

HFS Energy Transition Services Top 10 Snapshot, 2022

Service and technology providers shaping decarbonization and changing the energy and utilities industries

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The energy transition dominates the conversation across the energy and utilities industries. It dominates our conversations with consulting, technology, and services providers. Much of the global sustainability context—decarbonizing and the 17 UN Sustainable Development Goals—is dominated by the energy transition from fossil fuels to renewable and lower-carbon sources of energy. The energy transition is forcing the oil and gas industry to rebrand as the energy industry—causing the energy and utilities industry value chains to merge, new industries to be created, and the energy transition to weave through all other industries. We created this Snapshot report to map the tech and services firms that can, must, and will play a leading part in guiding clients through the energy transition and in helping them to balance the multiple, competing, and interlinked transitions they face from all angles.

Josh Matthews | Practice Leader, HFS Research



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Executive summary

1	The study	We created this Snapshot report to map the technology and services firms that can, must, and will play a leading part in guiding clients through the energy transition and in helping them balance the multiple, competing, and interlinked transitions they face from all angles.
2	The energy transition	The energy transition dominated the conversations in our recent <u>energy</u> and <u>utilities</u> Top 10 studies. Under the global context of decarbonizing to avoid the worst effects of climate change and addressing all <u>17 UN goals</u> covering environmental, social, and governance (ESG) factors, organizations worldwide are abandoning fossil fuels for renewable energy sources.
3	The data	The Global 2000 energy and utilities firms are united in viewing new markets and customers as key to facing the energy transition. But sustainability across ESG is frighteningly low in energy and utilities firms' outlooks.
4	The winners	Accenture, Infosys, TCS, Atos, and Capgemini make up our top five. They stand out for having the ambition to shape the energy transition and the clarity in how they align their capability and ecosystems to the global context.
5	The recommendations	To survive the next 30+ years where climate change and sustainability dominate, organizations must align everything they do to transition roadmaps that cover themselves, their industries and ecosystems, and the global context. Collaboration is critical to achieving this.
		We often see fragmented systems and unaligned business functions as barriers to technology or sustainability goals in organizations (see our research outline this at COP26, the recent UN climate summit). But it's not just internal disconnects that must be overcome. Industries and ecosystems must align and collaborate if any organization within them stands a chance of navigating the energy and other transitions. Their consulting, technology, and service partners will have an important role. They are plugged into ecosystems and their leading organizations. Organizations, industries, and ecosystems need aligned goals. They must collaborate to share data to benchmark their starting points—essential for any transition roadmap,

Introduction

- The energy and utilities industries are merging. The global energy transition is shaping new industries and influencing all others. To find their place in the new world, energy and utilities firms (and all those affected) must collaborate and align their strategies to this global context.
- The energy transition dominated the conversations in our recent <u>energy</u> and <u>utilities</u> Top 10 studies. Under the global context of decarbonizing to avoid the worst effects of climate change and addressing all <u>17 UN goals</u> covering environmental, social, and governance (ESG) factors, organizations worldwide are abandoning fossil fuels for renewable energy sources.
- But the energy transition so far is nowhere near fast enough.
- We created this Snapshot report to map the technology and services firms that can, must, and will play a leading part in guiding clients through the energy transition and in helping them balance the multiple, competing, and interlinked transitions they face from all angles.
- The energy transition services value chain on the next page illustrates the consulting, technology, and business services affecting the energy transition, aligned to the global context, industries, and horizontal services capability.
- Oil and gas firms are widely rebranding into the "energy" industry. Shell, bp, and TotalEnergies (formerly Total) are major European examples. This new energy industry is moving into the traditional utilities industry market, providing electricity and sometimes other utilities en masse to consumers, including broadband in Shell's case. New industries are forming from the energy transition, including battery and energy storage, electric mobility, and all the associated supply chain, marketing, and retail operations that emerge with them.
- The energy transition is driving growth in the demand for consulting, technology, sustainability, and managed services. The energy and utilities industry value chains are in transition; the same goes for the consulting, technology, and services industries. In the energy and utilities Top 10 reports, the demand for services is growing across the whole value chain, driven by the energy transition and the multiple interlinked and competing demands facing organizations. In our energy and utilities Top 10 studies, providers and clients wove sustainability services into 25% of their engagements. See our separate Sustainability Services Ecosystem Mapping study for a wider range of sustainability consulting, technology, and services firms. Service providers have seen growth across their revenues and headcounts over the past two years, at 22% and 7% respectively in the energy industry and at 11% and 10% in the utilities industry.

HFS Research energy transition services value chain, 2022

Energy transition							
Strategy	Upstream	Midstream	Downstream				
Energy transition planning	Resource extraction	Transportation	Generation and processing	Distribution and transmission	Retail and marketing		
 Roadmapping to net zero Emissions benchmarking ESG goals and strategies Technology roadmapping Developing an energy transition consulting, technology, and managed services portfolio Market repositioning 	 Oil and gas exploration and production (E&P) Mining operations Asset management Digital field management Upstream engineering, accounting, and R&D Production optimization Upstream data management 	 Trading and shipping Linear asset management (e.g., pipeline operations) Transportation operations management Supply chain management Supply planning and sourcing Risk management Market integration and operations Wholesale operations 	 Emissions management, monitoring, and reporting Integrated plant information systems Digital process control Plant and refinery operations Carbon capture, storage, sequestration, utilization Electricity generation operations and asset management 	 Market operations Pipeline management Terminal operations Distribution management Smart grids and meters Energy storage integration Grid optimization Asset performance management Demand response management Meter data management 	 Customer contact operations Electric charging points and EV services Metering and billing Digital meter-to-cash Retail and franchise operations Energy trading and risk Customer acquisition Field service operations Debt collection and credit Omni-channel management Customer experience (CX) 		
Key industries affected or created							
Oil and gas Utilities Batteries and energy storage Electric mobility Manufacturing Telecom Technology Banking and financial services Insurance Public sector							
Sustainability services cutting through the value chain							

Sustainability services cutting through the value chain

Strategy and consulting | Implementation | Managed sustainability services, e.g., carbon accounting and reporting | Technology supporting sustainability

Horizontal services cutting through the value chain

Consulting | R&D | Data | Cybersecurity | Planning and optimization | Engineering | Technology | IT | Business process services

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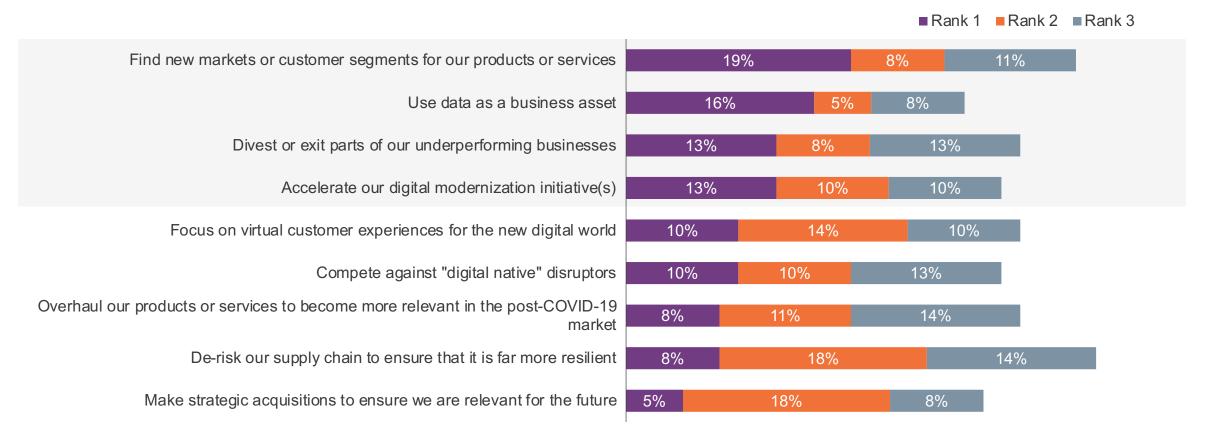
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Energy transition dynamics

- Energy firms worldwide are trying to find their place in the energy transition and the future. Despite specific regional attitudes, there's broad consensus among Global 2000 energy and utilities firms that new markets and customers are key, as is divesting what is underperforming and unsustainable (see chart on next page). The execs we surveyed also see data and digital technologies as critical in underpinning the energy transition, furthering the demand for services.
- Attitudes remain unaligned—they vary globally toward the energy transition.
- European energy firms (despite globally continuing to invest in fossil fuels) are investing large sums in renewable energy generation and producing net-zero decarbonization roadmaps. They're also trying their hands across the utilities value chain as they develop high-volume customer contact operations; Shell, for example, now provides broadband (from a rented network).
- **US supermajors** like Exxon Mobil and Chevron are taking a more natural-gas-heavy approach combined with carbon capture and storage developments. This is an oversimplified illustration of the trend, and all energy firms of this size are taking a wide variety of approaches. The same variation goes for energy firms across continents—each has its interpretation of the "energy transition" and a different geopolitical context to navigate.
- Decarbonization pathways also differ among energy firms. While the commitments of the three European firms mentioned above stretch across Scope 1, 2, and 3 emissions (direct, indirect, and value chain emissions, respectively), Exxon's new climate strategy, despite showing promising signs of a detailed roadmap with interim targets and measured accountability across its organization, does not account for Scope 3 value chain emissions. These account for well over 80%—even 90%—of energy firms' overall impact on global warming, whether through suppliers or the end-use of their products.

Energy and utilities firms are on the hunt for new sources of revenue, getting rid of the unprofitable and using data and digital to help

What are the major business strategies your organization is pursuing to meet your organizational goals over the next 12–18 months?



Sample set: 63 energy and utilities executives across Global 2000 enterprises Source: HFS Pulse, H2 2021



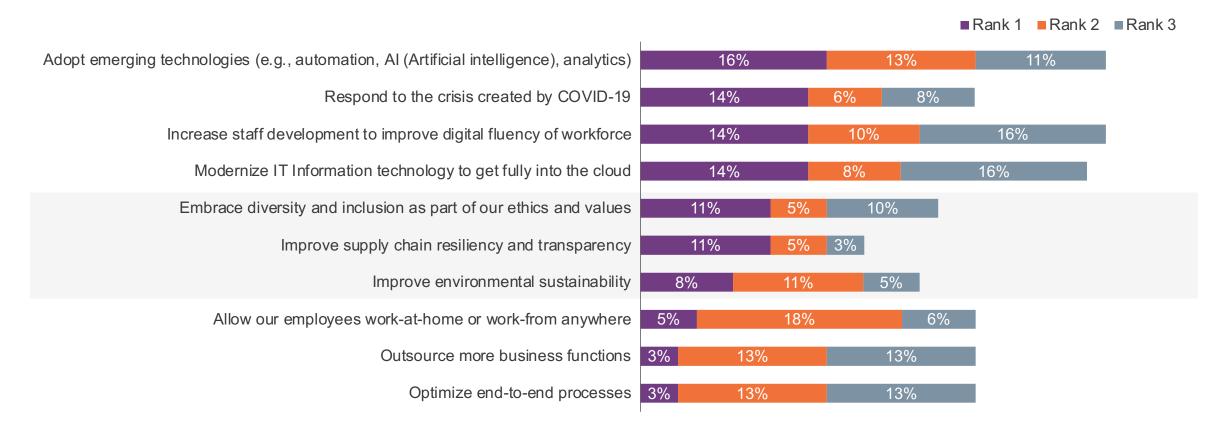
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Sustainability is in danger of dropping off the energy and utilities industry priority lists, and firms must balance multiple competing transitions

- There is a worryingly low prioritization of sustainability across ESG factors is in many energy and utilities organizations (see chart on next page). Environmental sustainability, diversity and inclusion, and supply chain risk and resilience are falling way down the priority lists of G2000 energy and utilities industry execs.
- True, these industries are grappling with multiple, competing, interlinked demands alongside the energy transition: digital and technology adoption, the effects of global fossil fuel prices rising (in the case of gas, skyrocketing), geopolitics and energy security, cybersecurity of nationally and internationally critical infrastructure, what to do with existing assets, general efficiency and cost-saving efforts, customer experience reinvention, and more besides.
- Some might even say that the industries were already prioritizing sustainability.
- However, given how far behind we remain in the journey to decarbonize and address broader sustainability, all ESG factors must continue to rise rapidly on the agendas of all levels of organizations (see our separate take on the sustainability views of industries).
- The following pages outline the challenges faced under the context of the energy transition, the technologies being currently incorporated, and the most important technologies fueling the coming 12 to 18 months.

Sustainability across ESG is frighteningly low in energy and utilities firms' outlooks—hopefully, it means they were already prioritizing it... or are embedding it in other efforts!

What are the major changes to your organization's ways of working for the next 12–18 months?

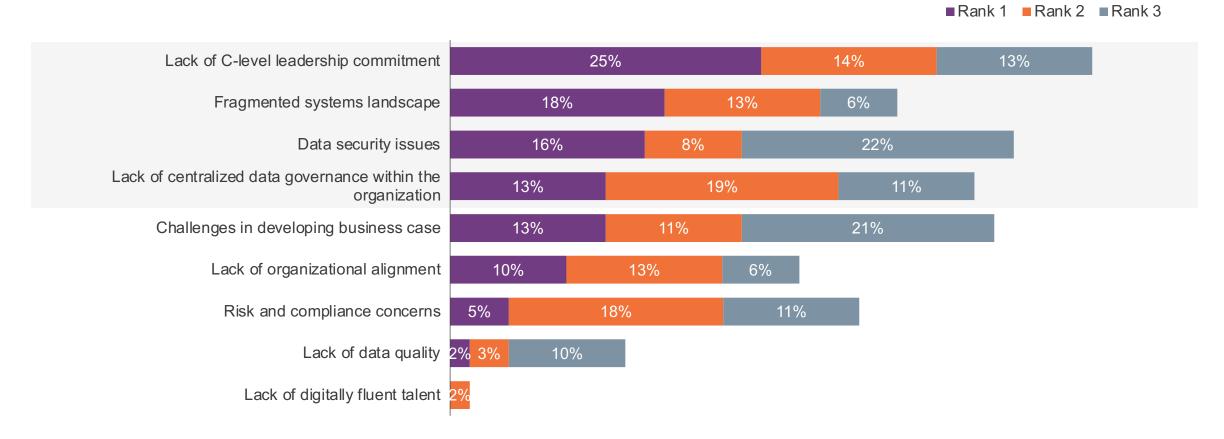


Sample set: 63 energy and utilities executives across Global 2000 enterprises Source: HFS Pulse, H2 2021

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The C-suite needs to dramatically drive the sustainability mandate and more broadly align their organizational systems and data

What are your organization's major challenges to meeting your objectives?



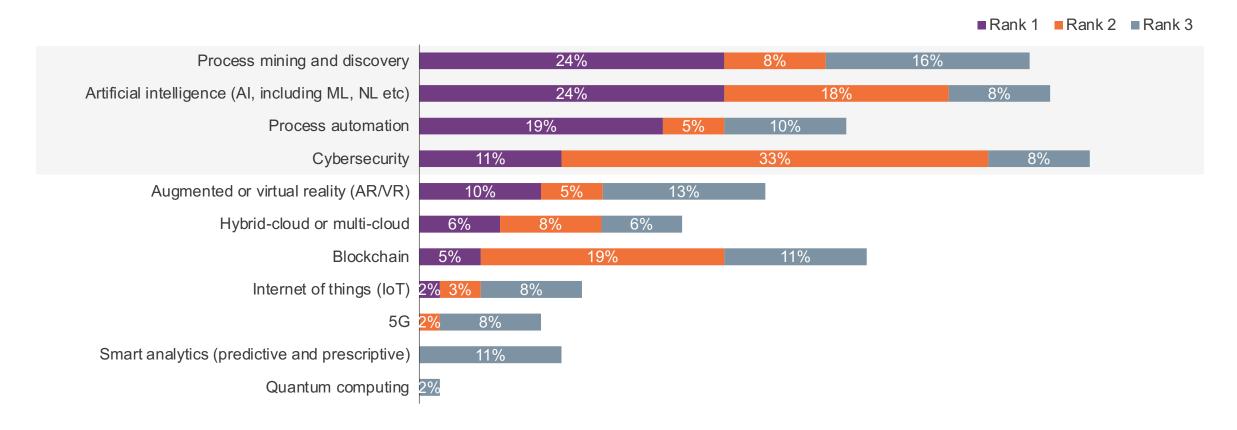
Sample set: 63 energy and utilities executives across Global 2000 enterprises Source: HFS Pulse, H2 2021



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Process intelligence, AI, and automation top the energy and utilities emerging technology priorities Cybersecurity is a fundamental organizational process that underpins everything

Please rank the following technologies based on your current investments?



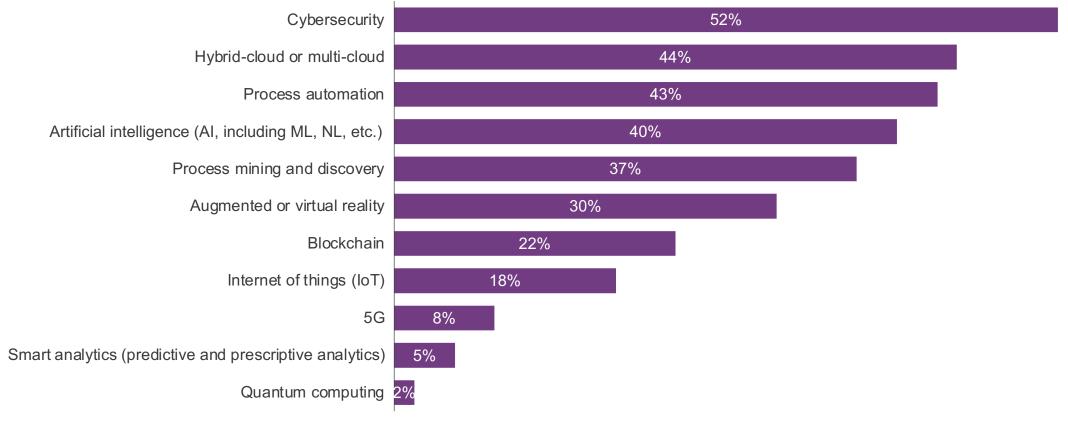
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Excerpt for Infosys

Cybersecurity and cloud have become fundamental to energy and utilities operation You must treat cybersecurity as a core organizational function in the future, not as "emerging tech"

Please select the three most important technologies where your organization expects to invest the most over the next 12–18 months



Sample set: 63 energy and utilities executives across Global 2000 enterprises Source: HFS Pulse, H2 2021

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Methodology: The service providers covered in this report























Methodology: Sources of data

This Top 10 Snapshot research report incorporates both our Energy and Utilities Top 10 studies and our Sustainability Services Ecosystem Mapping study, which rely on a range of data sources to support our methodology and help HFS obtain a well-rounded perspective on the capabilities of the organizations covered. Sources for these combined studies are as follows (our assessment criteria is on the next page):



RFIs and briefings

- We ask each participating organization to complete a detailed RFI.
- HFS conducts vendor briefings with senior executives from each organization.



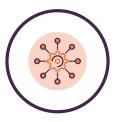
Reference checks

 HFS conducts reference checks with active clients of the study participants via detailed phone- based interviews.



HFS vendor ratings

 Each year, HFS fields multiple demand-side surveys in which we include detailed vendor rating questions. For this study, we leverage the HFS Pulse data featuring 600+ vendor ratings from Global 2,000 enterprises.



Other data sources

- Public information such as press releases, web sites, etc.
- Ongoing interactions, briefings, virtual events, etc., with in-scope vendors and their clients and partners.

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Methodology: Assessment criteria

	Execu	ution 20%				
Scale: Revenue and headcount in the energy and utilities (E&U) industries Growth and traject headcount in the E		oss revenue, clients, and tries		umber of E&U clients, geographical eadcount and clients, client mix by size		
Innovation 20%						
Ecosystem: Scope and use of energy-relevant partnerships; applicability and integration of energy-relevant acquisitions	Vision and sustainability services: Vision clarity and focus within the global sustainability context, digital, and competing transitions; sustainability services used in energy engagements	Creative client engagement: Co-innovation with clients; unique service models, including outcome-based and hybrid pricing; client assessments across a range of innovative engagement metrics		Technology use and development: Breadth of emerging-technology use in E&U engagements; platforms, tools, and technologies leveraged in E&U IP portfolio; R&D investment and strategy		
Sustainability services 20%						
Vision and strategy in the energy transition and our Sustainability Services Ecosystem Mapping study	Incorporation of sustainability consulting, technology, and services in the energy transition	Growth and trajectory in delivering sustainability services		Scale of established sustainability services practice and clients		
HFS OneOffice ¹	Voice of the customer 20%					
 Client perception of digital transformation management capability Service provider self-assessment of Or one face to the customer Breadth of provider engagements lever versus managing legacy HFS analyst assessment of OneOffice 	 Client quantitative assessments of execution and innovation Overall client satisfaction with the provider, outcomes, and financials Analyst conversations with reference clients Analyst assessment of references and case studies HFS enterprise buyer data across the Global 2000 					

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Results

Energy transition services Top 10 Snapshot, 2022

Energy transition Top 10 Snapshot—what do we think?

Providers (alphabetical)	HFS point of view
Accenture	Ambition and resources positioned at leading the energy transition, combining delivery with high-level strategy across energy, utilities, sustainability, and global networks
Atos	Atos is developing depth in data and decarbonization, and it differentiates on innovation and cybersecurity in its newly verticalized structure
Capgemini	Utilities scale and fast growth across energy, utilities, and sustainability services built on integrating its Altran acquisition and broader consulting developments
Cognizant	Technology foundations and industry-specific acquisitions aplenty combine with clear roadmapping approach to turn sustainability strategies and goals into delivery
HCL	Engineering history and industry growth come together across energy and utilities, leading the way in co-innovation and R&D as sustainability services focused on data and platforms build
Hitachi	The whole of Hitachi aligns to engage throughout the energy and utilities industries and in the energy transition with the expertise and scale of new industrial acquisitions
Infosys	Infosys' ambition across the energy transition and broader sustainability is matched with its deep energy history, rapid growth in its utilities practice, and an industry-leading sustainability services team that includes high-level strategy
LTI	LTI's deep solutions and industry-specific capability combine with the broader L&T group's energy and utilities scale and experience—the LTI energy practice is strongly established, and the utilities team is growing at pace
TCS	TCS' R&D, industry history in energy and utilities, sustainability services development, and overall scale put it at the forefront of the energy transition, as does the activity of the broader TATA Group
Tech Mahindra	The Mahindra Group's utilities operations and renewable energy focus combines with Tech Mahindra's clear focus for its technology expertise, aligning to the global context of the energy transition
Wipro	Wipro has sustainability embedded in a high proportion of engagements alongside a deep history in the energy and utilities industries—with a clear focus for how its expertise aligns to the global context

For detailed profiles and analysis on all participants, see our Energy Services Top 10, Utilities Services Top 10, and Sustainability Services Ecosystem Mapping reports



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Results | The HFS energy transition services Top 10 Snapshot, 2022

Rank	Overall position	Execution	Innovation	Sustainability services	OneOffice™ alignment	Voice of the customer
#1	accenture	accenture	Atos	accenture	accenture	Infosys® Navigate your next
#2	Infosys® Navigate your next	Capgemini	accenture	Infosys [®] Navigate your next	Capgemini	TATA CONSULTANCY SERVICES
#3	TATA CONSULTANCY SERVICES	TATA CONSULTANCY SERVICES	Infosys® Navigate your next	Atos	Infosys® Navigate your next	accenture
#4	Atos	Infosys® Navigate your next	HCL	wipro	LTI	HCL
#5	Capgemini	wipro)	TATA CONSULTANCY SERVICES	TATA CONSULTANCY SERVICES	wipro	HITACHI
#6	wipro	Atos	wipro	Capgemini	TATA CONSULTANCY SERVICES	LTI
#7	HCL	HCL	LTI	Tech Mahindra	AtoS	Capgemini
#8	LTI	HITACHI	Capgemini	HITACHI	HCL	Cognizant
#9	Cognizant	Cognizant	Cognizant	Cognizant	Tech Mahindra	Tech Mahindra
#10	HITACHI	Tech Mahindra	HITACHI	LTI	Cognizant	wipro)

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Josh Matthews is a Practice Leader at HFS, based in Cambridge, UK. Josh leads HFS's coverage of sustainability and the energy and utilities industries, built on academic and industry expertise across chemical engineering, management, and sustainability; he spoke at COP26, the 2021 UN climate summit, presenting the latest HFS sustainability research study. Josh also focuses on supply chain, the TMT (telecom, media, and technology) industry, and the HFS Triple-A Trifecta of automation, analytics, and Al segments. Other subjects of interest and coverage include quantum computing and diversity and inclusion (D&I). Previously, he has covered the internet of things (IoT) and manufacturing.

Josh is a former City Councillor in Cambridge, where he held the opposition portfolio for Climate Change, the Environment, and the City Center.

Josh graduated from an Engineering and Management master's program at Cambridge University. His research tackled operational and environmental improvements in industry, and the implementation and management of sustainable initiatives. On behalf of the university, Josh worked on consulting projects at Unilever, as well as SMEs in the tech and marketing spaces.

Josh had previously graduated from Loughborough University with a first-class master's in Chemical Engineering. Over the course of this degree, he worked in the energy industry, and was a visiting researcher at UC Santa Barbara, publishing designs and analysis of low-CO2 hydrogen production in the Chemical Engineering and Technology journal.

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About HFS

Insight. Inspiration. Impact.

HFS is a unique analyst organization that combines deep visionary expertise with rapid demand side analysis of the Global 2000. Its outlook for the future is admired across the global technology and business operations industries. Its analysts are respected for their no-nonsense insights based on demand side data and engagements with industry practitioners.

HFS Research introduced the world to terms such as "RPA" (Robotic Process Automation) in 2012 and more recently, the HFS OneOffice™. The HFS mission is to provide visionary insight into the major innovations impacting business operations such as Automation, Artificial Intelligence, Blockchain, Internet of Things, Digital Business Models and Smart Analytics.



