Power & Utilities Industry - Services and Solutions

A research report comparing provider strengths, challenges and competitive differentiators

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HCLTech

QUADRANT REPORT | JANUARY 2025 | NORTH AMERICA

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Executive Summary

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AI and GenAI applications slowly but steadily influencing the power and utilities value chain

The power and utilities industry is witnessing a transition from traditional energy sources to cleaner alternatives such as wind and solar energy, leading to an increase in new asset types to deploy, connect and manage. Additionally, there has been a rise in distributed energy resources (DERs), leading to disruptions in energy production patterns. Moreover, as the industry increasingly adds renewable energy sources such as solar and wind to its energy mix, their integration into the grid continues to be a challenge. Global supply shortage due to the war in Ukraine has led to an increase in natural gas prices, making the purchase or production of power expensive.

The above-mentioned integration challenge will need capabilities around strategy and technology in the form of solutions covering data analytics, AI and digital twin technology. The growing demand for electric vehicles (EVs), driven by falling costs, is increasingly impacting utilities grids and assets, These components play a crucial role in powering these vehicles and managing the associated load.

Growing climate-related events such as storms, wildfires, hurricanes and floods have led to high costs for utilities related to damages and not all these costs are recoverable. For instance, wildfires continue to burn acreage, damaging utilities infrastructure.

While power and utilities companies encounter the above challenges, evolving customer expectations, which now include a demand for personalized and digital experiences, continue to add pressure as there is a need to manage the complexities of the prosumer (both a consumer and a producer of energy). Meeting this challenge entails creating new operating models, investing in customer engagement platforms, leveraging data analytics for personalized services and implementing digital self-service tools.

Utilities industry is witnessing the **proliferation of new-age technologies**

Thus, utilities companies need to handle challenges around industry, technology and people by working closely with IT service providers and building niche solutions that can address their specific needs, define a road map for technology adoption and create a ready talent pool with the capability to use new-age technologies.

As an advisor that has helped several leading utilities organizations navigate their digital transformation, ISG believes that building a successful, competitive and future-proof utilities organization requires strengthening its technical and digital foundation, transforming grid operations, continuously improving cybersecurity, digitally enabling its workforce and improving CX through digital channels.

ISG sees the following trends in the global power and utilities industry:

Energy transition continues to gather momentum

Energy transition is impacting the utilities industry in the areas of generation, retail and transmission and distribution (T&D).

The industry is shifting from traditional energy sources to wind, solar and other green sources. These changes are coupled with an increasing preference for distributed energy and the resulting disruption of energy production patterns. Moreover, as customers increase their focus on sustainable energy solutions and become prosumers, the energy transition is becoming mainstream. In addition, organizations in the industry are facing the challenge of measuring their scope 3 emissions, which is a major roadblock in estimating carbon footprint and in trying to achieve Net Zero goals.

Nuclear resurgence

After the Fukushima disaster in Japan, many countries slowed down nuclear-energy-related activities; a few countries such as Germany had even ordered the shutdown of nuclear power plants by 2022. However, recent geopolitical events and challenges have led to a revival of the nuclear industry and made countries and their policymakers reconsider their views on nuclear energy. This revival is especially led by small modular reactors (SMRs). The SMR market is expected to grow considerably as the utilities industry is set to focus on providing nuclear energy to small, remote power grids, thus lowering the CapEx and OpEx connected with nuclear power facilities. Several nuclear reactor manufacturers are working on innovative designs and improving the fuel economy of existing modular reactors.

Data center and GenAI

The proliferation of AI and data centers could be transformational for the utilities industry. This factor is expected to put a lot of stress on the CapEx and OpEx plans of utilities companies as the need to upgrade infrastructure and integrate renewable energy resources will increase substantially. According to the International Energy Agency (IEA), GenAI data centers require almost 200 megawatts (MW) of power at a single location. Goldman Sachs Research estimates data center power consumption, led by AI, to be about 200 terawatt-hours, per year during 2023-2030 and expects AI to represent about 19 percent of data center power demand.

Dominion Energy, which serves the largest data center market in the world in Loudoun County, Virginia, believes that electricity demand from data centers in Virginia increased by about 500 percent during 2013-2022.

Aging infrastructure

Aging infrastructure such as power transmission lines and transformers, which are prone to damages from operational stress, extreme weather events and climate change can pose significant risks for utilities, making them susceptible to failures and service disruptions and grid safety compromises. This factor also leads to an increase in repair and replacement costs and reduced efficiency. Utilities companies need to modernize their asset management systems and utilize drone-supported solutions, IoT, AI and smart meters to manage legacy infrastructure. Smart meters generate large volumes of data at regular intervals, which can be analyzed to predict failures in infrastructure equipment.

Need for grid and asset resiliency and reliability

New entrants in the energy distribution segment, including DERs and prosumers pose new challenges to grid resiliency. Additionally, the increased adoption of EVs has added considerable strain on grids, necessitating modernization and enhancement. Moreover, the emphasis on demand management offerings, energy efficiency programs and smart grid technologies such as AMI 1.0 and 2.0 will enable intelligent monitoring, bringing usage tracking down to the meter level.

Also, the aging of power generation plants, transmission lines and distribution systems has resulted in increased outages, reduced efficiency and limited capacity. Organizations in the utilities industry have to invest in upgrading their grids, metering, tech infrastructure and workforce through digital solutions that leverage cloud, IoT, AI and ML. AI can be a game changer in addressing grid reliability challenges by way of predictive maintenance, renewable integration and demand-side management. Financial damages caused by weather-related disasters increase every year, with the industry players increasingly getting exposed to litigation risks related to asset and infrastructure damage. Providers can help with solutions around emergency response, asset health monitoring, work planning, risk modeling and vegetation management. Companies such as National Grid plan to invest heavily — $15 billion in New York over the next five years - to make grids more resilient and prepare for the electrification of cars and buildings.

Energy affordability

Capital, labor and material shortages are expected to drive costs in the utilities industry over the next two years. While transitioning to decarbonization, it is necessary to consider the risks associated with middle- and low-income groups' energy affordability. As energy transition becomes an increasingly important focus area, industry players should ensure that customer affordability and energy security for the disadvantaged groups are not adversely impacted. There is a need to develop multiple programs to ensure that the energy burden on an average household does not compromise its ability to support its basic needs, while concurrently ensuring there are alternative sources for uninterrupted supply. Low-income households in the U.S. use more than 30 percent of the electricity consumed in the region and face an energy burden three times higher than other households.

Digitization of the energy sector

The adoption of digital technologies such as smart grids and automation continues to increase across the utilities value chain, right from power generation to transmission and distribution. Organizations must shift to a digital operating model as the value chain becomes increasingly complex. Interoperability between OT such as supervisory control and data acquisition (SCADA) systems, distributed control systems (DCSs), programmable logic controllers (PLCs) and IT aspects such as AI and cloud is needed to support assets and operations. Organizations will prefer providers with deep engineering and OT capabilities as they aim to maintain the IT/OT balance. The focus on digitization has led to new revenue streams and business models and has seen the emergence of new market players in the utilities industry. Large and traditional organizations should adapt to these changes to survive and succeed against competition from innovative and digital-native third-party providers.

Growing cybersecurity concerns

Digitalization threatens security. Increasing connectivity through digitalization and the proliferation of decentralized energy resources require holistic and complex energy networks. The rise of intelligent grids makes systems increasingly vulnerable to cyber threats, making strategic and operational security in utilities critical. These companies should proactively run risk assessments and cybersecurity programs and share intelligence to prevent cyber and physical attacks on grids. At the same time, there is a strong market trend to separately address cybersecurity when constructing managed service strategies. Grid modernization and energy transition will also necessitate a dependence on digital operations and infrastructure, which, in turn, will increase the risks of cyberattacks. As companies in the utilities industry digitize their operations, they

must also increase their focus on cybersecurity to mitigate potential threats.

Workforce training and skilling

North America's power and utilities industry faces the challenge of an aging workforce and the need to attract/retain new talent. Organizations need to invest in training and upskilling their workforce to future-proof them to meet emerging needs and the rapidly changing skillsets required to build and operate the grid of the future. Over the next decade, the power and utilities industry will witness the retirement of more than 50 percent of its current workforce. However, the industry's challenge in attracting talent and competing against large tech firms is overwhelming. There is a shortage of talent with the necessary qualifications for new jobs, many of which require competencies around AI and ML, robotics and advanced analytics.

Changing consumer preferences

In this environment, utilities companies need to shift from being infrastructure providers to becoming service providers. With changing customer preferences and profiles, these companies must devise a strategy to engage with consumers across various platforms and channels (omnichannel), revamp UI/UX portals, enhance self-service features and build more responsive contact centers. Furthermore, they need to leverage data insights to respond to consumers' changing needs rapidly and with transparence. Also, with the emergence of new business models, such as community solar and virtual power plants and smart connected (IoT) homes, efficient resource consumption and improved UX is needed.

Data- and cloud-driven business

Utilities companies are yet to realize the full potential of data and need to overcome challenges around data access, deriving insights, data governance and quality, and the use of cross-functional analytics. By leveraging data and analytics, utilities companies can build powerful predictive models and resultant insights to power efficiencies and cost savings. The need to derive value from data for activities such as maintaining assets, noting weather-related warnings and determining customer preference drives the adoption of cloud and IoT platforms. Utilities companies run into unique challenges around adopting cloud-based solutions. Providers should focus on helping them capitalize on their cloud investments by creating transformational assets, comprising cloud subscriptions and transformation services and supported by regulatory review and approval. At the same time, CIOs should not wait for others to address this issue.

The power and utilities industry is at a crossroad as it is facing challenges around energy transition, aging infrastructure and workforce, grid resiliency and a growing demand for power as consumption from data centers and AI. It needs to adopt new technologies such as AI/GenAI, cloud and digital twin to manage assets, operations and processes.

Provider Positioning   **Page 1 of 4**

	Intelligence Business Process Management Services (iBPMS)	Next-Gen IT Services	Grid Modernization	Enterprise Asset Management (EAM)	Customer Information Systems (CIS) and Customer Experience (CX)
Accenture	Leader	Leader	Leader	Leader	Leader
Acquire BPO	Contender	Not In	Not In	Not In	Contender
Alorica	Leader	Not In	Not In	Not In	Leader
Ampcus	Not In	Contender	Not In	Not In	Not In
Capgemini	Product Challenger	Leader	Leader	Leader	Leader
Cigniti	Not In	Contender	Not In	Not In	Not In
Coforge	Not In	Contender	Not In	Not In	Contender
Cognizant	Leader	Leader	Leader	Leader	Leader
Concentrix	Product Challenger	Not In	Not In	Not In	Leader

Provider Positioning

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	Intelligence Business Process Management Services (iBPMS)	Next-Gen IT Services	Grid Modernization	Enterprise Asset Management (EAM)	Customer Information Systems (CIS) and Customer Experience (CX)
Cyient	Contender	Rising Star ★	Rising Star ★	Rising Star ★	Not In
Deloitte	Not In	Leader	Leader	Leader	Leader
Eviden | Atos	Not In	Product Challenger	Product Challenger	Product Challenger	Product Challenger
EXL	Product Challenger	Contender	Not In	Not In	Contender
EY	Not In	Product Challenger	Product Challenger	Product Challenger	Rising Star ★
Fujitsu	Not In	Product Challenger	Contender	Contender	Not In
Genpact	Leader	Product Challenger	Not In	Product Challenger	Not In
Happiest Minds	Not In	Contender	Not In	Not In	Not In
HCLTech	Not In	Leader	Leader	Leader	Leader

Provider Positioning   **Page 3 of 4**

	Intelligence Business Process Management Services (iBPMS)	Next-Gen IT Services	Grid Modernization	Enterprise Asset Management (EAM)	Customer Information Systems (CIS) and Customer Experience (CX)
Hitachi Digital Services	Contender	Leader	Product Challenger	Leader	Contender
IBM Consulting	Leader	Leader	Leader	Leader	Leader
Infosys	Leader	Leader	Leader	Leader	Leader
Kyndryl	Product Challenger	Rising Star ★	Product Challenger	Product Challenger	Product Challenger
LTIMindtree	Product Challenger	Leader	Product Challenger	Product Challenger	Product Challenger
Nagarro	Contender	Contender	Market Challenger	Contender	Product Challenger
Perficient	Contender	Product Challenger	Contender	Contender	Contender
PwC	Not In	Product Challenger	Product Challenger	Leader	Product Challenger
Qualitest	Not In	Contender	Not In	Contender	Not In

Provider Positioning

Page 4 of 4

	Intelligence Business Process Management Services (iBPMS)	Next-Gen IT Services	Grid Modernization	Enterprise Asset Management (EAM)	Customer Information Systems (CIS) and Customer Experience (CX)
TCS	Leader	Leader	Leader	Leader	Leader
Tech Mahindra	Leader	Leader	Product Challenger	Product Challenger	Rising Star ★
Teleperformance	Leader	Not In	Not In	Not In	Product Challenger
Wipro	Rising Star ★	Leader	Leader	Leader	Leader
WNS	Product Challenger	Not In	Not In	Not In	Contender
WWT	Not In	Product Challenger	Not In	Not In	Contender
Zones	Not In	Contender	Not In	Not In	Not In

This IPL study aims to **understand** key **industry challenges** and assess service provider capabilities to **address unmet enterprise needs**.
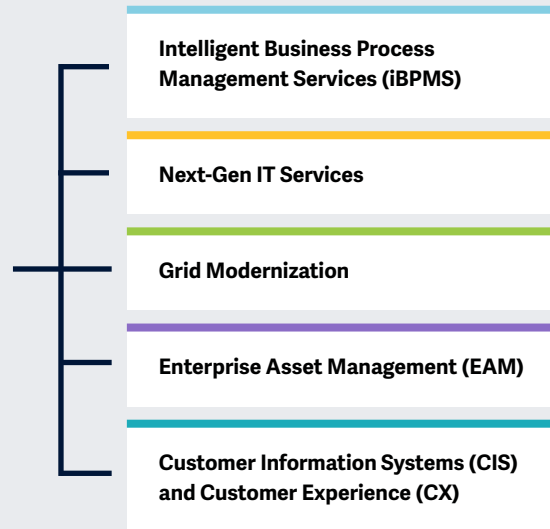
Simplified Illustration Source: ISG 2024

Intelligent Business Process Management Services (iBPMS)

Next-Gen IT Services

Grid Modernization

Enterprise Asset Management (EAM)

Customer Information Systems (CIS) and Customer Experience (CX)

Definition

The global power & utilities industry continues to be impacted by the steadily increasing demand for renewable energy and sustainability, government regulations, the development of smart cities, the rise of eMobility, geopolitical situations and increasing fossil fuel prices.

In 2024, the global power & utilities industry is in a state of flux. While the demand for electricity is on the rise, driven by economic growth and electrification trends, the path forward is fraught with challenges and opportunities. The clean energy transition continues to be a major driver. Renewables, particularly solar and wind, are projected to surpass coal as the leading source of global electricity generation by early 2025. This shift is fueled by falling costs of renewable technologies, government incentives and increasing public pressure to combat climate change. The grid, however, is struggling to keep pace with the changing energy landscape. Aging infrastructure, coupled with the integration of distributed energy resources (DERs) like rooftop solar, presents reliability concerns. Modernization efforts are underway,

but they require significant capital investment, which is further complicated by rising interest rates and inflation.

While utility prices are expected to remain relatively stable in 2024, affordability remains a concern. Rising fuel costs, particularly for natural gas, could increase prices. Regulatory frameworks need to find a balance between ensuring grid resilience and keeping energy affordable. Essentially, utilities are seeking providers with deep industry expertise, strong digital technologies and innovation capabilities around data and analytics, cybersecurity, and AI and ML.

ISG's Power & Utilities Framework

- Encapsulates the major topics that enterprises need to think about in Power & Utilities
- Helps detail headline digital solutions from Providers
- Inner tiles represent themes of enterprise objectives
- Outer tiles represent initiatives
- Behind each outer tile is a specific set of capabilities, with unique market leading providers and solutions

ISG Power & Utilities Framework hexagonal diagram. Inner themes: Operate Sustainable, Open, Ethical & Secure Busines; Analyse the Market and Create Strategies; Generate Utility; Generation Portfolio Strategy; Customer Engagement & Services; Supply and Support Customer; Content Distribution, Sales & Marketing; Media Supply Chain Services, Automation & Support. Central: ISG Power & Utilities Framework.

Outer tiles include: Renewable Energy Credits & Carbon Offsetting (Offset Schemes); Resiliency & Cybersecurity; Renewable Portfolio Standards (RPS); EHS Management (EHS & Safety Risks in Operations); Industry Advocacy & Collaboration (CSR Strategy); Energy Reporting & Sustainability Metrics (CSR, Business Practice); Environmental & Regulatory Compliance; Location strategy; Technology Strategy (Power Technology Evaluation); Demand Forecasting (Planning / Prediction); Market and Competitive Intelligence; Green Strategy (Assessing Renewable Sources); Utility, Strategy & Planning; Marketing and Sales; Thermal Power (Gas and Coal); Renewable Energy (Solar / Wind / Hydro); EPC and EPCM Strategy (Government Legislations and Tender); Nuclear Power; Distributed Energy Resources / Storage; Water / Wastewater Treatment; Intelligent Customer Operations (Use of AI / GenAI); Energy Education & Communication (Energy Use / Sustainability); Digital Customer Platforms (Gen AI / AI); Demand Side Management (Optimise Consumption); Customer Relationship Management; Customer Billing & Information Management; Regulatory Compliance; Market Operations & Energy Trading; Transmission & Distribution Infrastructure; Grid Modernization and Management; Transactions (Transparent / Secure inc Blockchain); Asset Management; Risk Management (Manage / Mitigate); Advanced Metering Infrastructure (1.0 and 2.0); Create / Manage Infrastructure (Build / Maintain); Demand Response Management (Collaboration / Augmentation / AR / VR); Purchase Arrangements (Buy / Sell Agreements); Pricing and Hedging (Price Trends / Informed Decision Making); Smart Grid Technologies (Intelligent Grid / IoT); Wholesale Electricity Market (PPAs).

Scope of the Report

This ISG Provider Lens™ quadrant report covers the following five quadrants for services/solutions: Intelligent Business Process Management Services (iBPMS), Next-Gen IT Services, Grid Modernization, Enterprise Asset Management (EAM), and Customer Information Systems (CIS) and Customer Experience (CX).

This ISG Provider Lens™ study offers IT decision-makers:

- Transparency on the strengths and weaknesses of relevant service providers
- A differentiated positioning of providers by segments (quadrants)
- Focus on the regional market

Our study serves as the basis for important decision-making by covering providers' positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

Provider Classifications

The provider position reflects the suitability of providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the service requirements from enterprise customers differ and the spectrum of providers operating in the local market is sufficiently wide, a further differentiation of the providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between $20 million and $999 million with central headquarters in the respective country, usually privately owned.

- **Large Accounts:** Multinational companies with more than 5,000 employees or revenue above $1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

- **Number of providers in each quadrant:** ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

Provider Classifications: Quadrant Key

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

Intelligent Business Process Management Services (iBPMS)

Intelligent Business Process Management Services (iBPMS)

Who Should Read This Section

This quadrant is relevant to North American enterprises in the power and utilities industry. It evaluates BPO and business process management (BPM) services providers.

In this quadrant, ISG highlights the current market positioning of providers offering BPM and BPO services to power and utilities companies in North America and how they address the critical challenges in the region through technology and domain expertise.

Enterprises in North America are increasingly investing in intelligent business process management services (iBPMS) to enhance operational efficiency and align their IT strategies with business outcomes. Providers are adopting talent solutions such as staff augmentation, direct placement, talent development and global remote talent platforms. There is also a significant emphasis on AI integration to enhance decision-making and process automation, along with adopting customer-centric approaches to improve CX and personalize services. The evolving

regulatory landscape requires enterprises to stay agile and swiftly adapt to new compliance requirements. Providers help in integrating advanced technologies such as AI, IoT and digital twins also presents challenges related to implementation and workforce readiness.

Power and utilities providers in North America are navigating a dynamic landscape characterized by rapid technological advancements and regulatory complexities. By leveraging iBPMS, these enterprises can enhance operational efficiency and align their IT strategies with broader business goals.

Technology professionals should read this report to understand how BPM and BPO services integrate multiple technologies into their proprietary offerings and compare their technical capabilities.
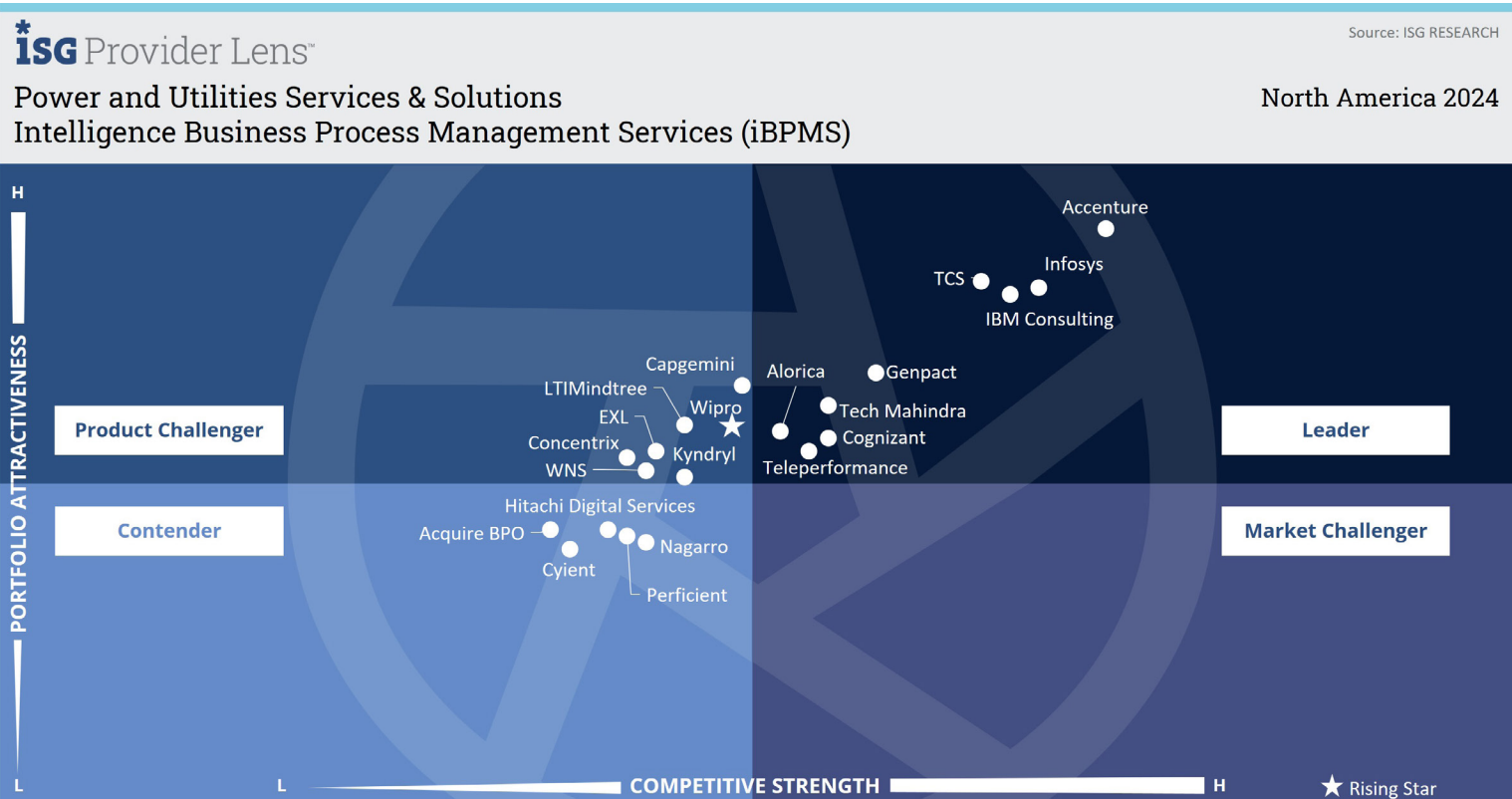
Operations professionals should read this report to understand the relative positioning and capabilities of providers offering end-to-end iBPMS solutions to enhance efficiency and effectiveness.

Digital professionals should read this report to understand and compare how BPM services providers are enhancing their digital transformation initiatives.

Marketing and sales professionals should read this report to understand the providers' relative positioning and capabilities that can help them harness iBPMS effectively.

ISG Provider Lens™

Source: ISG RESEARCH

Power and Utilities Services & Solutions
Intelligence Business Process Management Services (iBPMS)

North America 2024

PORTFOLIO ATTRACTIVENESS

H

Product Challenger

Contender

Accenture

Infosys
TCS
IBM Consulting

Capgemini
LTIMindtree   **Alorica**   **Genpact**
          Wipro
EXL   **Tech Mahindra**
Concentrix   Kyndryl   **Cognizant**
WNS
        Teleperformance

Hitachi Digital Services
Acquire BPO
          Nagarro
Cyient
        Perficient

Leader

Market Challenger

L

L   COMPETITIVE STRENGTH   H   ★ Rising Star

The quadrant assesses service providers that offer BPM and BPO services in the power and utilities industry to enable companies to **improve efficiency, productivity and processes for improved decision-making.**

Swadhin Pradhan

Intelligent Business Process Management Services (iBPMS)

Definition

The quadrant assesses service providers that offer intelligent business process management services (iBPMS) to power & utilities enterprises. These services are driven by automation and analytics and include customer services (both front office and back office, B2B and B2C), sourcing and procurement, human resources, finance, and accounting (F&A), regulatory and compliance, knowledge services, master data management, field workforce services, network operations, operational business intelligence (customer, marketing and asset) and supply chain management. These services enable client enterprises to improve efficiency and productivity in daily operations and business processes (front, middle and back office), enhancing customer experience and decision-making.

Eligibility Criteria

1. Ability to offer a combination (if not all) of the following to enterprises **across the value chain,** with expertise in the assessed region:

   - F&A
   - Sourcing, procurement, and supply chain
   - Customer service
   - HR
   - Legal
   - Regulatory and compliance management
   - Media and content management
   - Master data management
   - Field workforce services
   - Network operations
   - Analytics
   - Work order management
   - Meter data management
   - Demand response management

2. Knowledge of **industry and regional regulations**

3. Experience in **optimizing business processes** for leading firms

4. Expertise in **applying advanced technologies,** including automation, analytics, IoT, AI, cybersecurity, cloud and blockchain

5. **Partnerships** with industry associations, regulatory bodies, technology firms and power & utilities startups

6. **Referenceable case studies** for services/solutions across the value chain

Observations

Business process management/business process outsourcing (BPM/BPO) players are looking to strike the right balance between human- and non-human-centric BPO capabilities. The providers in the segment include large IT players and focused BPO players that help companies in the power and utilities industry in cost optimization, growth and transformation across various customer segments.

Traditional BPO players are looking to expand capabilities around AI/GenAI, analytics, cloud, data management and automation by leveraging their growing industry and domain expertise. For power and utilities, providers are currently investing in strengthening their service offerings and driving customer and business outcomes through different solutions that align with their core strategy and vision to enhance technology capabilities and geographic reach, complementing their organic growth. With utilities companies looking to have a digitally enabled business model and value proposition involving few people,

providers are redefining their approach to include new products to improve overall customer satisfaction.

The Leaders in this quadrant understand that the intersection between technology and business is a key capability that will continue to help them differentiate their services. In addition, they are coinnovating with clients and are using a consulting-led transformation approach as companies in this industry increase focus on improving key KPIs such as failure demand, billing accuracy and first contact resolution.

From the 100 companies assessed for this study, 21 qualified for this quadrant, with nine 9 being Leaders and one a Rising Star.

accenture

Accenture has been delivering BPO services to utilities companies for the past 20 years and is focused on providing automation, cost optimization and productivity enhancement services to clients through its global delivery centers.

Alorica

Alorica, with its industry expertise, BPO capabilities and presence in more than 100 locations in North America that include 50,000 employees and agents, covers the entire meter-to-cash and outage requirements for utilities companies.

cognizant

Cognizant combines its distinctive expertise in powering business and IT operating models with industry depth and leadership in process and IT automation to help transform business operations.

Genpact can integrate its automation, analytics and AI capabilities with solutions from its strategic partners into a combined offering for power and utilities clients in the BPM areas such as F&A, procurement and sourcing.

IBM

IBM Consulting offers solutions focused on digital services and data integration for iBPMS under the Intelligent Workflows concept with a strong focus on GenAI enablers.

Infosys

Infosys' BPO/BPM capabilities cover generation, T&D, trading, corporate and administrative, and retail operations. It integrating its AI/GenAI capabilities into utilities-focused BPM solutions.

TCS TATA CONSULTANCY SERVICES

TCS has built onshore, nearshore and offshore capabilities, with focused investments in technology and people, across geographies, around cost optimization, growth and transformation.

Intelligent Business Process Management Services (iBPMS)

Tech Mahindra is building innovative iBPMS offerings for the power and utilities industry using leading platforms/software that are business outcome-led, helping the industry with reducing costs and OpEx management.

Teleperformance

Teleperformance's BPO solutions for power and utilities firms are led by its focus on digital transformation and the use of GenAI, analytics and security to drive digital engagements for regulated and deregulated utilities.

Wipro's (Rising Star) digital CX solutions focus on modernizing customer care operations by minimizing dependence on human-centric processes. Its solutions integrate domain knowledge, technology proficiency and operational excellence.

Next-Gen IT Services

Next-Gen IT Services

Who Should Read This Section

This quadrant is relevant for North American enterprises in the power and utilities industry for evaluating next-gen IT services providers.

In this quadrant, ISG highlights the current market positioning of providers that offer next-gen IT services such as automation, analytics, IoT, AI and ML solutions to power and utilities companies and how they address the critical challenges in North America.

Enterprises in North America are increasingly adopting next-gen IT solutions to drive innovation and operational efficiency. Providers are integrating AI solutions to automate processes, optimize workflows and unlock new growth opportunities. Service providers are leverage data science and ML operations (MLOps) expertise, advanced AI Lab facilities and tailored strategy workshops to meet unique business goals. There is a significant shift toward hybrid data centers that combine traditional on-premises infrastructure with cloud-based solutions, offering enhanced security, control, flexibility and scalability.

One of the primary concerns is the aging infrastructure, which poses a significant threat to operational integrity amid increased supply-demand volatility caused by natural disasters, climate change, global events and cyberthreats. Ensuring the physical integrity of these aging assets is crucial for reliable service delivery.

The focus on AI integration, hybrid data centers, advanced networking and comprehensive data management underscores the enterprises' commitment to leveraging technology for improved efficiency and growth. However, addressing the challenges of aging infrastructure, accurate demand forecasting and the complexities of implementing advanced technologies is critical to sustaining this momentum.

Technology professionals should read this report to understand how next-gen IT services providers integrate multiple technologies into their proprietary offerings and compare their technical capabilities.

Operations professionals should read this report to understand the relative positioning and capabilities of providers that offer end-to-end next-gen IT services to enhance efficiency and effectiveness.

Digital professionals should read this report to understand and compare how next-gen IT services providers enhance their digital transformation initiatives for an improved CX.
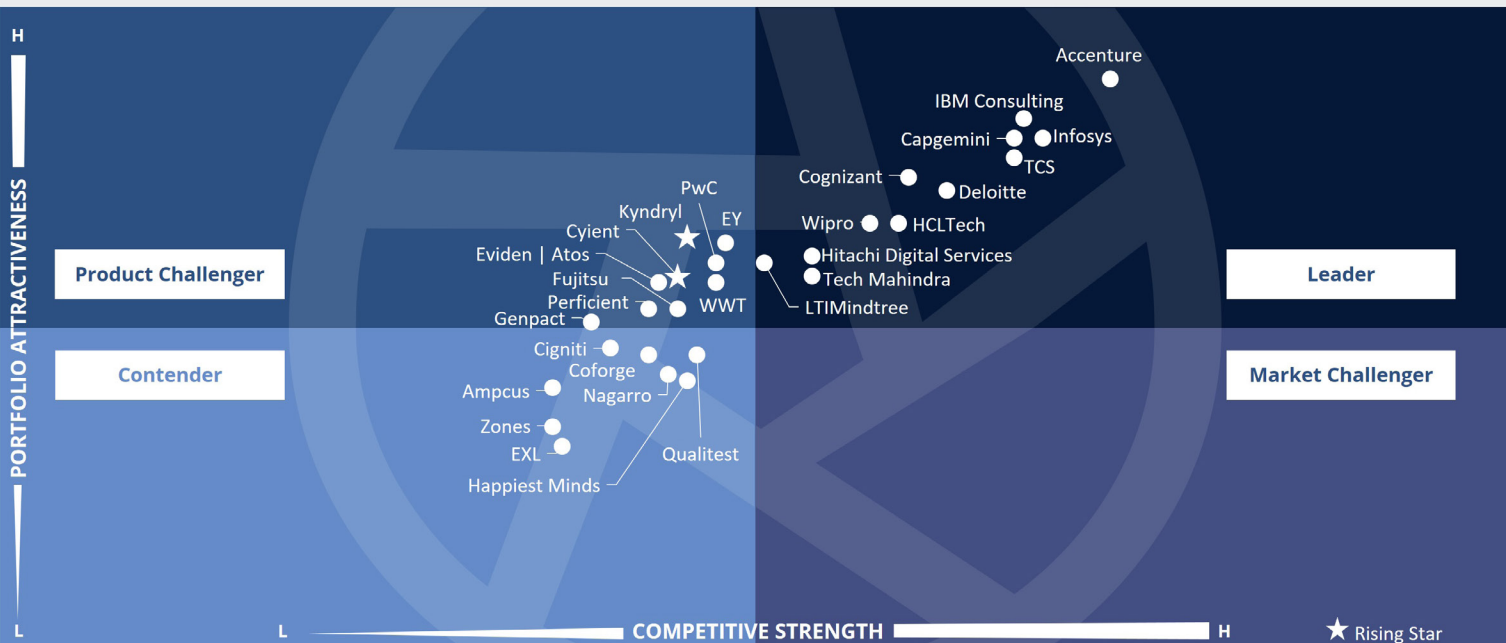
Marketing and sales professionals should read this report to understand the providers' relative positioning and capabilities that can help them harness next-gen IT services effectively.

ISG Provider Lens™

Power and Utilities Services & Solutions
Next-Gen IT Services

North America 2024

Source: ISG RESEARCH

H

PORTFOLIO ATTRACTIVENESS

Product Challenger

Contender

Accenture

IBM Consulting
Capgemini — Infosys
TCS

Cognizant   Deloitte

PwC   Wipro   HCLTech
Kyndryl   EY
Cyient   Hitachi Digital Services
Eviden | Atos   Tech Mahindra
Fujitsu   LTIMindtree
Perficient   WWT
Genpact
Cigniti
Coforge
Ampcus   Nagarro
Zones
EXL   Qualitest
Happiest Minds

Leader

Market Challenger

L

L   **COMPETITIVE STRENGTH**   H   ★ Rising Star

This quadrant assesses service providers that offer IT managed services to enable utilities companies to **increase efficiency, ensure compliance, minimize costs, optimize assets and maximize customer satisfaction.**

Swadhin Pradhan

Next-Gen IT Services

Definition

This quadrant assesses service providers offering next-gen IT services to the power & utilities industry. The services include application development and maintenance (ADM), infrastructure services (data center, cloud, network, workplace, and cybersecurity) and systems integration for new applications across the value chain. These services enable utilities to increase efficiency, ensure compliance, minimize costs, optimize assets, and maximize customer satisfaction.

Next-gen IT in utilities leverages data, cloud, and AI to improve efficiency and customer experience. Smart meters and sensors collect real-time information on energy use and grid health. Utilities analyze this data to predict demand, optimize resources and identify equipment issues. This allows for proactive maintenance that reduces downtime and costs. Customers also benefit from personalized energy plans and mobile applications for managing accounts and tracking outages.

Eligibility Criteria

1. Ability to **offer a combination** (if not all) of the following to enterprises across the value chain, with expertise in the assessed region:

   - Systems integration

   - App development and maintenance

   - Infrastructure services (data center, network operations center and cloud)

   - Cybersecurity

   - Next-gen technologies such as automation, analytics, AI, ML, IoT and blockchain

   - Digital twins

2. **Extensive domain knowledge** and support for compliance with regional regulations

3. **Partnerships** with industry associations, regulatory bodies, technology firms and power & utilities startups

4. Experience in **large transition projects** that include post-merger integration of firms, IT-driven business transformation, cybersecurity, and legacy system and application modernization in the industry

5. **Referenceable case studies** for services and solutions across the value chain

Next-Gen IT Services

Observations

Leading IT players leverage their existing and growing IT, OT and engineering capabilities to build differentiated solutions, targeted at the power and utilities value chain and segments such as water and gas. Emerging players are looking to build capabilities and compete with large players across this value chain.

The companies continue to build AI/GenAI solutions to enhance their capabilities around cloud migration, data modernization, security and analytics and leverage technologies such as digital twins, AI and ML, and cloud to upgrade their delivery models. However, most AI deployments remain in PoC stage. In addition, companies need to make additional investments in data to support the development of AI platforms and specialized skills across teams to integrate AI with processes and systems. Large SIs and managed services companies are building their engineering and IoT capabilities through acquisitions to drive value proposition and digital transformation for clients in this industry. In addition, they are also increasingly

developing solutions around sustainability, energy transition, and hydrogen and nuclear capabilities as the power and utilities industry focuses on these areas.

In addition, leaders continue to forge partnerships with large incumbent technology, consulting, hyperscalers and selective niche players to provide and expand their utilities-specific capabilities. Furthermore, they are taking a customer-first, AI-first, cloud-first and digital-first approach to help power and utilities companies manage operations, deliver improved CX, manage grid resiliency and reliability, and optimize asset and work management.

From the 100 companies assessed for this study, 29 qualified for this quadrant, with 12 being Leaders and two Rising Stars.

accenture

Accenture's IT solutions are driven by domain-focused talent, sustainability expertise and partnerships. The company is doubling down on GenAI-led solutions through its global network of GenAI Studios that bring together innovation and AI capabilities and industry and functional expertise.

Capgemini

Capgemini as a part of its ADMnext offering, provides Business Insightful Services (BIS) that integrate IT with business in the power and utilities industry to drive desired business outcomes.

cognizant

Cognizant is recognized for its continued excellence in providing next-generation IT services across the utilities industry value chain by focusing on emerging industry trends and digital transformation.

Deloitte.

Deloitte's digital transformation solutions for power and utilities are driven by its focus on cloud, AI and cybersecurity. It provides end-to-end cloud capabilities, spanning strategy, cloud migration, cloud platforms infrastructure and cloud-managed services.

HCLTech

HCLTech's deep engineering, IT infrastructure and software capabilities enable it to offer a comprehensive suite of next-generation IT services for the power and utilities industry covering areas such as digital transformation, operational efficiency and sustainable energy management.

Hitachi Digital Services

Hitachi Digital Services' solutions are a mix of industry and digital capabilities that create vertical differentiation using horizontal capabilities. This approach also involves developing joint go-to-market (GTM) strategies and coinnovation.

Next-Gen IT Services

IBM Consulting delivers business outcomes by embedding and operationalizing emerging technologies across the power and utilities industry value chain. It integrates data, AI, IoT and automation solutions across key domains**.**

Infosys' next-generation IT service offerings focus on new-age IT operations and modernization and digital transformation, enabled by domain advisory and consulting services and business process reengineering with a cloud- and AI-first mindset.

LTIMindtree's technology solutions address key demands for utilities companies, such as decarbonization and digitalization, through its cloud strategy and consulting services, enterprise IT modernization, smart service management, and data and AI.

TCS' energy and utilities solutions are a mix of its core technology offerings around cloud, AI and security; proprietary platforms and accelerators; and innovation centers. It also has dedicated delivery centers on specific focus areas such a nuclear energy.

Tech Mahindra implements next-generation IT solutions for leading global utilities companies by utilizing its deep domain knowledge and expertise in the latest digital technologies and solutions designed specifically for the energy sector.

Wipro's reorganization along with its competency in four core areas, namely, cloud, enterprise technology and business transformation, engineering, and consulting, allows it to leverage the power of One Wipro to deliver a wide range of services across the IT and OT spectrum.

Cyient's (Rising Star) analytics and IoT solutions leverage real-time machine data for embedded intelligence at the edge, IoT networks to connect to the cloud and advanced analytics to provide actionable insights.

Kyndryl (Rising Star) offers next-generation IT services using data, cloud, AI, and edge technologies to help power and utilities companies improve efficiency, compliance, cost optimization, asset management and customer satisfaction to speed up digital transformation.

HCLTech

Leader

"HCLTech drives its next-generation IT capabilities through its focus on digital, cloud, and IT/OT convergence programs, delivering business outcomes for companies in the power and utilities industry."

Swadhin Pradhan

Overview

HCLTech is headquartered in Noida, India. It has more than 227,500 employees across over 215 delivery centers worldwide. In FY24 the company generated $13.3 billion in revenue, with IT and Business Services as its largest segment. HCLTech has more than three decades of experience in the U.S., partnering with several energy and utilities companies to define and execute their IT transformation journeys. The company has executed many transformation programs, including ERP and CIS implementation, advanced metering infrastructure (AMI) solutions and enterprise asset management (EAM) solutions for electric, gas and water utility companies.

Strengths

Growing business: HCLTech continues to win clients across North America by supporting consulting and implementation, digital transformation, IoT platforms, digital workplace, RPA, cloud data migration, IT service management (ITSM) and security, among other key areas. This also indicates its capabilities in technologies and fields such as ERP, data modernization and customer operations, which continue to be important for power and utilities companies.

Strategic partner ecosystem: HCLTech leverages acquisitions, such as Actian and Cisco/IBM products, and partnerships with Black & Veatch, SAP, Oracle, Microsoft, AWS and Google to deliver comprehensive solutions in the power and utilities industry.

Digital-led strategy: HCLTech's UVision strategy is helping it to focus on new capabilities to address industry focus areas such as sustainability, engineering, business process, cloud, cybersecurity and digital infrastructure. The company's CloudSMART is a portfolio of solutions that enables continual modernization, enhanced agility and improved operational efficiency. HCLTech's infrastructure services and growing software business are its key strategic differentiators.

Caution

HCLTech should showcase its business-outcome-based models as its unique differentiators. It should further penetrate the midmarket segment of the power and utilities industry with its UVision strategy and engineering and infrastructure capabilities.

Grid Modernization

Grid Modernization

Who Should Read This Section

This quadrant is relevant to North American power and utilities companies for evaluating grid modernization services providers.

In this quadrant, ISG highlights the current competitive market positioning of providers that offer grid modernization services to power and utilities companies in North America and how they address challenges around grid optimization and resiliency in the region.

Enterprises in North America are actively pursuing grid modernization to address the challenges of aging infrastructure and the integration of renewable energy sources. This modernization effort is driven by adopting advanced technologies such as smart meters, sensors, automation and advanced analytics, transforming traditional power grids into more innovative, efficient and reliable systems.

Providers are moving towards distributed energy resources (DERs) trends, leading to a more decentralized power system. This shift empowers consumers with greater control over their energy usage and supports multidirectional energy flows. Despite such promising advancements, enterprises face several challenges in their grid modernization efforts. Integrating renewable energy sources requires careful planning and coordination to maintain grid stability and reliability. Providers can help in reducing reliance on fossil fuels by adopting smart grid solutions and integrating renewable energy presents technical and operational challenges.

Addressing the challenges of transitioning to renewable energy, managing grid modernization projects and upgrading aging infrastructure is crucial for enterprises in sustaining the growth momentum.

Technology professionals should read this report to understand how grid modernization services providers integrate multiple technologies into their proprietary offerings and compare their technical capabilities.

Operations professionals should read this report to understand the relative positioning and capabilities of providers that offer end-to-end grid modernization to improve efficiency and effectiveness.

Digital professionals should read this report to understand and compare how grid modernization services providers enhance their digital transformation initiatives for an improved CX.
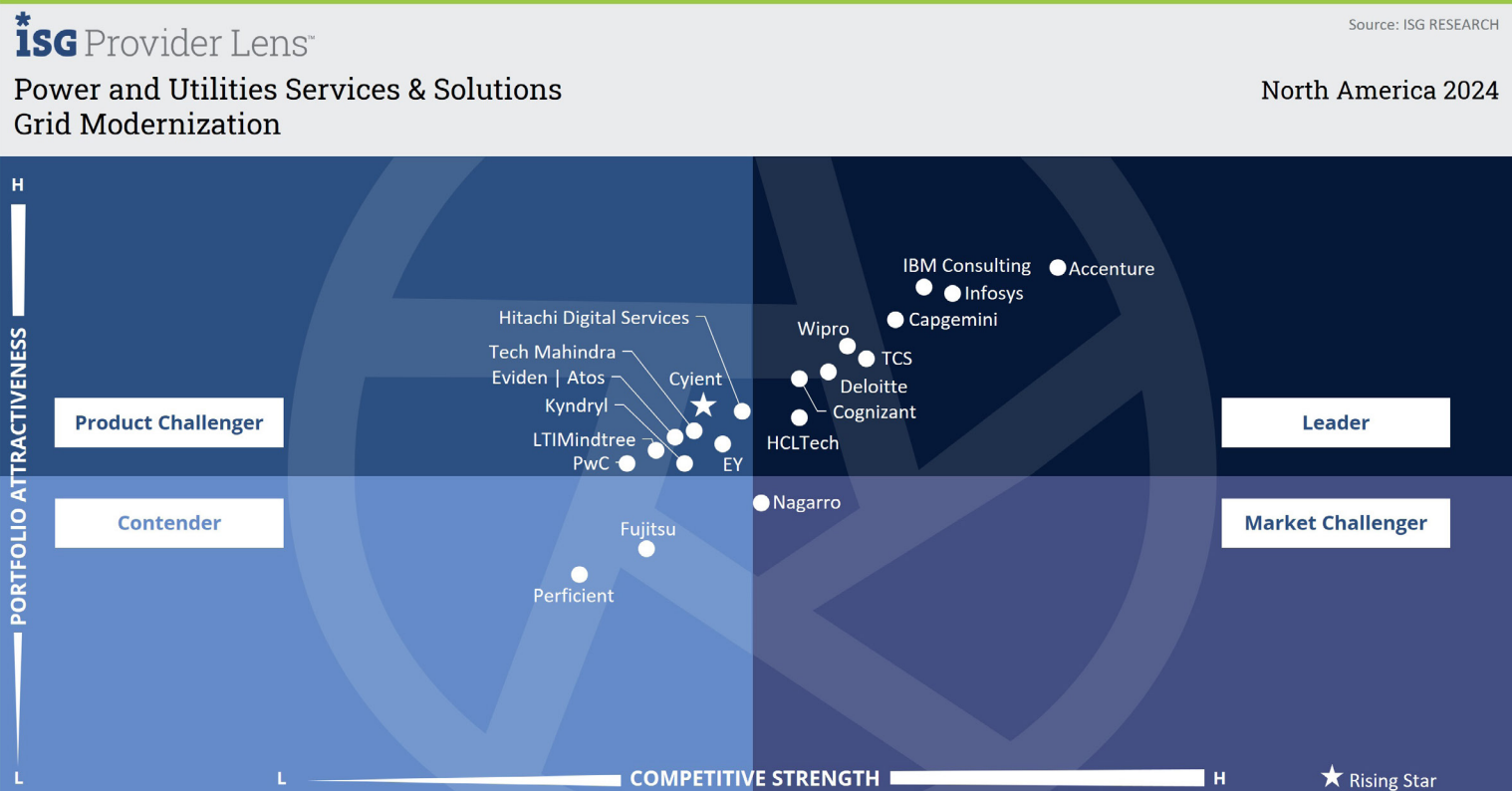
Marketing and sales professionals should read this report to understand providers' relative positioning and capabilities that can help them harness grid modernization services effectively.

ISG Provider Lens™

**Power and Utilities Services & Solutions
Grid Modernization**

North America 2024

Source: ISG RESEARCH

Product Challenger

Contender

Leader

Market Challenger

PORTFOLIO ATTRACTIVENESS

COMPETITIVE STRENGTH

★ Rising Star

IBM Consulting
Accenture
Infosys
Capgemini
Wipro
TCS
Deloitte
Cognizant
HCLTech
Hitachi Digital Services
Tech Mahindra
Cyient
Eviden | Atos
Kyndryl
LTIMindtree
PwC
EY
Nagarro
Fujitsu
Perficient

This quadrant assesses service providers that offer grid modernization and related services in the power and utilities sector. Transmission and distribution (T&D) companies focus on **increasing the reliability of their grids through technology adoption**.

Swadhin Pradhan

Grid Modernization

Definition

This quadrant assesses service providers offering grid modernization and related services in the power & utilities industry. The services include grid modeling, distributed energy resources management systems (DERMS), advanced distribution management systems (ADMS), geographic information systems (GIS), volt-var optimization (VVO), supervisory control and data acquisition (SCADA), advanced metering infrastructure (AMI), distribution and operations, scheduling and dispatch, grid resilience, demand planning and forecasting, response design and integration. These offerings lead to an improved, reliable and optimized grid infrastructure.

Grid modernization involves utilities overhauling the electricity grid to make it smarter, more resilient and more efficient. It is like upgrading an old, clunky computer system to a sleek, high-powered one. This transformation utilizes modern technologies such as sensors, automation and data analytics to improve reliability, integrate renewable energy sources and even empower customers with greater control over their energy use.

Eligibility Criteria

1. Experience in **grid modernization**

2. **Successful grid modernization projects** with at least three power & utilities firms

3. **Offerings** in more than one of the following:
   - Grid modelling and analytics
   - Grid management (distribution and operations, scheduling and dispatch)
   - Grid optimization and resilience
   - Demand planning, forecasting and outage management
   - DER (technology selection, strategy, road map and integration)
   - DERMS
   - EV charging integration
   - SCADA
   - GIS
   - Volt-var optimization and control
   - Advanced metering and smart grid services
   - Distribution automation
   - Integration and value realization
   - AMI (1.0 and 2.0)

4. Expertise in **next-gen technologies:** automation, analytics, IoT, AI, cybersecurity, cloud and blockchain

5. **Partnerships** with industry associations, regulatory bodies, technology firms and power & utilities startups

6. **Referenceable case studies**

Grid Modernization

Observations

Electric grids in North America and across the world are aging significantly, and energy transition is disrupting traditional grid operations. These challenges necessitate utilities to spend billions of dollars in developing and modernizing grids. Nevertheless, utilities can benefit from the Infrastructure Investment and Jobs Act (IIJA), which includes $65 billion to upgrade and expand the U.S. power infrastructure. The IIJA helps utilities meet their grid infrastructure goals and includes programs to prevent outages and enhance the electric grid and energy transmission.

Digital will play a key role in transforming grid management and operation. Utilities need to accelerate the transformation of the traditional power grid to a digital grid at scale on their path to energy transition. Thus, providers are looking to integrate their strong portfolio of grid modernization offerings with advanced analytics, AI and automation, RPA and the cloud to enhance grid modernization solutions. The need to develop OT capabilities drives IT companies to forge partnerships with large

OT players such as Schneider, Infor, ABB and Bentley and grid software players such as GE Vernova, AspenTech, Siemens and AutoGrid.

Grid modernization, a highly specific and niche capability, is dominated by large IT players. They use their industry and domain expertise, along with IoT capabilities, to develop a suite of products focused on electric vehicles (EVs), distributed energy resource (DER), advanced distribution management system (ADMS), AMI 2.0 and sustainability/net zero.

In addition, most of them are developing energy transition solutions to expand their offering portfolios as utilities are increasingly optimizing their energy sources and integrating them into the grid.

From the 100 companies assessed for this study, 20 qualified for this quadrant, with nine being Leaders and one a Rising Star.

accenture

Accenture's *One Accenture* strategy combines the company's technology, strategy and consulting, operations and interactive capabilities.

Capgemini

Capgemini's offerings address the industry's evolving needs, which encompass both core grid management and broad sustainability initiatives, by using its core grid modernization solutions that leverage analytics, AI and ML and IoT.

cognizant

Cognizant collaborates with clients to help them in their transition to digitalization of electrical networks, integration of renewable resources, grid modernization and cloud integration by deploying unique solutions and frameworks.

Deloitte.

Deloitte, with over 20 years of experience in sustainability services, offers deep domain expertise in power and utilities. It collaborates with Utilidata to provide intelligent power grid solutions leveraging AI and data capabilities.

HCLTech

HCLTech provides end-to-end AMI and grid automation and optimization solutions to help T&D companies deploy smart meters, manage data, and integrate renewables and energy storage solutions with utilities systems.

IBM.

IBM Consulting brings advanced assets to help T&D companies build digital twins and complex knowledge graphs for network modeling and grid planning in their grid transformation journey.

Grid Modernization

Infosys offers expertise and innovation through its dedicated CoEs for grid modernization and GE GridOS and capabilities from Infosys Cobalt and Topaz to provide various solutions around grid management, grid modeling, AMI 2.0. and grid optimization.

TCS' grid modernization offerings focus on strategy and architecture consulting, product implementation and managed services, digital services and new energy services for AMI, automatic meter reading (AMR), ADMS, outage management systems (OMS), DERMS, GIS EVs and virtual power plants (VPPs).

Wipro's network operations and grid modernization practice is well positioned to address the evolving needs of the utilities sector, leveraging its extensive domain expertise and experience in consulting, implementation and integration with leading utilities globally.

Cyient (Rising Star) offers end-to-end grid modernization solutions leveraging its expertise and industry knowledge. Its proprietary solutions are focused on advanced analytics, smart technologies and IT/OT integration tailored to meet industry standards.

Leader

"HCLTech's grid modernization solution portfolio is rapidly expanding, driven by robust engineering capabilities and a growing client base."

Swadhin Pradhan

HCLTech

Overview

HCLTech is headquartered in Noida, India. It has more than 227,500 employees across over 215 delivery centers worldwide. In FY24 the company generated $13.3 billion in revenue, with IT and Business Services as its largest segment. The company offers a comprehensive suite of services to modernize power and utilities grids, enhancing efficiency, reliability and sustainability. It also offers consulting and implementation services to help utilities develop and execute sustainability and decarbonization strategies.

Strengths

Strong industry, engineering and domain expertise: HCLTech's engineering and research services provide solutions around AMI and MDMS product suites, along with comprehensive service support for smart meter original equipment manufacturers (OEM)s. Its UVision framework components around engineering and digital are focused on utilities infrastructure modernization such as advanced metering, 360° secure OT framework, digital plant modeling and engineering, and DERMS. HCLTech anticipates that its GenAI capabilities will contribute to grid optimization for utilities.

Solution portfolio complemented by OT capabilities: HCLTech's operational technologies help utilities sustain resiliency and progress beyond efficiency gains associated with digital. HCLTech's IoT WoRKS division specializes in grid modernization and includes solution development laboratories, partnerships with IoT companies, and full lifecycle planning and delivery capabilities. The company has developed solutions in collaboration with Black & Veatch, DELL, Indra/Minsait, RamTech (GIS) and KalkiTech (Substation & DERMS Communication).

Expanding client base and robust deal pipeline: HCLTech has acquired new clients and expanded its work with existing ones in grid management. The company focuses on smart metering, supporting the transformation journey of OT systems, and IQGeo-based GIS enhancement and support.

Caution

HCLTech should aggressively showcase its grid modernization capabilities to North American power and utilities companies to consolidate its position. It should also leverage its strong engineering capabilities to drive IT/OT conversations with clients.

Enterprise Asset Management (EAM)

Who Should Read This Section

This quadrant is relevant for enterprises in the North American power and utilities industry that evaluate enterprise asset management (EAM) services providers.

In this quadrant, ISG highlights the current market positioning of providers that offer EAM, workforce management and field service management services to power and utilities companies and how they address the key challenges around asset maintenance optimization and workforce efficiency.

Enterprises are increasingly focusing on optimizing field service operations to enhance efficiency and performance management. This includes strategic field force allocation, timely repairs and implementing predictive maintenance strategies using algorithms, statistical methods and real-time data analysis. Providers are establishing monitoring and diagnostics centers that leverage AI and ML for data management and improving equipment uptime. One of the primary challenges is effectively using digital twin

technology to create virtual replicas of physical assets for better management. This requires significant investments in technology and expertise to ensure accurate and useful digital representations. Providers are leveraging advanced analytics to gain deeper insights into asset performance is crucial but challenging.

Providers in North America are making significant strides in EAM by adopting advanced technologies and innovative strategies. Integrating smart grid technologies and analytics further supports outage optimization, distributed generation profiles and safety challenges, while infrastructure modernization efforts ensure reliability, safety and cost management.

Technology professionals should read this report to understand how EAM providers integrate multiple technologies into their proprietary offerings and compare their technical capabilities.
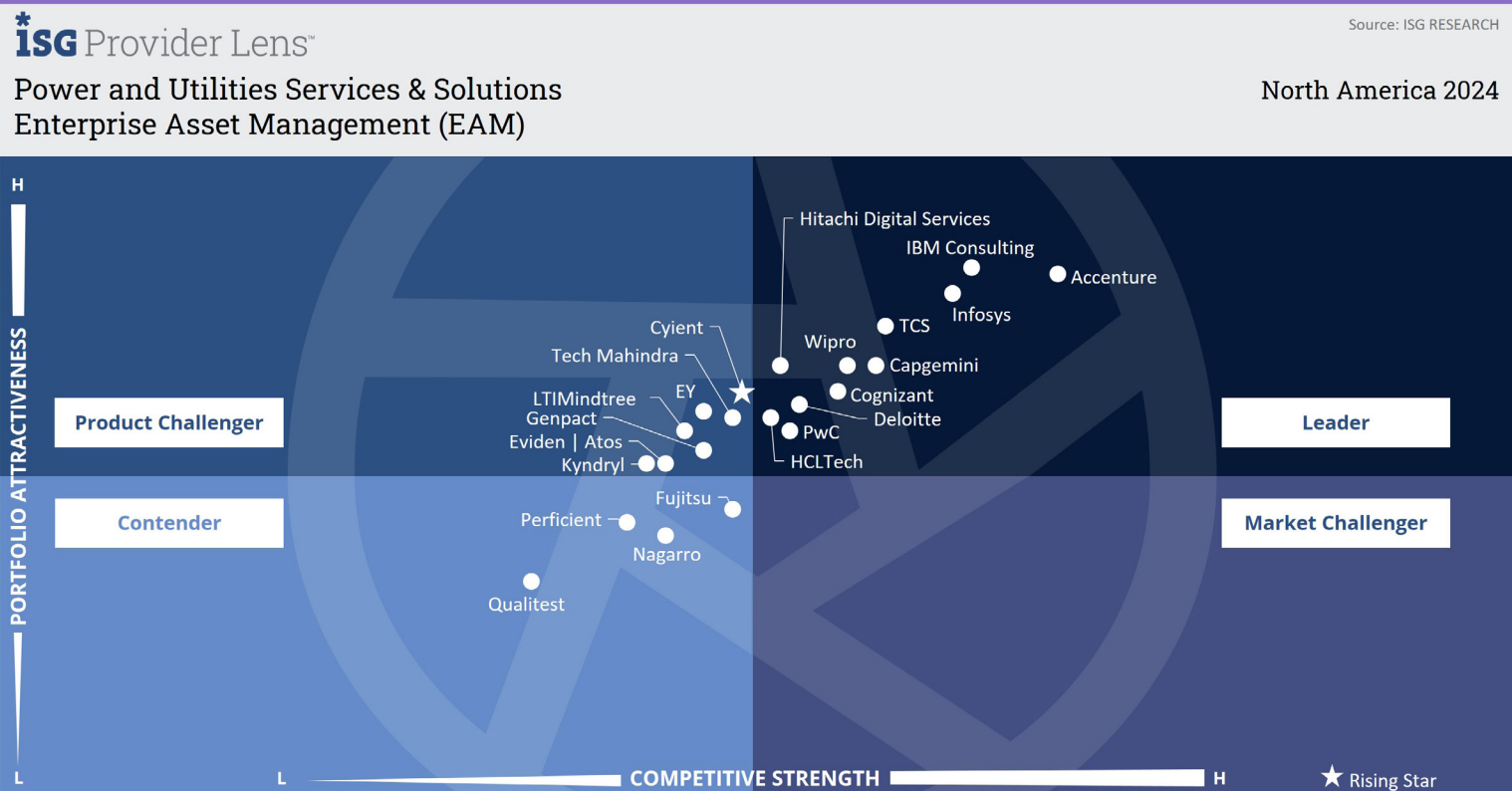
Operations professionals should read this report to understand the relative positioning and capabilities of providers that offer end-to-end EAM to improve efficiency and effectiveness.

Digital professionals should read this report to understand and compare how EAM services providers enhance their digital transformation initiatives for an improved CX.

Marketing and sales professionals should read this report to understand providers' relative positioning and capabilities that can help them harness EAM services effectively.

ISG Provider Lens™

Power and Utilities Services & Solutions
Enterprise Asset Management (EAM)

North America 2024

PORTFOLIO ATTRACTIVENESS

H

Product Challenger

Contender

Hitachi Digital Services
IBM Consulting
Accenture
TCS
Infosys
Wipro
Cyient
Capgemini
Tech Mahindra
Cognizant
EY
LTIMindtree
Deloitte
Genpact
PwC
Eviden | Atos
Kyndryl
HCLTech

Leader

Market Challenger

Fujitsu
Perficient
Nagarro
Qualitest

L

L   COMPETITIVE STRENGTH   H   ★ Rising Star

This quadrant assesses service providers that help companies manage assets. **Effective enterprise asset management (EAM) strategies and solutions will help enhance reliability** and **optimize aging infrastructure,** including transmission and distribution (T&D) assets.

Swadhin Pradhan

Enterprise Asset Management (EAM)

Definition

This quadrant assesses providers offering enterprise asset management (EAM) services and solutions to enterprises in the power & utilities industry. Services include asset lifecycle management, maintenance, repair and operations, labor management, controls management, application maintenance and support, supply chain solutions, cloud services, asset health management, digital enablement services and remote monitoring. These services enable enterprises to increase asset performance, extend their useful life and reduce operational costs.

Additionally, many service providers explore mergers and acquisitions (M&A) and develop proprietary EAM platforms to offer industry-specific solutions. These platforms use technologies such as digital twins, augmented reality (AR), VR, mixed reality (MR) and 3D technology in the asset management space. Field service management and workforce management are also key areas within asset management.

Eligibility Criteria

1. **EAM** experience in the regional power & utilities industry

2. **Successful EAM** projects with at least three power & utilities firms

3. **Offerings** in at least one of the following:
   - Asset health management
   - Failure prediction
   - Work and labor management, including HSE
   - Supply chain transformation
   - MRO management
   - Computerized maintenance management system
   - Controls management
   - Warranty management
   - Geographic information system
   - Digital EAM solutions based on AI and ML
   - Analytics and reporting
   - Field management
   - Asset inventory and work order management

4. **Expertise in next-gen technologies:** automation, analytics, IoT, AI, cybersecurity, cloud and blockchain in the industry

5. **Partnerships** with industry associations, regulatory bodies, technology firms and power & utilities startups

6. **Referenceable case studies** for services/solutions across the value chain

Observations

Power and utilities EAM services include asset lifecycle management, maintenance optimization, real-time asset monitoring, condition-based maintenance and predictive analytics. Providers integrate IoT technology with cloud and AI/GenAI-based capabilities to build solutions around field services management and predictive maintenance.

The IBM Maximo® suite of solutions is a leading offering that almost all leaders and most players provide to clients in asset-intensive industries such as power and utilities. The providers are also building EAM CoEs in collaboration with EAM software players such as IBM and SAP to foster innovation, continuous training and skill enhancement initiatives. In addition, companies are also working with IFS and Hitachi Energy to broaden their EAM solutions portfolio.

The EAM space is dominated by large IT players with deep expertise and domain knowledge gained from working across asset-intensive industries. Leaders focus on M&A and proprietary EAM platforms to deliver industry-specific EAM solutions. These proprietary platforms and products use digital twins, AR, VR, mixed reality (MR) and 3D technology in the asset management space. In addition, providers are also using their ERP implementation capabilities to integrate EAM products and solutions with existing ERP systems, enabling utilities to benefit from better data and analytics for enhanced asset maintenance and visibility.

From the 100 companies assessed for this study, 22 qualified for this quadrant, with 11 being Leaders and one a Rising Star.

accenture

Accenture's intelligent asset management leverages its partner products, industry expertise, consulting experience, data analytics and digital capabilities. It also utilizes third-party integrations, including Maximo, SAP S/4 HANA and others, to deliver EAM solutions.

Capgemini

Capgemini's expertise in research, vendor partnerships, advanced analytics, and Capgemini Industry 4.0 and industry best practices enables it to provide focused EAM solutions.

cognizant

Cognizant has developed EAM solutions based on Maximo and other products to help utilities transform asset management and field services programs. The acquisition of Belcan adds engineering, research and development (ER&D) and digital engineering capabilities.

Deloitte.

Deloitte's EAM-focused industry offerings incorporate data and analytics to support companies in asset location information, work execution efficiency and data management for asset-intensive operations.

HCLTech

HCLTech's EAM solutions mitigate OpEx, increase asset availability, raise asset utilization and visibility, and improve process compliance.

Hitachi Digital Services

Hitachi Digital Services leverages Lumada's EAM solutions and its functionalities for the asset management, maintenance and reliability needs of power and utilities organizations.

IBM

IBM Consulting harnesses its Maximo portfolio of asset and work management software, along with experienced industry consultants, to deliver EAM solutions, helping companies manage their T&D and power generation assets.

Enterprise Asset Management (EAM)

Infosys' system integration (SI) capabilities, domain consulting expertise, product/package functional and technical capabilities, and AI/GenAI-based innovative solutions framework bring innovative EAM solutions, including product suite evaluation and implementation.

PwC's EAM offerings capitalize on its core operational consulting capabilities, optimizing asset management strategies for power and utilities companies by unlocking operational efficiencies for the entire asset lifecycle.

TCS' EAM offerings are driven by its global partnerships with leading vendors and the solutions it has developed over the years in areas such as asset failure prediction, asset inspection (U-Vision), asset health index, and asset anomaly detection.

Wipro integrates its engineering capabilities, advanced analytics, and AI/ML technologies into EAM solutions to enable predictive maintenance, anomaly detection, asset performance forecasting, and prescriptive maintenance recommendations.

Cyient (Rising Star) offers comprehensive EAM services for power and utilities companies, backed by its expertise and proven track record. It supports the entire asset lifecycle, using advanced analytics and IoT for real-time monitoring and predictive maintenance.

HCLTech

Leader

"HCLTech's engineering, industry and domain expertise and deep relationships with IBM, SAP and Microsoft make its asset management solutions robust and flexible."

Swadhin Pradhan

Overview

HCLTech is headquartered in Noida, India. It has more than 227,500 employees across over 215 delivery centers worldwide. In FY24 the company generated $13.3 billion in revenue, with IT and Business Services as its largest segment. The company has more than three decades of experience in the U.S., partnering with several energy and utilities companies to define and execute their IT transformation journeys. HCL Asset Management Solution (HAMS) is focused on providing Maximo and SAP solutions harnessing a combination of cloud, consultative, system integration, implementation, upgrade, maintenance, and support services capabilities.

Strengths

Strong portfolio of capabilities and solutions: HCLTech's EAM portfolio includes SAP-certified industry add-ons, such as iMRO and iSAM for EAM and MRO management; asset twin 360; geospatial linear asset management (GLAM), powered by Microsoft Azure and Maximo Visual Inspection; and connected assets and workers. The company also leverages its digital engineering capabilities to drive IoT and power electronics offerings.

Robust partner ecosystem: HCLTech partners with key EAM players such as IBM, ESRI, KloudGin and SAP to enable power and utilities companies to generate insights into physical assets and ensure their availability and dependability. In addition, it has also launched vertical-specific solutions in collaboration with platform companies. Solutions developed in collaboration with Google, AWS and Microsoft focus on data and insight platforms and field force automation.

Matured EAM practice: HCLTech's EAM CoE combines expert minds, efficient engineering methods and cutting-edge technologies to improve the pace of product development. The EAM CoE includes over 200 consultants and has completed more than 60 projects for over 40 clients across the world. The company is also looking to integrate GenAI capabilities into solutions around autonomous inspection and worker-related applications, including Volt MX, SAP Field Service system and MSFT Dynamics.

Caution

HCLTech should aggressively market its EAM solutions by capitalizing on its use cases and client stories, together with its key partners, especially IBM. In addition, it should integrate its software capabilities to further expand its solutions for the power and utilities industry.

Customer Information Systems (CIS) and Customer Experience (CX)

Customer Information Systems (CIS) and Customer Experience (CX)

Who Should Read This Section

This quadrant is relevant to North American enterprises in the power and utilities industry for evaluating providers of customer information systems (CIS) and customer experience (CX) services.

In this quadrant, ISG highlights the current market positioning of providers that offer CIS and CX services to power and utilities companies in North America and how they address the key challenges in the region.

Enterprises in North America are increasingly focusing on enhancing CIS and CX services to address evolving market demands. A significant trend is the rise in customer debt levels, driven by economic pressures and changing consumer behaviors. Providers are implementing flexible payment plans, customer assistance programs and enhanced debt recovery efforts to mitigate these challenges. There is also a growing emphasis on automating processes to create efficient infrastructures, which saves time and improves CXs by allowing providers to focus more on service quality. Utilizing customer data analytics to gain insights and improve service delivery is crucial but requires significant investment in technology and expertise. Increasing the availability of self-service options empowers customers and reduces service costs, but it also demands robust digital infrastructure and continuous updates to meet customer needs.

Providers in North America are making significant strides in enhancing CIS and CX services by adopting innovative strategies and technologies. The focus on addressing rising customer debt, automating processes and improving customer onboarding underscores the providers' commitment to financial resilience and customer satisfaction.

Technology professionals should read this report to understand how CIS and CX providers integrate multiple technologies into their proprietary offerings and compare their technical capabilities.

Operations professionals should read this report to understand the relative positioning and capabilities of providers that offer end-to-end CIS and CX services to enhance efficiency and effectiveness.

Digital professionals should read this report to understand and compare how CIS and CX services providers enhance their digital transformation initiatives for an improved CX.
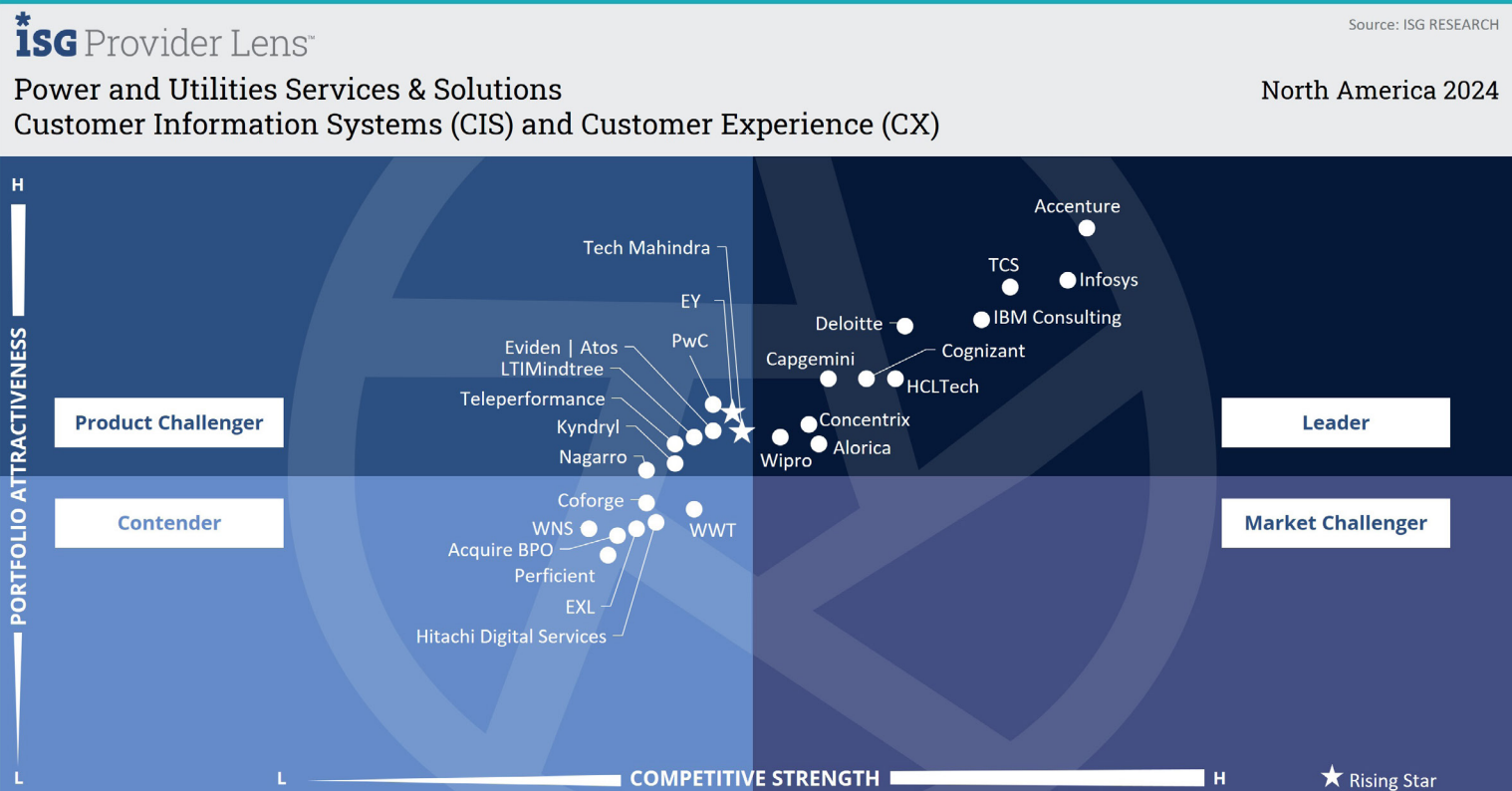
Marketing and sales professionals should read this report to understand providers' relative positioning and capabilities that can help them harness CIS and CX services effectively.

ISG Provider Lens™

Power and Utilities Services & Solutions
Customer Information Systems (CIS) and Customer Experience (CX)

North America 2024

Source: ISG RESEARCH

Product Challenger

Contender

Leader

Market Challenger

Tech Mahindra

EY

PwC

Eviden | Atos
LTIMindtree

Teleperformance

Kyndryl

Nagarro

Accenture

TCS
Infosys

IBM Consulting

Deloitte

Cognizant

Capgemini

HCLTech

Concentrix
Alorica

Wipro

Coforge

WNS

WWT

Acquire BPO

Perficient

EXL

Hitachi Digital Services

PORTFOLIO ATTRACTIVENESS

COMPETITIVE STRENGTH

★ Rising Star

This quadrant assesses service providers that offer customer-centric solutions and offerings. With the changing customer profile, **a robust CIS will help utilities better manage customer interaction and relationships.**

Swadhin Pradhan

Customer Information Systems (CIS) and Customer Experience (CX)

Definition

This quadrant assesses service providers offering meter-to-cash (M2C), customer service and business process solutions related to customer information systems (CIS) in the power & utilities industry. The services covered in this quadrant include account management, order processing, product management, rate design (handling complex rate structures), data management, billing, credit and collections, payment processing, contact services (call center), interactive voice response (IVR), consumer engagement, customer self-service and relationship management, all enhancing customer experience (CX).

Eligibility Criteria

1. **Experience in CIS and CX** in the industry

2. **Successful CIS projects** with at least two power & utilities firms

3. **Offerings** in at least one of the following:

- M2C
  * Account management
  * Order processing
  * Product/service management
  * Rate design (handling complex/ TOU rate structures)
  * Billing
  * Credit and collections

* Accounts receivables
* Statement preparation
* Payment processing

- Customer service
  * 24/7 call centers
  * IVR
  * Consumer engagement (social media, virtual assistant and chatbots)
  * Self-service portals
  * Relationship management
  * Customer onboarding management
  * Omnichannel support

4. **Adaptability to regulatory changes,** compliance, evolving billing structures and retail needs

5. Expertise in **next-gen technologies:** automation, analytics, IoT, AI, cybersecurity, cloud and blockchain in the industry

6. **Partnerships** with industry associations, regulatory bodies, tech firms and power & utilities startups

7. Referenceable **case studies across the value chain**

Observations

As customer expectations continue to evolve, customer service is becoming an increasingly important part of CX. The power and utilities industry is transforming significantly by digital innovation, customer-centric strategies and sustainability goals. With advancements such as AI/GenAI, utilities can now offer smarter, more personalized and more efficient services to their diverse customers.

CIS and CX offerings focus on enhancing customer interactions and streamlining business processes through traditional account management, billing design and data management to ensure accurate and efficient operations. AI-driven tools such as conversational AI and virtual agents to improve customer engagement, self-service, and support and omnichannel integration to enable seamless interactions across multiple touchpoints.

The CIS and CX field is dominated by large traditional system integrators (SIs) and BPO/BPM players with partnerships with leading CIS product players, such as Oracle and SAP, serving the power and utilities industry. Providers are also looking for players such as SEW, Powercloud, ENESK, Nexant and Milestone to drive innovation and solution development in the CIS segment.

In addition, power and utilities companies are looking to integrate new-age technologies such as IoT, edge, analytics, AI and ML, and the cloud to execute their strategies, particularly in delivering digital solutions in the CIS segment.

From the 100 companies assessed for this study, 26 qualified for this quadrant, with 11 being Leaders and two Rising Stars.

accenture

Accenture, together with it key CIS and CX partners, is co-developing and innovating to drive digital CX, assisting utilities in improving customer interactions and automating operations.

Alorica

Alorica is focused on expanding operations geographically and continues to invest in the right technology and partners to assist clients in their CX transformation journey.

Capgemini

Capgemini uses advanced GenAI-powered features to streamline operations and customer satisfaction for select key clients in the utilities sector.

cognizant

Through a collaborative operating approach, **Cognizant** provides a uniform and integrated picture of all customer touchpoints to enable clients to create an exceptional CX.

CONCENTRIX

Concentrix continues to expand capabilities in CX and transformation through acquisitions. The acquisition of Webhelp helps the company expand its high-value services and digital capabilities across industries, including power and utilities.

Deloitte.

Deloitte is focused on enhancing CX through its capabilities in the digital transformation domain, which integrates cutting-edge technology, strategic insights and seamless execution to elevate customer interaction.

HCLTech

HCLTech uses a comprehensive experience management framework to deliver CX transformation and is looking to leverage GenAI to help utilities provide more personalized and engaging interactions.

IBM.

IBM Consulting has extensive experience in transformative AI-first BPO capabilities, assisting energy retailers and utilities in their next-generation CIS implementation and migration.

Infosys®

Infosys leverages AI and utilities industry accelerators, built on leading CX and CIS products, to drive large-scale transformation, improve customer service and deliver modern customer systems.

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Customer Information Systems (CIS) and Customer Experience (CX)

TCS' CX and CIS offerings combine its assets and accelerators for traditional CX domains, with a focus on niche areas such as community net metering (credit allocation) and blockchain-based trading platforms for renewable certificates.

Wipro's cloud-native CIS platforms and digital CX frameworks enhance digital CX by integrating solutions available in the cloud ecosystem, including new energy technologies, EV charging and data solutions.

EY (Rising Star)

EY (Rising Star) drives CX transformation through a data-driven and consulting-led approach using its long-standing relationships with some of the biggest players in the power and utilities industry.

Tech Mahindra (Rising Star) approach to CX transformation is driven by its next-gen AAC Model, which combines analytics, automation and consulting to deliver advanced contact center solutions and transform customer interactions and insights.

HCLTech

Leader

"With deep industry and domain expertise, HCLTech develops technology offerings that integrate advanced AI innovations into CX solutions. This is further enhanced by its focused UVision strategy, driving differentiated solutions."

Swadhin Pradhan

Overview

HCLTech is headquartered in Noida, India. It has more than 227,500 employees across over 215 delivery centers worldwide. In FY24 the company generated $13.3 billion in revenue, with IT and Business Services as its largest segment. It has 25 years of experience in customer engagement transformations and has successfully led more than 36 customer transformations for utilities. HCLTech has a dedicated CX Center of Excellence and CX Innovation Lab that provides end-to-end CX services, from strategy and design to implementation and support. The center also leverages GenAI to deliver best-in-class CX solutions.

Strengths

UVision strategy and offerings: HCLTech's power and utilities digital business services solutions are part of its UVision strategy. For CIS, the company focuses on providing CIS transformation and CX solutions such as DX, UCX, Fluid CC and IntelliService. It also includes VOLTMX with HCL BASE 90 — a customer engagement solution suite available on SAP and Oracle CC&B and Click-to-Chat for customer self-service. Other UVision connected offerings include MS Dynamic (Customer Service for Utilities) and Meter to Cash as a Service.

Focus on new products and GenAI integration: HCLTech continues to build in-house and proprietary solutions leveraging its software and vertical businesses. In addition, it harnesses its partnerships, open collaboration, crowdsourcing, and cocreation with clients to expand its solution portfolio in areas such as customer engagement strategy. The company also focuses on building and implementing GenAI offerings in the customer segment through innovation in UCX Platforms, Fluid CC and IntelliService.

Strong ecosystem partners: HCLTech has a range of partners focused on customer engagement and experience. Apart from SAP and Oracle, the company has partnerships with leading platforms such as Adobe, Sitecore and Drupal for digital marketing and experience services.

Caution

HCLTech should strategically leverage its IP and investment in software products to expand its prebuilt offerings for customer engagement, CIS and multichannel engagement platforms.

Star of Excellence

A program, designed by ISG, to collect client feedback about providers' success in demonstrating the highest standards of client service excellence and customer centricity.

Customer Experience (CX) Insights

In the ISG Star of Excellence™ research on enterprise customer experience (CX), clients have given feedback about their experience with service providers for their **Power & Utilities Industry** services.

Based on the direct feedback of enterprise clients, below are the key highlights:

Client Business Role

▲ **Most satisfied**
Shared Services Operations

▼ **Least satisfied**
Procurement / Vendor Management

Region

▲ **Most satisfied**
Australia/New Zealand

▼ **Least satisfied**
Western Europe

Industry Average CX Score

79.8

▲ Highest CX: 90.6
▼ Lowest CX: 72.1

CX Score: 100 most satisfied, 0 least satisfied
Total responses (N) = 161

Most Important CX Pillar

Execution and Delivery

Service Delivery Models	Avg % of Work Done
Onsite	48.6%
Nearshore	20.9%
Offshore	30.6%

Appendix

Methodology & Team

The ISG Provider Lens 2024 – Power & Utilities Services study analyzes the relevant software vendors/service providers in the U.S. market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

Study Sponsor:
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The research and analysis presented in this report includes research from the ISG Provider Lens™ program, ongoing ISG Research programs, interviews with ISG advisors, briefings with service providers and analysis of publicly available market information from multiple sources. The data collected for this report represent information that ISG believes to be current as of October, 2024 for providers that actively participated and for providers that did not. ISG recognizes that many mergers and acquisitions may have occurred since then, but this report does not reflect these changes.

All revenue references are in U.S. dollars ($) unless noted otherwise.

The study was divided into the following steps:

1. Definition of Power & Utilities Services market

2. Use of questionnaire-based surveys of service providers/ vendors across all trend topics

3. Interactive discussions with service providers/vendors on capabilities and use cases

4. Leverage ISG's internal databases and advisor knowledge and experience (wherever applicable)

5. Detailed analysis and evaluation of services and service documentation based on the facts and figures received from providers and other sources.

6. Use of the following key evaluation criteria:

   * Strategy and vision

   * Innovation

   * Brand awareness and presence in the market

   * Sales and partner landscape

   * Breadth and depth of portfolio of services offered

   * Technology advancements

Author & Editor Biographies

Lead Author

Swadhin Pradhan
Assistant Director and Principal Analyst

Swadhin Pradhan brings more than 17 years of technology, business and market research experience and expertise to ISG clients. He has rich experience in executing market/competitive intelligence (MI/CI) and quasi-consulting projects in manufacturing, energy and resources industry.

Prior to ISG, Swadhin has worked with MI/CI and thought leadership organizations of large tech and consulting firms such as IBM and Deloitte. At ISG, He is focused on ISG Provider Lens™. His research and analysis for ISG clients is focused on Energy and Utilities market development, disruption and change. He currently contributes to ISG's Provider Lens global research studies as a lead analyst.

Swadhin holds an MBA in Marketing and Finance from Institute for Integrated Learning in Management (IILM), New Delhi, and an engineering degree in Electronics and Telecom.

Research Analyst

Ayushi Gupta
Senior Research Analyst

Ayushi is a Senior Research Analyst at ISG. She is responsible for supporting Provider Lens™ studies on the Future of Work. Ayushi has 3 years of experience conducting in-depth competitive research in IT services, Health, Higher Education, Infrastructure, and Finance. Along with a rich understanding of various business verticals, she has also been responsible for collating and analysing secondary data to provide insights on ongoing trends, defining the business landscape, and evolving needs of the potential target audience. She is good at collaborating seamlessly with stakeholders and external clients, ensuring smooth project management and successful strategy development. Ayushi is skilled in market research, visualization, storyboarding, and analysis.

Author & Editor Biographies

Study Sponsor

Iain Fisher
Director, Research

Iain leads ISG's Future of Work, Customer Experience and ESG solutioning redefining business models and operating models to drive out new ways of working with a CX and ESG focus. He joins up end to end value chains across a number of markets and advises clients on where digital and technology can be used to maximize benefit.

A regular Keynote speaker and online presenter, Iain has also authored several eBooks on these subjects.
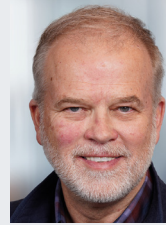
IPL Product Owner

Jan Erik Aase
Partner and Global Head – ISG Provider Lens/ISG Research

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes;. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry.

Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor. Now as a partner and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

ISG Provider Lens™

The ISG Provider Lens™ Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens™ research, please visit this webpage.

ISG Research™

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research™ delivers guidance that helps businesses accelerate growth and create more value.

ISG offers research specifically about providers to state and local governments (including counties, cities) as well as higher education institutions. Visit: Public Sector.

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ISG

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 900 clients, including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including AI and automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis.

Founded in 2006, and based in Stamford, Conn., ISG employs 1,600 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.

For more information, visit isg-one.com.

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