse Client Needs:** Most of the 13 service providers covered in this Blueprint have a unique set of offerings and capabilities for addressing clients' needs. There are a couple of clusters of expertise to be identified in the field of service providers. Some, like KPIT and HCL, focus on a specific area of the value chain, others, like TCS, Infosys, Wipro, Accenture, IBM and Cognizant, focus on strong domain expertise and consulting-led delivery while others, like EPAM, Atos, Luxoft, Harman and Tech Mahindra, lead with engineering or Digital Transformation with credible experience from other industries.
- **Growing Market Under Pressure of Low Oil Prices and Environmental, Political and Social Pressures:** Over the course of the research process for this Blueprint the oil price reached lows of under \$30,- per barrel. In a world of high oil prices and cash abundance, most Oil & Gas companies let inefficiencies exist. Now there is a strong imperative to find new efficiencies, optimize production, lower capital needs and take advantage of data. The name of the game for Oil & Gas is: Fixing the basics and starting to leverage new technologies. Service providers play a role here, bringing more efficiency into processes, fueling innovation, implementing new technologies and preparing Oil & Gas clients for a new era.
- **Oil & Gas Companies Looking for New Levers:** As the focus of the industry is on cost reduction, production optimization and operational efficiency, automation and outsourcing are two principal levers available to the industry. Oil & Gas executives are forced to have a good look at their strategy. Key questions being asked are:
 - What is the core of our enterprise?
 - What do we need to do internally, what differentiates us from the competition?
 - What parts of our processes can we automate?
 - Can we outsource what we can't automate?

Key Highlights – State of the Energy Operations Market

- **Buyers Perception of Service Provider Becoming More Strategic:** A pivotal changing dynamic in the market is how buyers look at their service providers. With the renewed focus on outsourcing as a lever to deal with the pressures in the volatile business environment, Oil & Gas clients tell us they look beyond labor arbitrage and see service providers as an extension of their organization. They want deeper relationships with their providers and forge stronger ties between internal and external staff. They look at their service provider(s) to help the organization become more flexible and scalable, ramping up and down in the cyclical business of Oil & Gas.
- **As-a-Service Delivery Becoming the Norm, As-a-Service Pricing Is Lagging Behind:** In their quest to become more flexible and agile, buyers are warming up to As-a-Service delivery and engagement models. Lower capital requirements, focus on business outcomes and plug and play services are attractive, but most engagements still start off with an FTE, Time and Material or Fixed Price model with the intent to introduce more transaction or outcome based pricing during the duration of the contract. Service providers show an appetite to experiment with As-a-Service pricing models, especially in new engagements or when new technology is involved.
- **The Big Data and Analytics Impetus:** Big data and data sciences play a more and more far-reaching role in Energy Operations services as organizations start to realize their big data strategies. Advanced analytics is increasingly embedded in service providers' offerings enabling the capture and integration of previously disconnected and disparate data in order to create accessible and actionable insights in support of business decisions. While there is no shortage of data in Oil & Gas companies, data quality is a major obstacle. Availability, consistency and completeness of data is often a bottleneck for Analytics services.
- **Intelligent Automation Is On The Rise:** Robotic process automation (RPA) and Autonomics are widely used technologies in Energy Operations for instance in back-office and mid-office BPO processes like Procurement, Finance & Accounting, HR and infrastructure maintenance and support.

Key Highlights – State of the Energy Operations Market

- **Talent is a Growing Concern and Service Providers Can Plug the Talent Gap:** Oil & Gas companies have faced difficulties attracting talent over the past decades. Only a fraction of college graduates consider a career in Oil & Gas. The crisis in the current market has led to large scale layoffs of employees. The aging workforce will drive what is called the “Big Crew Change”. Service providers can play a role in solving the talent problem of the industry. Providers seem to be in a better position to attract younger talent, offering them more diverse career opportunities. The digital revolution in Oil & Gas also brings a qualitative talent gap, different skills are required. Data scientists, software architects and engineers are not the traditional Oil & Gas employee and service providers are able to attract and develop these talents.
- **Large Scale Deployment of Services Aiming to Bring Down Cost:** Service providers are asked to deliver services with cost saving potential such as applications rationalization, infrastructure optimization, operations analytics for more efficient operations, mobility and social platforms to empower workers, enabling a smarter and smaller workforce.
- **Plug and Play Digital Services Starting to Emerge:** Energy Operations service providers are just beginning to become partners with their clients in developing and deploying Plug and Play Digital Business Services. Typically, they have taken the form of analytical applications. We see these services as being at the “Initial” stage of development with significant progress forecasted over the next few years as service providers become more comfortable with being platform developers.

Key Market Dynamics in Energy Operations

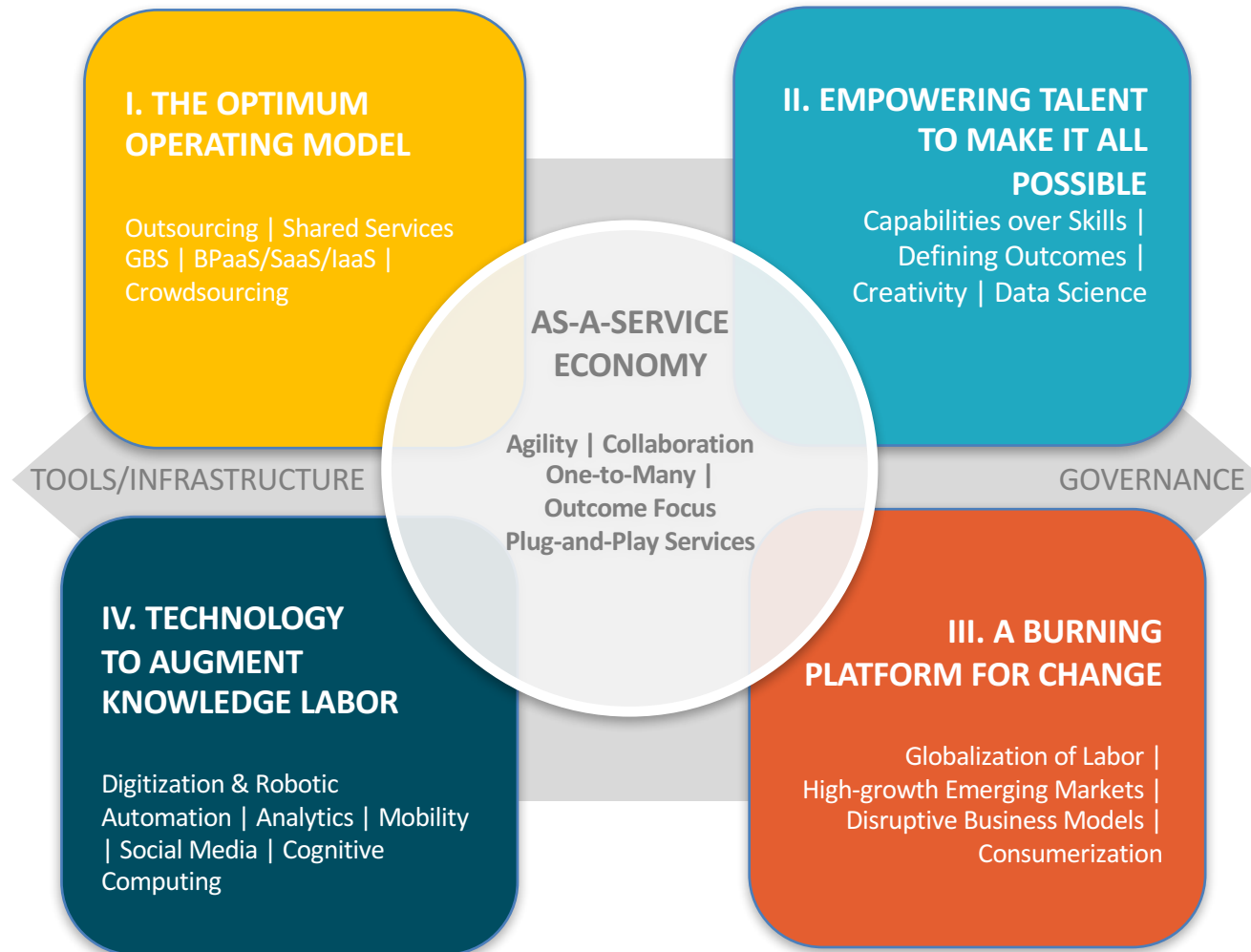


Issues for Energy Operations Providers Today

- **Sustaining the Momentum of Change:** The downturn in the Oil & Gas industry and sustained low oil price has created a momentum for change in the industry. However, in many of our discussions, service providers and Oil & Gas executives voice their concern about the behavior of Oil & Gas companies if the oil price rise would rise above \$ 60 per barrel or higher. Many fear a return of complacency, that will slow the pace of innovation and change, when the absolute economic necessity of cost cutting, improving efficiency and leveraging technology to become smarter and cheaper wanes. This fear potentially puts a strain on willingness to co-invest with clients.
- **Introducing Innovation in a Safety Obsessed Culture:** Oil & Gas companies have a culture of safety and security deeply embedded. This culture sometimes holds companies back to introduce new ways of working and emerging technologies into the Energy Operations, just because its unclear what the ramifications could be for safety and security. One example we have frequently heard is around broadly adopting Internet of Things technologies, as they will introduce a new set of cyber security challenges. These reservations need to be addressed before large scale implementations of IoT will take place.
- **Gaining Trust:** While service providers and buyers alike aim for more collaborative relationships, service providers want to be trusted partners and become a more integral part of the client's organization, trust remains a fragile and elusive phenomenon. We see this pose a problem for service providers who are anxious to bring innovation by leveraging big data and advanced analytics and the limited access they have to said data due to confidentiality. Trust is a crucial factor here and is paramount for the ability to seize opportunities in new services, new technologies and moving up the strategic value chain, ultimately delivering more value to the client.

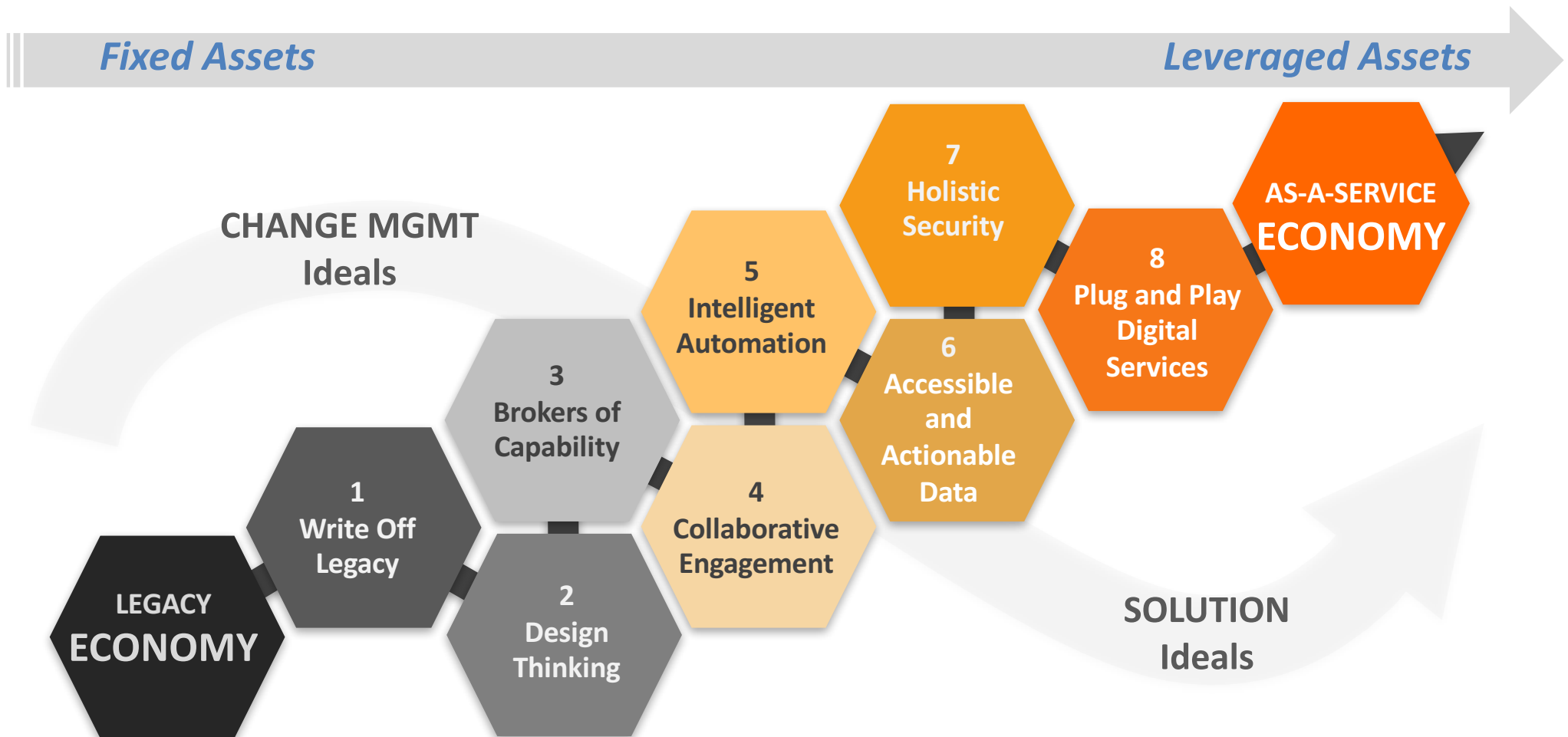
Welcome to the As-a-Service Economy

HfS uses the word “economy” to emphasize that the emerging next phase of outsourcing is a more flexible, outcome focused way of engaging and managing resources to deliver services. Operating in the As-a-Service Economy means architecting use of increasingly mature operating models, enabling technologies and talent to drive targeted business outcomes. The focus is on value to the consumer.



Journey to the As-a-Service Economy

- Moving into the As-a-Service Economy means changing the nature and focus of engagement between enterprise buyers, service providers and advisors
- “As-a-Service” unleashes people talent to drive new value through smarter technology and automation



Energy Operations Is Beginning to Incorporate the Ideals of the As-a-Service Economy

IDEAL	AS-A-SERVICE IDEAL DEFINITION	NONEXISTENT	INITIAL	EXPANSIVE	EXTENSIVE	ALL PERVASIVE
Write Off Legacy	Using platform-based solutions, DevOps and API ecosystems for more agile, fewer exception-oriented systems		2016			
Design Thinking	Understanding the business context to reimagine processes aligned with meeting client needs			2016		
Brokers of Capability	Orienting governance to source expertise from all available sources, both internally and externally, to address capability gaps			2016		
Collaborative Engagement	Ensuring relationships are contracted to drive sustained expertise and defined outcomes			2016		
Intelligent Automation	Using automation and cognitive computing to blend analytics, talent and technology			2016		
Accessible and Actionable Data	Applying analytics technologies, processes and resources on relevant data sets to derive insights that can help improve an enterprise				2016	
Holistic Security	Proactively managing digital data across service chain of people, systems and processes		2016			
Plug and Play Digital Business Services	Plugging into “ready to go” business outcome-focused, people, process and technology solutions with security measures		2016			

How As-a-Service Is Taking Shape in Energy Operations: Writing Off Legacy

Legacy technology and physical distribution investments that limit agility and create exceptions addressed through adding internal and external FTEs



Using platform-based solutions, DevOps and API ecosystems for more agile, fewer exception-oriented systems



- Writing Off Legacy for enterprises and service providers in Energy Operations is still largely in the “Initial” phase. Significant investment have gone into implementing ERP systems and in many cases, customizing these systems. Today, we see a lot of application rationalization to drastically lower the complexity and number of ERPs in the organization. Writing off Legacy is not about abandoning these systems but in exploring and using platform-based solutions that integrate with the system of record, making the data more accessible and extensible, and interfacing and integrating with other technologies. Service providers are forming extensive networks of partnerships, providing industry and functional platforms, expertise and methodologies to enable both technological and change management capabilities and expand their ability to help clients change.

Examples:

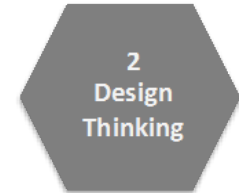
- EPAM and Luxoft are two providers with strong software engineering skills applying DevOps to Energy Operations engagements. EPAM for example has inherited many of their clients’ legacy and new application portfolio, with the task to combine, rationalize and integrate these applications into modern, more sustainable platforms supported by DevOps teams. The next step in Writing Off Legacy is for EPAM to invest in the underlying platforms and accelerators and deliver the solutions with outcome-based pricing.

How As-a-Service Is Taking Shape in Energy Operations: Design Thinking

Resolving problems by looking first at the process as the source of the solution



Understanding the business context to reimagine processes aligned with meeting client needs



- Design Thinking provides a new way to think and engage as partners. It helps shift the focus of work and engagement from “inside out” to “outside in”, starting from the end consumer. Design Thinking can be applied to new engagements, existing engagements or in search of next level value. Most service providers have adopted Design Thinking in some way, shape or form and have introduced clients to the concept. We believe this ideal is starting to become “Expansive” in the Energy Operations engagements but there remains a large opportunity to use Design Thinking as a way to establish joint initiatives and change the nature of engagements. As it takes two to tango, the challenge for service providers is to engage their counterparts in the client organization and entice them to be an equal partner in this process, by showing success with other clients and in other industries and positioning Design Thinking as an new frame of reference for innovative thinking and developing.

Examples:

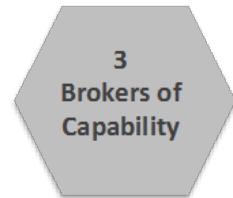
- Infosys has put Design Thinking at the heart of the company’s strategy for developing solutions and managing client relationships. We see evidence of this approach being used, to reimagine processes and service delivery with clients and resulting in a project for large scale exploration of the opportunities for automation with a international Oil & Gas client.
- Cognizant is an example of a service provider that has been putting Design Thinking and other methodologies to practice in its Co-Innovation Model, a platform where clients, research groups, partners and Cognizant collaborate to solve complex business problems. One compelling example is the use of Design Thinking and experience design and human-centric design to rethink the nine to five process of an oilfield engineer, resulting in better workforce and asset management, improvement of health, safety and reliability with an Augmented Reality project.

How As-a-Service Is Taking Shape in Energy Operations: Brokers of Capability

Focusing governance and operations staff on managing to the letter of the contract and the decimal points of service levels



Orienting governance to source expertise from all available sources, both internally and externally, to address capability gaps



- Being a broker of capability is about articulating a business problem or opportunity, the desired outcomes, and then coordinating and facilitating across internal and external entities to reach those results. In our research, Brokers of capability are the Oil & Gas industry veterans who can look outside the process for current and anticipated needs to deliver business results. Often these results go above and beyond the requirements of the engagement, but are identified as the “sticky” business problems lacking of a sustainable solution. Solving said problems requires intricate knowledge of processes and the capabilities of (new) technologies and partners. In complex environments and ecosystems under pressure of change and volatility, these capabilities are extremely valuable to Oil & Gas clients and service providers. Given the domain expertise service providers have accumulated, this ideal is “Expansive” in the current market.

Examples:

- TCS captured domain expertise and capabilities in industry specific solutions and blueprints based on industry requirements and clients’ desired business outcomes. An example is the Well Factory solution that solves the labor intensive and time consuming process of bringing new wells online, including all the work needed to be done putting these wells in dispersed applications across the enterprise.
- Infosys has similar solutions that bring together a wide range of capabilities from within Infosys, clients and partners to solve previously unsolved industry challenges. SmartOFS for Oil Field Services companies is one example, giving clients an integrated, pre-configured solution that includes templates and accelerators, to reduce time and cost on implementation along with complete standardization of Oil Field Services specific processes.

How As-a-Service Is Taking Shape in Energy Operations: Collaborative Engagement

Evaluating relationships on baselines of cost, effort and labor



Ensuring relationships are contracted to drive sustained expertise and outcomes



- The key to a sustainable outsourcing engagement is collaboration, working together to produce a result. Traditionally, outsourcing work has been directive from service buyers to service providers and managed strictly by procurement organizations. As more business units and global shared services centers take responsibility for relationships, HfS is seeing a move over time to more collaboration where trust and experience are in place, often through shared outcomes and results. The adoption of practices of collaborative engagement is “Expansive” in Energy Operations today as a response to the orientation of the market toward A) solving challenging business issues and B) deeper relationships as a result of rounds of consolidation over the last couple of years.

Examples:

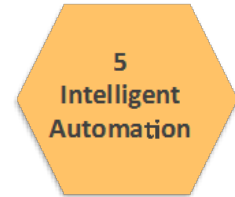
- There are several examples of service providers facilitating collaborative engagement between themselves and clients and even with other clients. Notable examples are Accenture’s Energy Hubs that are set up across the globe to serve as a showcase of (digital) technologies and inspiration for clients. Cognizant’s Collaboratories, part of Cognizant Digital Works, is its investment to accelerate Digital and aims to involve clients and partners in innovation. And TCS’ Co-Innovation Network (COIN), a three-level model of collaborative engagement with strategic discussions at the senior management level, tactical collaboration between operational managers (supported by a Customer Engagement Portal) and operational reviews at the day-to-day level.

How As-a-Service Is Taking Shape in Energy Operations: Intelligent Automation

Operating fragmented processes across multiple technologies with significant manual interventions



Using of automation and cognitive computing to blend analytics, talent and technology



- Automation has become “Expansive” in Energy Operations. We see the application of RPA and Autonomics in several business processes and IT infrastructure and application management. Several industry executives we talked with in our research classify RPA and autonomics in business process and IT as “table stakes” or “bare bones” as the industry looks to reduce headcount, drive efficiency and increase digital advantage. However, what we call Intelligent Automation—using software and technology to do routine tasks, and enhancing it through machine learning and natural language processing, and moving up the curve with artificial intelligence, is far from pervasive at this stage. There are real opportunities in applying Artificial Intelligence and cognitive computing to Energy Operations but this is in initial stages, which is only logical as this is a rapidly evolving but young field.

Examples:

- Several service providers show real promise in Intelligent Automation, with TCS’s ignio™, Infosys’ Mana, Wipro’s Holmes and IBM’s Watson starting to being applied to Energy Operations engagements. IBM has an engagement with Woodside in Australia where Watson is employed to use predictive data science to leverage more than 30 years of collective knowledge and experience. Watson is trained by Woodside engineers and makes available the collective expertise in designing, fabricating and constructing major oil and gas facilities as well as managing major turnarounds to a large number of Woodside employees as a cloud based knowledge platform appropriately called ‘Lessons Learned’.

How As-a-Service Is Taking Shape in Energy Operations: Accessible and Actionable Data

Performing ad-hoc analysis on unstructured data with little integration or business context



Applying analytics technologies, processes and resources to relevant data sets to derive insights that can help improve an enterprise



- Analytics is driving a new wave of transformation in Oil & Gas. Data is everywhere in Energy Operations processes. There are huge amounts of historical data, asset data, process data, project data, and it is growing every day at a staggering rate. Having Accessible and Actionable Data is the future of Energy Operations. Solutions range from predictive operational analytics, predictive asset analytics, behavioral analytics in surveillance and security to customer and marketing analytics. These options tie into areas in Energy Operations where efficiency gains can have huge financial impact such as predictive and prescriptive maintenance, and production optimization.
- There are important hurdles around data confidentiality and data quality in the industry. We see several service providers being an active participant in the development of insights rather than a passive data provider in their Energy Operations engagements. There is room for more expansive roles when clients start allowing the service provider to act more upon the developed data to improve the effectiveness of processes. This is especially true in the more industry specific parts of the value chain, closer to the core of the client's expertise and where the IP of the industry is found, such as drilling and well completion, reservoir engineering and production optimization.

Examples:

- Two exemplary use cases for providing accessible and actionable data to clients' workers are TCS' "Data Streams As-a-Service" offering and Infosys' "Dataroom As-a-Service". The former digitizes and integrates previously dispersed and paper information people spend a lot of time chasing down and delivers them at the fingertips of field workers and engineers. The latter brings together all the data involved in M&A and divestitures on a secure platform and provides analytics around the data in the due diligence process.

How As-a-Service Is Taking Shape in Energy Operations: Accessible and Actionable Data

Performing ad-hoc analysis on unstructured data with little integration or business context



Applying analytics technologies, processes and resources to relevant data sets to derive insights that can help improve an enterprise



Examples:

- EPAM takes an end to end responsibility for analytics, from capturing data, building data platforms, data lakes, adding data science, writing algorithms and proving the technology in a full stack approach. One example is analysis of well related PDF-based photographic data, taken from public domain sources and large data sets, with sophisticated algorithms, feeding insights into the client's resource planning with visualized, map-based views optimized for planning purposes. For an O&G major, EPAM developed an Advanced Analysts Platform on a Hadoop/Spark infrastructure. This platform supports the clients' Unconventionals Operations, fetching information from multiple systems of record and data sources (internal and external like WellView, Energy Components, Primavera) and turning the data into dashboards, KPI's and metrics specific to the client's asset planning, production operations, drilling and completions in tailored views for disparate business units.
- Wipro, using Analytics as a platform to solve business problems, provides a good example of putting analytics at the center of a new Marketing/Retail Point of Sale solution for a US based chain of service stations. The solution combines analytics of customer behavior, historical data on car maintenance and buying patterns into recommendations and special offers and can pre-empt new demand. This in turn enabled entirely new business models for the client.
- Atos presents a case of data analytics in operations and design for a major Oil Field Services client. The service, running on Atos' Codex data analytics platform, acquires data from a logging while drilling tool (a real-time well site evaluation tool) and analyzes for data trends. The service gives the client insights into the health of the tool and feeds this insight into maintenance and design, speeding up the re-deployment of the tool significantly. Prior to the solution, it could take up to a month to turn around the tool after failure because of the time spent looking for the cause of failure.

How As-a-Service Is Taking Shape in Energy Operations: Holistic Security

Responding reactively with post-event fixes. Little focus on end-to-end process value chains



Proactively managing digital data across service chain of people, systems and processes



- The assets in Oil & Gas, such as wells, rigs, pipelines, refineries and tankers are considered the world's critical infrastructure. The damage an accident in this industry can impose on the environment, people and economies is tremendous, as we have seen with the 2010 Deepwater Horizon disaster in the Gulf of Mexico. This catastrophe has put further emphasis on the culture of safety and security in the Oil & Gas industry. With the pervasiveness of digital data, the need for Holistic Security is growing. Physical and digital assets are abundant and need to be secured holistically, a requirement driven by the integration of Information Technology and Operations Technology (IT/OT) and maturation of Internet of Things (IoT) in the industry. Holistic Security is however still a nascent As-a-Service Ideal today in Energy Operations offerings. The distributed nature of assets and the sheer number of contractors involved in day to day operations in Oil & Gas pose significant challenges for a holistic approach to security. This is not to say there is no physical security or cyber security in place, this industry has a high security threshold, but in HfS' view there is an opportunity for service providers to expand their culture and infrastructure of Holistic Security to create this holistic view of the state of physical and digital assets and up the ante on security in Oil & Gas and their role in securing energy.

Examples:

- Several service providers, such as Accenture, TCS and Cognizant, operate Managed Security Operations Centers for clients. Wipro specifically has a strong vision for breaking down security silos in OT, IT and IoT. But, perhaps because of Atos' greater experience with military grade security services, HfS saw from Atos more of an strategy and awareness of what the opportunities and issues are for a holistic approach to cyber and physical security management than from other service providers. Understanding the needs of managing physical and data security in Energy Operations, Atos is showing how significant these capabilities will be and how it should increasingly form a integral part in a Energy Operations offering vision.

How As-a-Service Is Taking Shape in Energy Operations: Plug and Play Digital Business Services

Undertaking complex and often painful technology transitions to reach a steady state



Plugging into “ready to go” business outcome–focused, people, process and technology with security measures



- Oil & Gas is heavily dependent on ERP systems, Plug and Play can unlock value by interfacing with these systems, and making them more extensible and valuable. Plug-and-play also is well positioned for smaller but growing companies, and in support of replacing systems for companies going through mergers. Service providers in Energy Operations are just beginning to become partners with their clients in developing and deploying Plug and Play Digital Business Services. In Oil & Gas, a conservative industry, innovations have been adopted slowly, creating a sort of “innovation gap”. Service providers now have the opportunity to leapfrog a generation of technology and services and really drive new Plug and Play Digital Services. At this moment, there are few true Plug and Play Digital Services. We see these services as being at the “Initial” stage of development with significant progress forecasted over the next few years as service providers become more comfortable with being platform developers.

Example:

- Accenture offers several services that can be procured with an as-a-service model; one example is real-time Digital Turnaround analytics to drive significant cost and schedule performance improvements. It even has a service for a large multi-national resource company called “Everything As-a-Service”, leveraging cloud-enabled data analytics, Internet of Things technology, Security and freeing up talented resources for innovative projects. This engagement is contracted with flexible consumption-based pricing to allow quick reaction to changes in the business environment
- Infosys has a number of Plug and Play Analytics As-a-Service: clients can plug into Competitor Analytics (for instance Distribution of Wells and Operators across leases, Production vs. Operators distribution) and Completion Efficiency & Optimization (for instance Frac Stages /Details vs Production Distribution, Fracking Wells by Operators by year).

Research Methodology



Blueprint Research Methodology

Data Summary

- Data was collected in Q1 and Q2 2016, covering buyers, providers and advisors/influencers of Energy Operations Services.

Participating Service Providers

accenture

Infosys®



<epam>



Atos



IBM

KPIT

HCL



Tech
Mahindra

This Report Is Based On:

- **Tales from the Trenches:** Interviews were conducted with buyers who have evaluated service providers and experienced the services. Some were supplied by service providers, but many interviews were conducted by HfS Executive Council members and participants in our extensive market research.
- **Sell-Side Executive Briefings:** Structured discussions with service providers were intended to collect data necessary to evaluate innovation, execution and market share, and deal counts.
- **Publicly Available Information:** Financial data, website information, presentations given by senior executives and other marketing collateral were evaluated.

HfS Blueprint Scoring Percentage Breakdown

EXECUTION	100%
Quality Of Service Provider’s Account Management Team	15%
Integration Of Customer Feedback And Collaborative Models Of Engagement	10%
Experience Delivering To Super Majors (e.g. BP, Shell, Chevron, ExxonMobil, Eni, Total, ConocoPhillips) And National Oil Companies (e.g. Saudi Aramco, Nigerian National Petroleum Corporation, Qatar Petroleum etc.)	10%
Models For Continuous Improvement	5%
Actual Delivery Of Services (Upstream, Midstream, Downstream, Cross Industry)	25%
Depth Of Industry Specific Capabilities (Services, Domain Expertise, Tools, Platforms)	15%
Flexibility To Deliver End-to-End And Point Solutions And Integration Of Supporting Technology	10%
Talent Development / Ability To Attract And Retain Key Industry Skills	5%
How Is The Service Provider Becoming A Broker Of Capability For The Client	5%

INNOVATION	100%
Vision For Oil & Gas Market Evolution And Services	15%
Models For Co-Innovation And Collaboration For Solution Design	15%
Innovation In Commercial Models To Help Clients Write Off Legacy	15%
Use Of Partnerships, Alliances And Joint Ventures	15%
Strategy For The Deployment Of Intelligent Automation (RPA, Autonomic Platforms, Cognitive Computing)	10%
Investment In Oil & Gas Market Services Related Plug & Play Digital Services	10%
Vision For Holistic Security Of Critical Infrastructure	10%
Programs For Developing Industry Talent	10%

Execution Definitions

EXECUTION	How well does the service provider execute on its contractual agreement, and how well does the provider manage the client/provider relationship?
<i>Quality Of Service Provider's Account Management Team</i>	How engaged is the executive and management team in defining and managing the delivery of services?
<i>Integration Of Customer Feedback And Collaborative Models Of Engagement</i>	How has the service provider taken feedback and incorporated it into the solution and delivery? How was the service provider maintained a collaborative engagement?
<i>Experience Delivering To Super Majors And National Oil Companies</i>	What experience does the service provider have working with the Super Majors (e.g. BP, Shell, Chevron, ExxonMobil, Eni, Total, ConocoPhillips) and/or National Oil Companies (e.g. Saudi Aramco, Nigerian National Petroleum Corporation, Qatar Petroleum etc.)? How long have these engagements been active? What type of work is delivered, industry specific services or horizontal services?
<i>Actual Delivery Of Services (Upstream, Midstream, Downstream, Cross Industry)</i>	What are the clients' and market's overall impression of the quality of service across the value chain from this service provider?
<i>Models For Continuous Improvement</i>	What methodologies and processes are implemented to continuously improve service delivery? How effective are these models? Do clients notice the existence of these models in the day to day delivery?
<i>Flexibility To Deliver End-to-End And Point Solutions</i>	When looking at a client's Energy Operations issues, can the service provider offer various solutions (point and end to end) to create a flexible and configurable (or customized) response?
<i>Becoming Brokers Of Capability For Clients</i>	Is the service provider able to act as a deep partner in meeting clients' specific and varied talent and technology requirements over time?
<i>Experience In Delivering Industry-Specific Solutions</i>	How deep is the domain expertise (talent and solutions) in understanding and then addressing industry-specific issues? Is this domain expertise limited to a single industry area, or is it widespread? Is the service provider organized around industry-specific knowledge development and delivery?
<i>Talent Development / Ability To Attract And Retain Key Industry Skills</i>	Does the service provider employ talent with Oil & Gas industry specific skills and experience? What is the service provider's vision and strategy to attract and retain industry talent?

Innovation Definitions

INNOVATION	How well does the service provider innovate its offering(s) in response to market demand, client requirements and its own vision for how the Oil & Gas market will evolve?
<i>Vision For Oil & Gas Market Evolution And Services</i>	What is the service provider's vision for the evolution of the Oil & Gas market and Energy Operations services? Is there a clear strategy for delivering Energy Operations As-a-Service, and are there identifiable investments in place to realize this strategy today?
<i>Models For Co-Innovation And Collaboration For Solution Design</i>	What are the main areas of innovation customers are asking from service providers? What models are service providers experimenting with?
<i>Vision For Holistic Security Of Critical Infrastructure</i>	How do service providers deal with security of the physical and digital environment? How is Holistic Security part of service delivery and platforms? Is Holistic Security integral to the service provider's offering?
<i>Use Of Partnerships, Alliances And Joint Ventures</i>	What partnerships, alliances and joint ventures does the service provider have with providers of technology, tools, platforms and/or domain expertise in Oil & Gas? How does the service provider use partnerships, alliances and joint ventures to build and expand capabilities for service delivery?
<i>Strategy For The Deployment Of Intelligent Automation (RPA, Autonomic Platforms, Cognitive Computing)</i>	What is the service provider's approach to using intelligent automation platforms (RPA, autonomics and cognitive) to improve the efficiency and effectiveness of delivering Energy Operations process? How mature is the service provider's strategy for intelligent automation?
<i>Investment In Oil & Gas Market Services Related Plug & Play Digital Services</i>	What digital platforms does the service provider use to deliver Energy Operations services? Are they integral to the service provider's offering(s) or add-ons? How pervasive is the uptake of these digital platforms by clients today? What is the service provider's future digital platform strategy?
<i>Innovation In Commercial Models To Help Clients Write Off Legacy</i>	How does the service provider use and introduce new commercial models to give clients new ways of working with the service provider? How are new commercial models used to help clients write off legacy, provide flexibility and/or less capital requirements up front?
<i>Programs For Developing Industry Talent</i>	What does the service provider do to attract and develop industry talent? Are there identifiable investments made to develop industry talent, expand domain expertise in the Oil & Gas practice?

Service Provider Grid

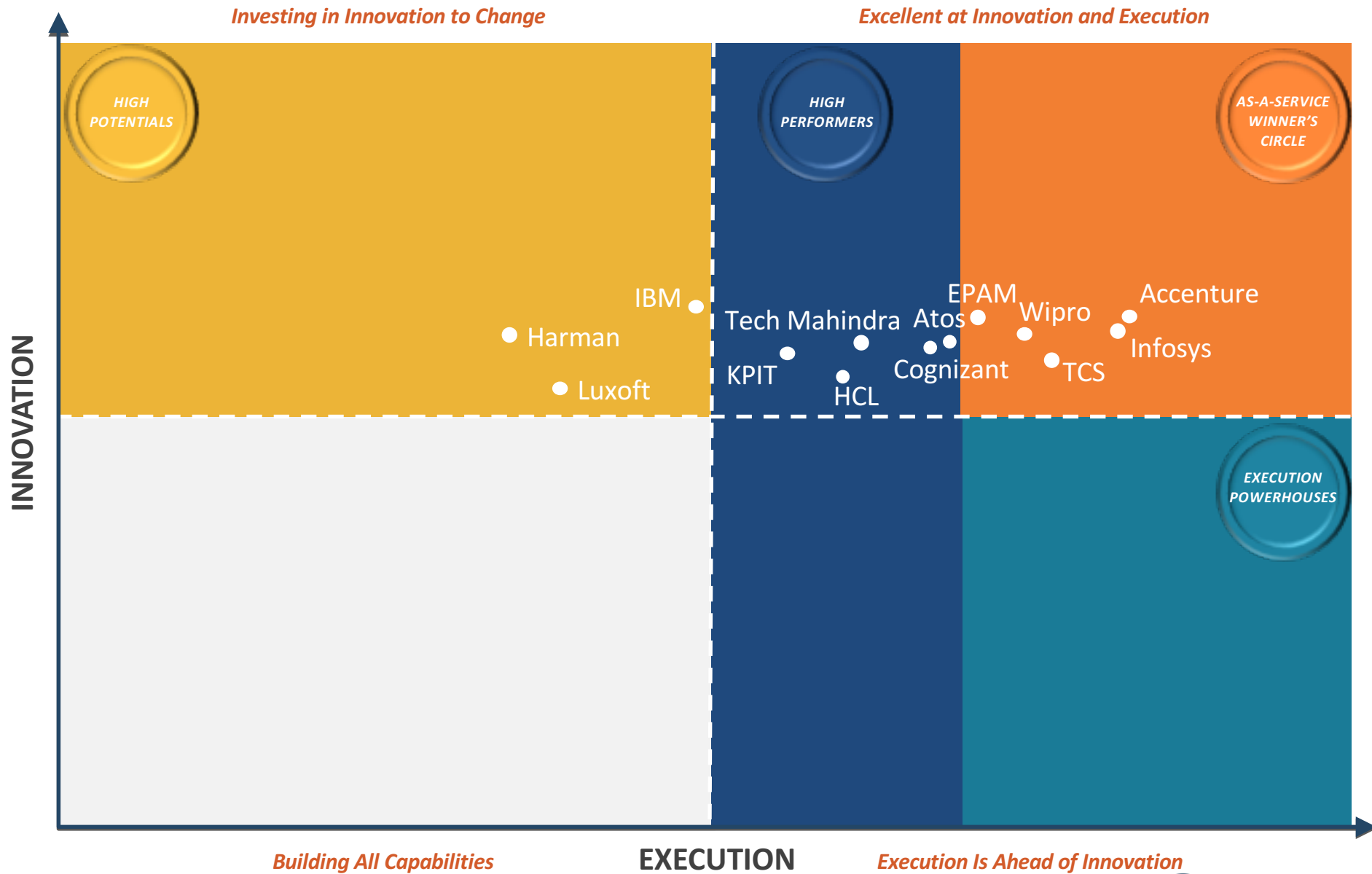


Guide to the Blueprint Grid

To distinguish service providers that show competitive differentiation in a particular line of delivery with progress in realizing the “As-a-Service Economy” of business outcome-oriented, on-demand, talent + technology services, HfS awards these providers the “As-a-Service Winner's Circle” designation.

	EXECUTION	INNOVATION
<p>● As-a-Service Winners Circle show excellence recognized by clients in the 8 Ideals in execution and innovation</p>	<p>Collaborative relationships with clients, services executed with a combination of talent and technology as appropriate, and flexible arrangements.</p>	<p>Articulate vision and a “new way of thinking,” have recognizable investments in future capabilities, strong client feedback, and are driving new insights and models.</p>
<p>● High Performers demonstrate strong capabilities but lack an innovative vision or momentum in execution of the vision</p>	<p>Execute some of the following areas with excellence: worthwhile relationships with clients, services executed with “green lights,” and flexibility when meeting clients’ needs.</p>	<p>Typically, describe a vision and plans to invest in future capabilities and partnerships for As-a-Service, and illustrate an ability to leverage digital technologies and/or develop new insights with clients.</p>
<p>● High Potentials demonstrate vision and strategy but have yet to gain momentum in execution of it</p>	<p>Early results and proof points from examples in new service areas or innovative service models, but lack scale, broad impact, and momentum in the capability under review.</p>	<p>Well-plotted strategy and thought leadership, showcased use of newer technologies and/or roadmap, and talent development plans.</p>
<p>● Execution Powerhouses demonstrate solid, reliable execution but have yet to show significant innovation or vision</p>	<p>Evidence of operational excellence; however, still more of a directive engagement between a service provider and its clients.</p>	<p>Less evident vision and investment in future-oriented capability, such as skills development, “intelligent operations,” or digital technologies.</p>

HfS Blueprint Grid: Energy Operations



Major Service Provider Dynamics: Highlights

EXECUTION

- **Actual Delivery of Services:** The quality of service delivery is a crucial component of the value service providers offer their clients. Low quality service delivery can negatively impact the Oil & Gas company's top- and bottom-line performance. This Blueprint places a lot of value on excellent service delivery. Feedback from clients and the market on delivery excellence was especially positive for the service providers in **the As-a-Service Winner's Circle**. Highlights in feedback are they have introduced more flexibility in service delivery and contractual arrangements and they combine industry expertise, consultative capabilities, technology leadership and consistent delivery.
- **Brokers of Capability:** Enterprise clients are becoming much more demanding in the type of roles and skills they want to acquire from service providers in Energy Operations processes. The days of large transactional team sourcing start to wane and are being replaced by agile skill sourcing. Service providers, including **Accenture, Wipro, Infosys** and **TCS**, are adapting to this new dynamic by diversifying their skills offering, including technology and expertise from their partner ecosystem, and building more flexible commercial structures to provide access to talent to leading clients.
- **Industry-Specific Capabilities and Expertise:** The value of deep industry domain expertise in Energy Operations is resonating through interviews with clients and market shapers. **Infosys, TCS, Wipro** and **Accenture** lead the way here. **Cognizant, Tech Mahindra, EPAM, Luxoft, Atos** and others are stepping up industry investments, and **HCL** and **KPIT** are focusing client needs for transforming the IT landscape.
- **Talent:** The ability to attract, retain and develop domain talent is a key ingredient for a real Oil & Gas practice. The providers showcase excellent programs for Energy Operations Talent Development and we see very serious efforts to meet future demand for talent in the industry.

INNOVATION

- **Vision for Energy Operations Market Evolution and Services:** In the challenging market environment, creating a strong vision for the Oil & Gas market, how client needs are evolving and the services needed to facilitate meeting these needs is more important than ever. Clients expect much more than just cost savings by labor arbitrage. Multiple providers stand out with their vision for the role of service providers will play in helping Oil & Gas clients in the energy transition, especially the providers in the **As-a-Service Winners Circle** and **Cognizant, Tech Mahindra** and **Atos**.
- **Expanding use of Intelligent Automation in Energy Operations:** Artificial Intelligence and cognitive are still relatively new in Energy Operations processes, but HfS has seen encouraging use cases and commitment to Intelligent Automation from service providers. We expect Intelligent Automation capabilities to become much more mainstream in the next few years. Efforts from **IBM, Infosys, TCS** and **Wipro** in autonomics, Artificial Intelligence and cognitive stood out for this Blueprint, as well as **Accenture's** large scale application of automation in BPO service delivery, driving substantial value for clients.
- **Partner Ecosystems and Alliances:** Service providers have a clear understanding that partnering is the key to being brokers of capabilities, bringing new value to engagements and being drivers of innovation. This translates into investments in industry specific and technology partnerships by almost all service providers in this Blueprint. The breadth of partner ecosystems and alliances of **Accenture, TCS, Tech Mahindra** and **Infosys** stand out, spanning alliances for the creation of industry specific solutions, academics and industry associations.

The Energy Operations Value Chain

Upstream		Midstream	Downstream		BPO	Engineering	IT
Asset Management	Upstream Accounting	Linear Asset Management	Emission Management	Energy Marketing	Analytics	Product Lifecycle Management	Application Development & Maintenance
Asset Integrity Management	Petro Technical Computing	Transportation Operations Management	Integrated Refinery Information Systems	Retail and Franchise Operations	Digital Transformation	Product Design & Engineering	IT Security Management
Digital Oilfield Management	Reservoir Engineering	Supply & Trading	Plant Operations	Energy Trading & Risk Management	Finance & Accounting	MRO	Enterprise Content Management
Drilling and Well Completion Management	Field Development Planning & Contract Management		Refinery Production Planning	Retail Fuel Pricing	Procurement		Environmental & Health and Safety Systems
Upstream Engineering and R&D			Supply Planning & Sourcing	Convenience Retailing	HR & Learning		IT Operations
Upstream Data Management			Terminal Operations		Knowledge Management		SAP/Oracle ERP Implementation & Management
Production Optimization			Distribution Management		Sales & Fulfillment		Mobility and IoT



Mature

Competitive market with examples of service offerings and customer case studies from a large number of service providers



Nascent

Market in development with limited examples of service offerings and customer case studies

The Current Maturity of Service Provider Energy Operations Offerings

- Service Maturity Analysis:** The analysis of Energy Operations scope and maturity by service is based on the full set of weighting criteria for operations, including time in the market, capability, vision and strategy, use of technology to deliver, client feedback, and proven results. The boxes represent the value chain.

	Upstream	Midstream	Downstream	BPO	Engineering	IT
Accenture					More Mature Services	
Atos						
Cognizant						
EPAM						
Harman	More Mature Services				More Mature Services	
HCL	More Mature Services	More Mature Services	More Mature Services			
IBM						
Infosys						
KPIT				More Mature Services	More Mature Services	More Mature Services
Luxoft	More Mature Services	More Mature Services			More Mature Services	More Mature Services
TCS						
Tech Mahindra						
Wipro						

Key to Services Maturity on the Service Provider Profile Pages

- No Services offered
- Less Mature Services
- More Mature Services

Service Provider Profile



Blueprint Leading Highlights	Strengths	Challenges	
<ul style="list-style-type: none"> Vision For Oil & Gas Market Evolution and Services Depth of Industry Specific Capabilities Innovation in Commercial Models Actual Delivery of Services 	<ul style="list-style-type: none"> Broad Experience and Expertise: Wipro has experience in delivering services across the entire Oil & Gas value chain. Bringing in New Commercial Models: Wipro reports to have new types of pricing in over a fifth of its engagements, with transaction based pricing most used and experiments with subscription based and gain sharing models. Helping Clients Innovate: Wipro created a cloud-based point of sale application for a large chain of service stations in the US, enabling quick introduction of new services, up- and cross selling, recommendations for products and services based on a picture of a car's license plate, bundling of services and tracking of buyer patterns to anticipate new demand. This new service had a big impact on the client's business model. Another example of innovation and transformation is a Platform As-a-Service service for a super major's Exploration and Production software platform, with Wipro taking responsibility for the whole stack, linking all required capabilities. Industry Domain and Consulting Capabilities: Wipro has a large number of Energy consultants and engineers in comparison to other service providers, putting them in position to capture strategic engagements in the current market. Strong Vision for Oil & Gas Market: Wipro has a comprehensive vision for the upstream, midstream, downstream and retail areas of the Energy Operations Value Chain and creates industry specific point and end-to-end solutions in each of them. 	<ul style="list-style-type: none"> Really Infuse Design Thinking Into Engagements: Design Thinking in the Energy Practice is still early days. Wipro sees Design Thinking as a key methodology for client engagement and innovation, but it is not yet introduced in all current engagement. Wipro is in the process of making it as part of the culture. Expanding the Role of Wipro Digital in Energy Operations: Wipro Digital houses a lot of the capabilities that are critical for Oil & Gas engagements: IoT, automation, strategic design, and consulting. Market discussions we had often point to the need to have a tighter relationship between the practices. 	
Value Chain Services Maturity			
Upstream			
Midstream			
Downstream			
Cross Value Chain BPO and Engineering			
Cross Value Chain ITO			
Relevant Acquisitions / Partnerships	Key Clients	Global Operations	Proprietary Technologies / Platforms
<p>Acquisitions: DesignIT (2015) for strategic design capabilities Atco I-Tek (2014) SAIC Global Oil & Gas Information Technology (2011)</p> <p>Partnerships: Schlumberger, Landmark (Halliburton), SAP, Oracle, Kongsberg, P2ES, Tieto, OSIsoft, Primavera, Meridium, OpenLink, IBM Maximo, Honeywell, Microsoft, FleetCor, Quintiq, GE</p>	<p>60+ Clients globally including:</p> <ul style="list-style-type: none"> Integrated super majors like BP, Shell, Chevron National Oil Companies like Petroleum Development Oman, Saudi Aramco Refinery, Petrochemical and Midstream companies like Oman LNG, Saudi Aramco JV, Williams, Alyeska Integrated Regional Oil and Gas companies Oil Field Services companies Engineering, Procurement and Construction companies 	<p>Locations: 13 Energy Operations Delivery locations:</p> <ul style="list-style-type: none"> USA and Canada (Houston, Anchorage, Calgary) India (Bangalore, Hyderabad) Australia (Brisbane, Perth) Europe (Netherlands) United Kingdom (London, Aberdeen) Middle East (Oman, UAE, Saudi Arabia) Centers of Excellence / Collaboration Centers in Houston, Bangalore and Aberdeen 	<ul style="list-style-type: none"> Holmes: for Intelligent Automation and Bots Wipro Identity Cloud: for Identity Management As-a-Service Spidernet: a platform to integrate and manage security systems and assets RapidLNG: out of the box software solution for end-to-end LNG planning, shipping and trading Automated testing framework: for enabling testing factory DesignIT: digital strategy and roadmap generation Digital Oilfield assessment, roadmap and benefits realization Data discovery platform: for marketing and customer value analytics

Market Wrap-Up and Recommendations



Where to Next for Energy Operations

We see the following as the major trends that will foster the future evolution of Energy Operations over the next 2–3 years:

- Analytics offerings will evolve from being based largely on access to data science talent and unique algorithms and will include industry specific analytical applications delivered by service providers that deeply understand a client's enterprise and marketplace.
- Predictive and prescriptive analytics will enable more real-time decision making and this will have a huge impact on the operating models in the industry.
- Integration of asset data in cloud platforms enables a unified view of production assets and operations, leading to better planning and use of resources.
- The (Industrial) Internet of Things holds tremendous promise and we expect adoption to accelerate as there are already huge numbers of connected assets in the industry and connecting those assets to the internet will bring tremendous value.
- Intelligent automation, led by robotic process automation (RPA) in BPO and autonomies in IT will become deeply integrated service delivery, reducing the size of current labor arbitrage-centric contracts further. Cognitive computing will take center stage in many new services across the value chain.

Where to Next for Energy Operations

We see the following as the major trends that will foster the future evolution of Energy Operations over the next 2–3 years:

- Further evolution of the Digital Oilfield and IT/OT integration. The digital footprint will increase in Energy Operations. In Upstream, advanced analytics will improve operations in drilling, reservoir modeling and engineering and remote monitoring.
- Mobility combined with other digital technologies like social and Augmented Reality will further enable digital field workers. Digitally enabled workers can collaborate with experts, interact with their environment via video streaming and access contextualized knowledge in the field.
- 3D simulations will become more prevalent in designing solutions, training purposes and planning processes across Energy Operations.
- As the market adjusts to the new oil price reality expect transformation of the front-office and back-office to be high on the agenda of Oil & Gas companies as they look for new ways to achieve efficiency and effectiveness.
- Demand and take-up for digital services that directly contribute to improved operational efficiency and agility will grow significantly.
- Increasing efforts to write off legacy and new digital platform capabilities facilitates more integration of core industry platforms with digital (industry) solutions.

Energy Operations Is Beginning to Incorporate the Ideals of the As-a-Service Economy

IDEAL	AS-A-SERVICE IDEAL DEFINITION	NONEXISTENT	INITIAL	EXPANSIVE	EXTENSIVE	ALL PERVASIVE
Write Off Legacy	Using platform-based solutions, DevOps and API ecosystems for more agile, fewer exception-oriented systems		2016	2019		
Design Thinking	Understanding the business context to reimagine processes aligned with meeting client needs			2016	2019	
Brokers of Capability	Orienting governance to source expertise from all available sources, both internally and externally, to address capability gaps			2016	2019	
Collaborative Engagement	Ensuring relationships are contracted to drive sustained expertise and defined outcomes			2016	2019	
Intelligent Automation	Using automation and cognitive computing to blend analytics, talent and technology			2016	2019	
Accessible and Actionable Data	Applying analytics technologies, processes and resources on relevant data sets to derive insights that can help improve an enterprise				2016	2019
Holistic Security	Proactively managing digital data across service chain of people, systems and processes		2016		2019	
Plug and Play Digital Business Services	Plugging into “ready to go” business outcome-focused, people, process and technology solutions with security measures		2016	2019		

2017-18 Recommendations: Enterprise Buyers

- **Articulate Innovation Ambitions:** Be clear about what you expect for your service provider(s) when it comes to innovation. Many buyers expect service providers to help them innovate. Put this innovation ambition at the center of the engagement and select providers based on their innovation merits in other industries and/or other Energy Operations clients.
- **Push The Automation Envelope:** Make clear you expect service providers to pull every lever available to achieve more cost savings, greater quality, accuracy and speed in processes, and balance it with a joint strategy.
- **Dare To Make Cost Savings Work For Innovation:** It is very attractive to put cost savings achieved by service providers in the hand of the CFO in the current environment. We recommend to reinvest savings in innovation, make it a part of a Collaborative Engagement arrangement: service provider, save 20% and get that 20% as innovation budget.
- **Move Faster And Deeper To As-a-Service Offerings From Service Providers:** As an enterprise buyer keep pushing your service provider(s) to move to an As-a-Service model that goes beyond labor arbitrage to include and offer you a broader set of choices for what solutions you adopt and how they interact with your own retained organization. Don't settle for a long-term fixed model of solution delivery for Energy Operations services, but push your service provider(s) to be flexible and agile so that future services offerings better align to your own potential future needs. As part of the As-a-Service push, opt for Plug and Play Digital Services like BPaaS where you can, especially for standardized, 'commoditized' services.
- **Take A Co-Investment And Partnership Approach To IoT:** IoT has the ability to underpin major transformations across the Energy Operations value chain. While IoT is a very important imperative for Oil & Gas, we don't see widespread or large-scale projects yet. No service provider has all the pieces of the puzzle that is Internet of Things. Look for service providers who can partner with you, act as brokers of capability and have a good partnership strategy.

2017-18 Recommendations: Enterprise Buyers

- **Adopt Design Thinking:** Don't dismiss design thinking as something that is a fad with little benefit for your own operations. The opportunities to sit down with your service provider(s) to better understand the business context in which your current processes operate and what can be done to realign or reimagine these processes to achieve different and/or better results is always an exercise worth undertaking.
- **Push Your Provider On Holistic Security:** The Oil & Gas industry harbors a lot of critical infrastructure. Securing this infrastructure is only getting more important as it is the target of cyber attacks and risks increase with the IT/OT integration and growth of networks of connected assets. Ask your service provider(s) for their vision and strategy for Holistic Security. The service provider's culture and infrastructure of security is critical for their ability to keep your operations secure.
- **Increase The Trust:** Push your service provider(s) to be more collaborative, more visionary, more inclusive and share with you. In turn, provide that same approach to the service provider(s). Discuss the business challenges you have like close partners and invite a proactive role from your service provider to come up with ideas to create the business outcomes you need.
- **Truly Focus On Making Data Work For Your Organization:** Data and more specifically the insights you are able to derive from your data will hugely impact your future ability to compete. Analytics, insights and better understanding enable superior decision making influencing economic viability of Energy Operations and competitive advantage. Select service providers based on their ability to provide you with deep expertise and capabilities in data and information management, advanced analytics and ability to translate your data into actionable and accessible insights supporting your entire organization.

2017-18 Recommendations: Service Providers

- **Move Further To As-a-Service Offering Design And Execution:** At HfS, we are strong believers in the rapid move of BPO away from legacy “lift and shift” models toward an As-a-Service solution design and delivery world. We have seen significant progress from service providers in this Blueprint in their move to As-a-Service as well as rising demand for new engagement models from buyers. But there is still significant opportunity to move this further forward and bring a more modular yet end-to-end solution stack to Energy Operations and bring more integration, innovation, flexibility and agility into the engagement.
- **Put Your Money Where Your Mouth Is:** Be prepared to back up your claims of being an innovation powerhouse with the willingness to co-invest in innovation. Pro-actively and aggressively push the innovation agenda around automation, analytics, drones, 3D printing for MRO, simulating with digital twins, machine learning, deep learning, cognitive computing. Present clients with use cases, examples and capabilities to “unfreeze,” inspire and build credibility in innovation.
- **Industry Talent Is Key:** Industry talent and capabilities form the heart of the leading Energy Operations practices in this Blueprint. Shore up the investment in attracting, developing and retaining people with deep domain expertise and experience. Industry talent is a key component in value creation for Oil & Gas clients, solving complex industry problems and growing your Energy Operations services business.
- **Prepare For The Reality That Renewables Are Here To Stay:** Not all Oil & Gas companies have come out of denial, but you need to have a strong story and accompanying service offerings on how you can help them integrate renewable energy sources and build business and operating models around them when they do.

2017-18 Recommendations: Service Providers

- **Whatever You Do, Automate, Automate And Automate:** Buyers expect service providers to use automation in service delivery, some of the clients we have spoken with already call automation table stakes. It is paramount for service providers to leverage automation for clients and take the maturity up a notch in the coming 12-24 months, from RPA and automomics to Artificial Intelligence and cognitive computing to make sure you are not left out of the automation race.
- **Put Platforms At The Center Of Your Strategy:** Underpinning As-a-Service delivery are full-stack platforms that enable end-to-end services combining people, technology and processes. Invest in the development of proprietary platforms with embedded advanced analytics capabilities to position your practice to seize opportunities from digital technologies and the wave of data enabled transformation in the industry.

About the Author



Derk Erbé

Research Vice President, Supply Chain, Procurement and Energy



derk.erbe@hfsresearch.com

Overview

- Derk Erbé is Research Vice President, Supply Chain, Procurement and Energy. Erbé is responsible for a compelling, leading-edge research agenda covering the core topics of interest for buyer and vendor communities in the areas of digital business transformation services and business operations, with a specific emphasis on key vertical markets, namely Energy, Utilities and Resource Industries.
- He works with the HfS research team on key research areas that are impacting HfS clients, such as automation, SaaS and workforce transformation.
- Derk is responsible for Custom Research at HfS, working across the commercial and analyst team and client organizations developing and executing research deliverables.
- Derk has a keen interest in Business Transformations, new business models, Digital, Mobile and IoT from a technology and change management perspective.

Previous Experience

- Most recently, Derk was Co-Founder and CEO of Kea Company. He held several roles at Kea Company, serving as EVP Strategy and leading business advisory and consultancy. He was part of the team behind the annual global Analyst Relations Forum.
- Throughout his career Derk had a wide variety of leadership, consultancy and advisory roles with emphasis on business processes, operations, enterprise architecture, change management and crisis management. He was a management consultant and interim manager at energy companies like RWE/Essent and a natural gas giant, NGO's, government agencies, tech startups, large technology vendors and service providers.
- Derk is known for his ability to rapidly distill the top priorities in difficult circumstances and fluid, complex situations and executing on these priorities with his "getting things done" mentality.

Education

- Derk holds a Master's of Science in Sociology from the University of Amsterdam.

About HfS Research

[HfS Research](#) is The Services Research Company™—the leading analyst authority and global community for business operations and IT services. The firm helps enterprises validate their global operating models with world-class research and peer networking.

HfS Research coined the term [The As-a-Service Economy](#) to illustrate the challenges and opportunities facing enterprises needing to re-architect their operations to thrive in an age of digital disruption, while grappling with an increasingly complex global business environment. HfS created the Eight Ideals of [Being As-a-Service](#) as a guiding framework to help service buyers and providers address these challenges and seize the initiative.

With specific focus on the digitization of business processes, intelligent automation and outsourcing, HfS has deep industry expertise in healthcare, life sciences, retail, manufacturing, energy, utilities, telecommunications and financial services. HfS uses its groundbreaking [Blueprint Methodology](#)™ to evaluate the ability of service and technology providers to innovate and execute the Eight Ideals.

HfS facilitates a thriving and dynamic global community of more than 100,000 active subscribers, which adds richness to its research. In addition, HfS holds several [Service Leaders Summits](#) every year, bringing together senior service buyers, providers and technology suppliers in an intimate forum to develop collective recommendations—for the industry and add depth to the firm’s research publications and analyst offerings.

Now in its tenth year of publication, HfS Research’s acclaimed blog [Horses for Sources](#) is the most widely read and trusted destination for unfettered collective insight, research and open debate about sourcing industry issues and developments. Horses for Sources and the HfS network of sites receive more than a million web visits a year.

HfS was named [Analyst Firm of the Year for 2016](#), alongside Gartner and Forrester, by leading analyst observer InfluencerRelations.