ISG Provider Lens™

Power and Utilities – Services and Solutions

A research report comparing provider strengths, challenges and competitive differentiators

Customized report courtesy of:

Infosys®

QUADRANT REPORT | AUGUST 2023 | NORTH AMERICA

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Energy transition and digital transformation shaping the utilities of future

North American power and utilities industry may not drive global headlines but faces considerable headwinds such as increasing clean energy adoption (decarbonization), ensuring grid and service reliability and resiliency, improving infrastructure security, and optimizing costs.

Growth in distributed energy resources (DER), together with the prosumer revolution, creates challenges for power and utilities companies in terms of demand, quality of power, and reliability of assets and grid. Thus, integrating DER resources into the grid will help ensure effective demand response and reliability/quality metrics. Furthermore, owing to the bi-directional flow of energy with increasing prosumers, distributed energy resources management system (DERMS) and advanced distribution management system (ADMS) will continue to grow and become more complex.

The focus on energy transition will gain further momentum in 2023 and beyond as the adoption of clean energy technologies grows. Per Bloomberg NEF (BNEF), global investment in the low-carbon energy transition totaled $1.1 trillion in 2022 compared to $849 billion in 2021. Furthermore, the focus of energy transition is global, and utilities can benefit by sharing and collaborating.

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

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

Geopolitics affecting prices

As the war between Russia and Ukraine drags on, global energy and utilities markets will continue to be affected by the volatility in oil and gas prices. This will drive the need to

Geopolitics, energy transition and policy changes drive new-age technology adoption.

diversify energy supplies to ensure energy security. Current geo-political events cause energy security challenges, resulting in the continued need for traditional energy sources (coal and gas), while driving the rapid adoption of new energy sources (renewables and hydrogen).

Nuclear as a key energy source

After the Fukushima disaster in Japan, many countries went slow on nuclear energy and some like Germany even ordered the shutdown of nuclear power plants by 2022. However, the Ukraine war has made the countries and its policy makers reconsider nuclear as the source of clean energy. North America, particularly the U.S., must consider nuclear energy to ease the burden on traditional energy sources. However, significant construction costs in terms of time, money and regulatory reviews make the transition complex. In April, the U.S. got its first nuclear power plant in Georgia since 1996 — the Vogtle expansion project. It took $34 billion and 17 years to get it running.

Energy affordability

While transitioning to decarbonization, it is necessary to consider the risks associated with middle- and low-income groups' energy affordability. With a large amount of investment required to drive energy transition, incremental grid investments will be a recurring annual burden for the foreseeable future. With continued energy security challenges and an increase in supply chain costs, utilities are faced with the challenge of keeping costs low and customer bills reasonable. To mitigate the rising costs, utilities develop multiple programs to ensure that the energy burden on the average household does not compromise their ability to support their basic needs while ensuring that there are alternative sources for uninterrupted supply. The low-income households in the U.S. use more than 30 percent of the electricity consumed in the U.S. and face an energy burden three times higher than other households.

Mobility and electrification

With the growing adoption of electric vehicles (EVs), there is an urgent need to increase investments in expanding charging infrastructure, grid integration and billing systems. Passenger EV sales in the U.S. grew 54.5 percent YoY in 2022, according to Counterpoint Research. The shift toward EVs will provide a new revenue stream for utilities, while it will require investments in new technologies such as advanced sensors, smart inverters, energy storage systems, upgrades to existing grid infrastructure and EV charging station management systems.

Digitization of the energy sector

Utilities must shift to a digital operating model as the complexity across the value chain increases. From a technology standpoint, there needs to be an integration between operational technologies (OT), such as supervisory control and data acquisition (SCADA) systems, distributed control systems (DCSs), and programmable logic controllers (PLCs), and IT such as AI and cloud, which will become the core to support assets and operations. Providers with deep engineering and OT capabilities will be preferred by utilities to maintain the IT/OT balance. Advances in digitization have led to new revenue streams, business models and market players for utilities. Large players are under pressure from regulators to keep energy prices low, while they lose market share to nimble, asset-light players. This has an impact on the profitability of their business. Utilities should adapt to these changes to survive and succeed against innovative, digital-native third-party providers. An important element of change management is involved, which requires an alignment between business and IT.

Growth in battery storage

Energy storage systems are an intrinsic part of today's modern renewable energy infrastructure. With solar and wind energy becoming the drivers of the energy transition, battery energy storage systems (BESSs) become critical for the optimization of energy output to the grid. Energy storage systems can store excess electricity generated by renewable sources and release it back into the grid when needed. Despite being hit with supply chain and material issues, battery storage growth continues to rise in 2023.

Need for grid and asset resiliency

Financial damages caused by weather-related disasters increase every year, and utilities get increasingly exposed to litigation risks related

to asset and infrastructure damage. The U.S. witnessed more than 15 weather-related disasters, with an average loss of $1 billion in 2022. This has led the utilities to focus on grid resiliency, disaster readiness, grid and asset reliability, and aging assets. In addition, the need to drive energy transition causes disturbances more than ever before. Providers can help utilities 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 the grid more resilient and prepare for electrification of cars and buildings. Furthermore, the aging U.S. electric transmission and distribution (T&D) infrastructure needs to be significantly upgraded as the industry faces challenges around energy transition, EV adoption, sustainability and net-zero initiatives, and changes in customer preferences and regulations. Players invest in upgrading the grid, metering, tech infrastructure and workforce through digital solutions that leverage cloud, IoT and AI and ML.

Decarbonization of the energy mix

Utilities are shifting from traditional energy sources to wind, solar and other green sources. These changes are coupled with an increasing shift toward distributed energy and the resulting disruption of energy production patterns it creates. Per International Energy Agency's (IEA) forecasts, global renewable capacity is expected to increase by almost 2,400 GW or 75 percent between 2022 and 2027 driven by rising fuel and electricity prices and the ongoing Russia–Ukraine conflict.

Aging workforce and the need for digital workforce

North America's power and utilities industry faces the aging workforce issue and the need to attract/retain new talent. Over the next decade, the power and utilities industry will witness the retirement of more than 50 percent of its current workforce. The industry's challenge in attracting talent and competing against large tech firms is overwhelming. There is a shortage of qualified talent for new jobs, many of which require competencies around AI and ML, robotics and advanced analytics.

Changing customer preferences

Today's utilities need to shift from an infrastructure provider to a service provider. In North America, customers changing utility companies leads to a high churn rate and thus engaging with the consumer across various platforms and channels (omnichannel) is the need of the hour. They need to address challenges associated with customer transformation through revamped UI/UX portals, enhanced self-service features and responsive contact centers. Furthermore, utilities need to leverage data insights to respond to customers' changing needs rapidly and transparently.

Data and cloud-driven business

Utilities need to realize the full potential of data by addressing issues around access to data, data insights, data governance and quality, and cross-functional analytics. The need to derive value from data for asset maintenance, weather-related warnings, customer preference, etc., drives the adoption of cloud and IoT platforms. Many industries are moving toward cloud-based solutions for key workloads, which can enable greater resiliency, faster innovation and better customer service. However, utilities run into unique challenges around adopting cloud-based solutions. Providers should focus on helping utilities capitalize their cloud investments by creating transformational assets, comprising cloud subscriptions and transformation services supported by regulatory review and approval. CIOs should not wait on others to address this issue.

Growing cybersecurity concerns

Digitalization threatens security. Rising connectivity through digitalization and proliferation of decentralized energy resources require holistic and complex energy networks. The rise of intelligent grids brings higher vulnerability to cyber threats. Strategic and operational security in utilities is therefore critical at an enterprise level. These companies should proactively run risk assessments and cybersecurity programs and share intelligence to prevent cyber and physical attacks on grids. There is a strong market trend to separately address cybersecurity when constructing managed service strategies.

Legislation and regulatory changes

Recent policy changes and developments continue to influence homeowners, utilities and new technology areas such as energy storage. The most notable new policies include the U.S. Inflation Reduction Act, signed into law in August 2022, which provides more than $369 billion in funding for clean technologies. The act may further help U.S. utilities fast-track their emission reduction plans.

The North American power and utilities industry is undergoing a visible change in areas such as energy mix, customer preference and transformation, mobility-related electrification, technology adoption, and regulations. Providers respond to utility needs by optimizing their solution portfolio to include offerings and services that can help them address the challenges associated with the aforementioned changes.

Provider Positioning

	Intelligent Business Process Management Services (iBPMS)	Next-Gen IT Services	Grid Modernization	Enterprise Asset Management (EAM)	Customer Information System (CIS) and Customer Experience (CX)
Accenture	Leader	Leader	Leader	Leader	Leader
Alorica	Market Challenger	Not In	Not In	Not In	Market Challenger
Birlasoft	Not In	Contender	Not In	Contender	Contender
Capgemini	Product Challenger	Leader	Leader	Leader	Leader
Cigniti	Not In	Product Challenger	Not In	Not In	Not In
Coforge	Not In	Product Challenger	Not In	Contender	Product Challenger
Cognizant	Leader	Leader	Leader	Leader	Leader
Cyient	Contender	Product Challenger	Rising Star ★	Rising Star ★	Not In
DXC Technology	Contender	Product Challenger	Contender	Contender	Product Challenger
EXL	Product Challenger	Not In	Not In	Not In	Contender

Provider Positioning

	Intelligent Business Process Management Services (iBPMS)	Next-Gen IT Services	Grid Modernization	Enterprise Asset Management (EAM)	Customer Information System (CIS) and Customer Experience (CX)
Eviden (Atos)	Not In	Product Challenger	Product Challenger	Product Challenger	Not In
Genpact	Leader	Not In	Not In	Product Challenger	Not In
HCLTech	Product Challenger	Leader	Product Challenger	Leader	Leader
Hitachi Vantara	Product Challenger	Leader	Leader	Leader	Not In
IBM	Leader	Leader	Leader	Leader	Leader
Infosys	Leader	Leader	Leader	Leader	Leader
KPMG	Not In	Contender	Not In	Not In	Not In
Kyndryl	Contender	Product Challenger	Product Challenger	Product Challenger	Contender
LTIMindtree	Not In	Rising Star ★	Product Challenger	Product Challenger	Contender
Lumen	Not In	Contender	Not In	Contender	Not In

Provider Positioning

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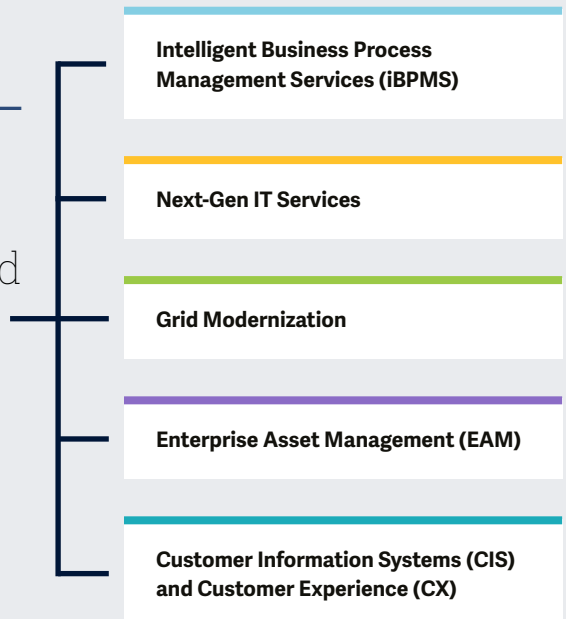
	Intelligent Business Process Management Services (iBPMS)	Next-Gen IT Services	Grid Modernization	Enterprise Asset Management (EAM)	Customer Information System (CIS) and Customer Experience (CX)
Perficient	Contender	Product Challenger	Contender	Contender	Contender
PwC	Product Challenger	Product Challenger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

This **Power and Utilities Industry – Services and Solutions report**, aims to understand key industry challenges and assess service provider capabilities.



Simplified Illustration; Source: ISG 2023

Definition

The global power & utilities industry continues to be affected by the steadily increasing demand for renewable energy sources and sustainability, government regulations, smart cities, electric mobility, geopolitical situations and rising fossil fuel prices. Post the COVID-19 pandemic peak, utilities are looking to invest in new age technologies and infrastructure to improve resiliency and reliability as extreme weather conditions drive capital spending. Irrespective of the nature of the business (electricity, gas, water or retail), utilities need to strive to develop intelligent solutions, improve operational efficiency, increase reliability and understand clients' challenges.

The path forward in 2023:

Moving into 2023, the power & utilities industry will continue to fight challenges around clean energy, reliability, resiliency and security, while keeping waste and technical debt to a minimum and continuing strategic investments. To address these issues, the industry needs to accelerate decarbonization, digitalization and decentralization.

In addition, various government regulations such as the Inflation Reduction Act (IRA) of 2022 and the Infrastructure Investment and Jobs Act (IIJA) of 2021 will prompt investments by the U.S. utilities sector in infrastructure and cleantech. Globally, the power & utilities industry will continue to focus on new business models, improving customer experience and optimizing financial performance and operational efficiency.

Essentially, utilities are seeking service providers that can demonstrate deep industry expertise, along with strong digital technologies and innovation capabilities around data and analytics, cybersecurity, machine learning and AI.

Scope of the Report

In this ISG Provider Lens™ quadrant report, ISG 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 with the following:

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

Our study serves as the basis for important decision-making in terms of 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 IT providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT 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 IT 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 Challenger, Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens™ quadrant may include service providers that ISG believes have 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.

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.

★ **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.

Intelligent Business Process Management Services (iBPMS)

Who Should Read This Section

This report is relevant to enterprises in North America's power and utilities industry for evaluating the providers of business process outsourcing (BPO) and business process management (BPM) services.

In the quadrant report, ISG highlights the current market positioning of providers that offer BPM/BPO services to power and utilities companies in North America and how they address the key challenges faced in the region through technology and domain expertise.

For organizations undergoing digital transformation, agility is key to responding to a rapidly changing technology and business landscape. Power and utilities enterprises are facing steep challenges due to increased fuel prices, maintenance costs, regulatory pressure, capacity constraints and skilled manpower shortages across the value chain, complex legacy infrastructure and systems, etc.

To address these challenges, power and utilities enterprises in North America are working closely with service providers to implement BPM services to optimize and automate their business processes to achieve operational excellence, streamline processes and rationalize back-office.

Service providers help these firms by providing AI, automation-based insights and analytics-based solutions to optimize costs, increase revenue and remain competitive. Significant progress has been made in automation and AI initiatives, but scaling up is still challenging. There is a need to invest sufficiently in training and organizational change management initiatives; otherwise, the workforce resistance to change can inhibit the realization of promised business benefits.

Technology professionals should read this report to understand how BPM/BPO service providers integrate multiple technologies into their proprietary offerings and compare their technical capabilities.

Digital professionals should read this report to understand how providers of BPM services enhance their digital transformation initiatives for improved CX and how they compare with one another.

Operations professionals should read this report to understand providers' relative positioning and capabilities that offer end-to-end BPMS to deliver high efficiency and effectiveness.

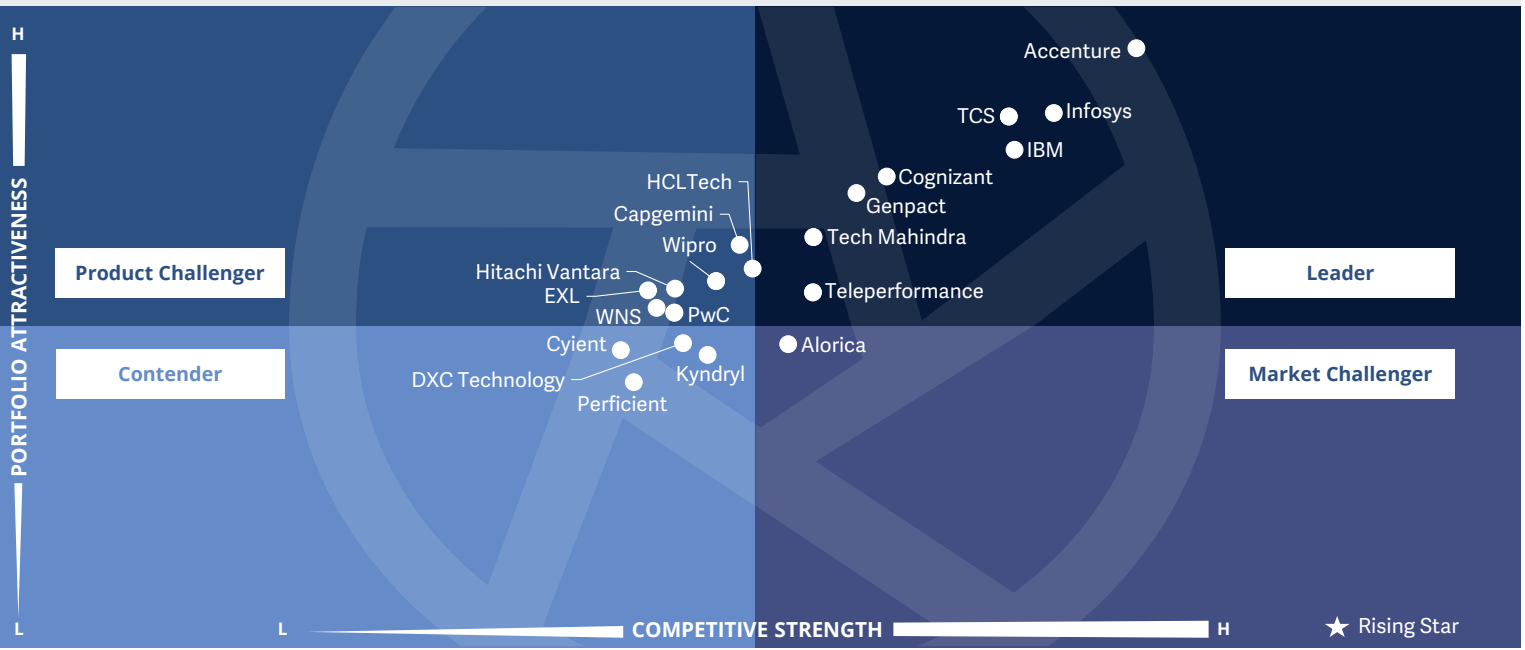
Marketing and sales professionals should read this report to understand the relative positioning and capabilities of providers that can help them harness iBPMS services effectively.

ISG Provider Lens™

Source: ISG RESEARCH

Power and Utilities – Services and Solutions
Intelligent Business Process Management Services (iBPMS)

North America 2023



The quadrant assesses service providers that offer business process management and outsourcing services in the power and utilities industry. These services enable companies to **improve efficiency, productivity and processes for better decision-making**.

Swadhin Pradhan

Definition

The quadrant assesses service providers that offer power & utilities clients business process management (BPM) services that are driven by automation and analytics, including customer services (front and back-office and B2B/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 the client companies to improve efficiency and productivity in daily operations and business processes (front, middle and back office) for an enriched customer experience and better decision-making.

Eligibility Criteria

1. Ability to offer a combination (if not all) of the following BPM services to companies in the **power & utilities space** across the industry value chain, with local expertise in the assessed region or country:
   * F&A
   * Sourcing, procurement and supply chain
   * Customer service
   * Human resources (HR)
   * Legal
   * Regulatory and compliance
   * Media and content management
   * Master data management
   * Field workforce services
   * Network operations
   * Analytics
2. Knowledge of the **industry and local/regional regulatory requirements**
3. Experience in **optimizing business processes** for clients, predominantly in this industry
4. Expertise in **applying next-gen technologies**, including automation, analytics, IoT, AI, cybersecurity, cloud and blockchain, for client engagements in this space
5. Demonstrate **strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in power & utilities
6. Offer **referenceable case studies** for various services and solutions across the value chain

Observations

Providers with business process management/ business process outsourcing (BPM/BPO) capabilities are looking to move beyond traditional back-office BPO services and drive solutions around automation, bots, digitization with IoT, and data and analytics. The segment is dominated by large IT players, including Indian service providers, and focused BPO players in the North American power and utilities industry, which help companies in cost optimization, growth and transformation.

Lately, providers focus on providing BPO/BPM solutions leveraging their deep industry and domain expertise around new-age technologies. According to 1Q23 ISG Index, industry-specific BPO capabilities garner good traction with clients across industries, including energy and resources. For power and utilities, providers focus on capabilities around vegetation management and enterprise operations. In addition, they are constantly looking to innovate around technologies and solutions through partnerships and IP.

The leaders look at M&As and partnerships with selective niche players to provide and expand their BPM capabilities. Understanding the intersection between technology and business is a key capability that has helped them distinguish their services.

From the 100 companies assessed for this study, 21 have qualified for this quadrant, with eight being Leaders.

accenture

Accenture's BPM services leverage its strong industry and technology focus, along with capabilities brought in by various units such as consulting, strategy and operations. The company continues to build its portfolio through partnerships and acquisitions.

cognizant

Cognizant's focus on industry-specific digital solutions helps it provide more than just traditional BPM services. Its focus on acquisitions and partnerships helps it expand its capabilities around process mining, F&A, after-market services, etc.

Genpact has strong functional and domain expertise in the power and utilities industry. The company has capabilities across the depth and breadth of F&A operations, digital and analytics. Its GE legacy provides deep insights into technology/business processes.

IBM

IBM's BPM services are centered around its Intelligent Workflow concept leveraging its capabilities around consulting and technology. In addition, its deep research and industry capabilities help it bring differentiated business process solutions to clients.

Infosys

Infosys' BPM capabilities cover most power and utilities segments. The company leverages its dominance in F&A. In addition, its network of delivery and offshore centers and utilities-focused CoE acts as a catalyst for clients to outsource key workflows.

TCS TATA CONSULTANCY SERVICES

TCS leverages its Cognix™ platform to help utility companies accelerate digital transformation through pre-built solutions and offerings across business processes, IT infrastructure and the application layer.

TECH mahindra

Tech Mahindra provides digital-led solutions for power and utilities clients using its intelligent suite of BPM solutions. The company is an established solution provider across the power and utilities value chain.

Teleperformance

Teleperformance's vast experience of over 40 years in CX and business services outsourcing has helped grow its power and utilities business. The company focuses on developing digital energy and utility offerings globally.

Leader

"Infosys' strong portfolio of utility-focused BPM solutions and platforms complements its cross-industry digital solutions to cater to wide workloads across the power and utilities value chain."

Swadhin Pradhan

Infosys

Overview

Infosys is headquartered in Bengaluru, India and operates in 54 countries. It has more than 343,200 employees across 247 global offices. In FY23 the company generated $18.2 billion in revenue, with Financial Services as its largest segment. The company has been strengthening its focus on the U.S., establishing innovation centers and utility CoEs. It continues to expand its portfolio of clients and overall business growth in BPM. In North America, its utilities sector has delivered a consistent 25 percent YoY growth over the past 10 years.

Strengths

Array of utility-focused BPM solutions and platforms: Infosys' BPM solutions cover key business areas and segments of the industry, such as generation, transmission and distribution, trading, corporate and administration, and retail operations. It also leverages and continues to enhance its leadership position in F&A. It has more than 17,000 finance professionals globally and has one of the largest CoEs in the industry providing end-to-end services across the F&A value chain.

Partner ecosystem and delivery excellence: Infosys continues strengthening its partner network 360 degree partners and hyperscalers) across the organization and in BPM. Partnerships with companies such as HighRadius, GE and AutoDesk have helped it launch utility-specific solutions around geographic information system (GIS), Intelligent I2C, MDM, etc. In addition, with more than 35 delivery centers across 14 countries, Infosys provides BPM solutions in a cost-effective and timely manner.

Focus on developing new-age solutions: Infosys is building new industry solutions focused on automation, user experience and domain. It has developed solutions around smart meter deployment operations, asset damage and insurance management and energy theft analytics. The company also focuses on providing BPM services in vegetation management to utilities, helping them save costs and reduce risks.

Caution

Infosys focuses on transmission and distribution and the retail segment of the value chain. It should look at other segments such as water and gas and capabilities such as automation to expand its client base.

Next-Gen IT Services

Who Should Read This Section

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

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

With the growing complexity of infrastructure and customer and business expectations, utilities are under immense pressure to provide support and drive innovation using technology. Advances in innovation and edge technologies such as IoT, big data analytics and AI have accelerated the adoption of IT/OT integration, which eliminates data silos, reduces downtime, and improves visibility, real-time decision-making and efficiency. But as IT/OT convergence becomes an everyday reality, cyberattacks and risks from malware increase at an equal pace, turning security into a real challenge. The current recessionary environment also creates challenges in procuring and retaining skilled IT talent. Amidst all these concerns utilities are under constant pressure not only to ensure reliable delivery of their daily grid operations but also to develop new end-user services and accelerate their time-to-market.

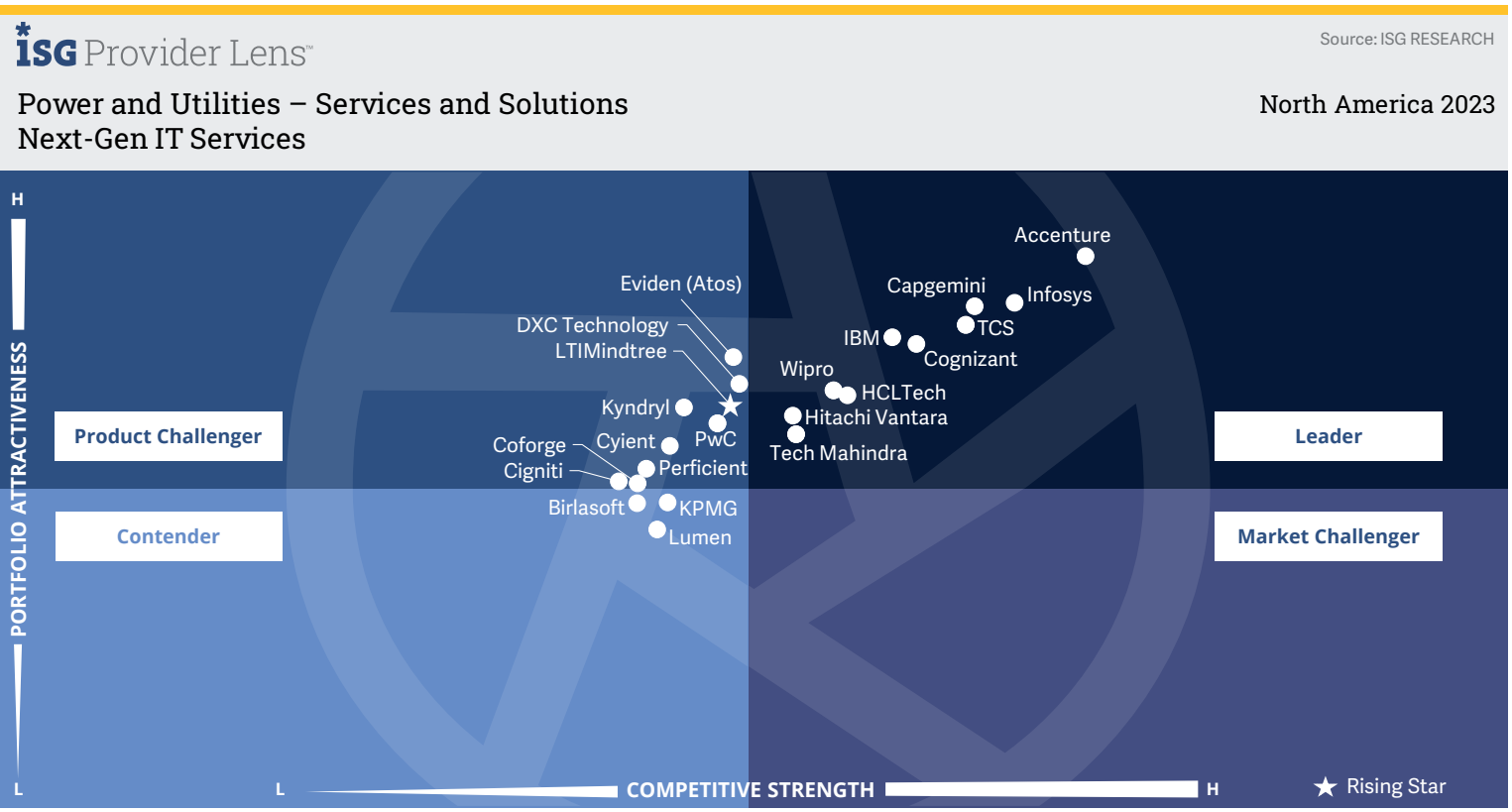
North American utilities modernize and upgrade their IT/OT networks to create a more unified and efficient operation and have greater data connectivity. They partner with reliable and experienced technology providers to harness the business benefits of big data to build use cases for predictive analytics, intelligent automation and remote or automated orchestration of processes.

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

Digital professionals should read this report to understand how providers of next-gen IT services enhance their digital transformation initiatives for improved CX and how they compare with one another.

Operations professionals should read this report to understand providers' relative positioning and capabilities that offer end-to-end next-gen IT to deliver high efficiency and effectiveness.

Marketing and sales professionals should read this report to understand the relative positioning and capabilities of providers that can help them to harness next-gen IT services effectively.



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

Swadhin Pradhan

Definition

This quadrant assesses service providers offering IT managed 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 (such as for new applications) across the value chain.
They enable utilities to increase efficiency, ensure compliance, minimize costs, optimize assets and maximize customer satisfaction.

Eligibility Criteria

1. Ability to offer a combination (if not all) of the following IT services to companies across the **power & utilities industry value chain**, with local expertise in the following in the assessed region or country:
   * Systems integration
   * Applications development and maintenance
   * Infrastructure services, such as data center, network operations center and cloud
   * Cybersecurity solutions
   * Next-gen technologies such as automation, analytics, AI, machine learning, IoT and blockchain
2. **Showcase extensive domain knowledge** and support for compliance with local/regional regulatory requirements
3. **Demonstrate strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in power & utilities
4. Experience in **large transition projects** that include post-merger integration of companies, IT-driven business transformation, cybersecurity and modernization of legacy systems and applications in the industry
5. Offer **referenceable power & utilities case studies** for various services and solutions across the value chain

Observations

Most large IT players leverage their IT, OT and engineering capabilities to dominate the North American power and utilities industry. Emerging players also build capabilities and compete with large players across the value chain.

The companies focused on the power and utilities industry look at cloud migration, data modernization and BizDevSecOps-based operating model leveraging technologies such as digital twin, AI and ML, and cloud to upgrade their delivery models. Companies such as Capgemini, Wipro, Hitachi and HCLTech use their large engineering and IoT capabilities and professionals to drive value proposition and digital transformation for clients in this industry. In addition, they also increasingly develop solutions around sustainability, energy transition and nuclear capabilities as power and utilities channel their focus on these areas.

In addition, leaders continue to look at M&As and partnerships with selective niche players to provide and expand their utility-specific capabilities. IT/OT integration is where almost all players with a manufacturing or industrial focus build capabilities together with large OT players.

From more than 100 companies assessed for this study, 23 have qualified for this quadrant, with 10 being Leaders and one Rising Star.

accenture

Accenture's portfolio of services and solutions for the power and utilities industry leverages its capabilities from its Industry X group, focused on building digital transformation and engineering capabilities, and partnerships to help utilities optimize OpEx and CapEx.

Capgemini

Capgemini's strong engineering capability and ADMnext transformation approach help it provide digital transformation solutions to the power and utilities industry. In addition, it has specific capabilities around energy transition and nuclear power.

cognizant

Cognizant highly focuses on digital-led solutions that drive its offerings around cloud, IoT, data and digital engineering. In addition, it leverages its deep industry and domain expertise, acquisitions and collaborations to expand its offerings.

HCLTech

HCLTech differentiates itself with its strong engineering capabilities and growing software portfolio. The company has innovative models around cloud (CloudSMART strategy) and infra services and aligns pricing to a business outcome-based model for the IT services.

Hitachi Vantara

Hitachi Vantara has strong capabilities in IoT, cloud, and app and data modernization. To bring focused power and utilities offerings, the company leverages its growing synergy with other Hitachi Group companies, particularly Hitachi Energy.

IBM

IBM's IT services are based on its hybrid cloud and AI strategy underpinned by partnerships and a software portfolio. With its deep industry and domain knowledge, the consulting business provides end-to-end services focusing on new-age technologies such as quantum.

Infosys

Infosys' next-gen IT services focus on leveraging the AI platform, analytics, IoT solutions, cloud platforms and security to drive efficient operations. Infosys has built a partner ecosystem that comprises enterprise platforms, hyperscalers and leading universities.

TCS TATA CONSULTANCY SERVICES

TCS delivers services and solutions by combining technology capabilities with a differentiated location strategy. The company has invested significantly in dedicated delivery centers around nuclear and NERC CIP and nearshore centers.

TECH mahindra

Tech Mahindra has more than two decades of experience in the power and utilities industry and focuses on providing digital-led solutions. Its offerings include solutions for renewable energy integration, energy efficiency and carbon management.

Wipro expands its power and utilities industry offerings through acquisitions and focuses on cloud to drive digital transformation. The company is betting big on new technologies such as metaverse, Web3, AI, mixed reality and 5G through its Lab45 initiative.

LTIMindtree (Rising Star) leverages the capabilities obtained through the Mindtree acquisition and strong association with parent L&T to grow its utilities business. The company provides digital transformation services across generation, T&D and CX.

Leader

"Infosys has a strong portfolio of next-gen IT services focused on digital transformation and energy transition across the power and utilities industry value chain."

Swadhin Pradhan

Infosys

Overview

Infosys is headquartered in Bengaluru, India and operates in 54 countries. It has more than 343,200 employees across 247 global offices. In FY23 the company generated $18.2 billion in revenue, with Financial Services as its largest segment. The power and utilities segment falls under the company's SURE (Services, Utilities, Resources and Energy) segment. Live Enterprise Application Management Platform (LEAP), Infosys Cobalt, the Polycloud platform, Infosys Information Grid, Infosys Cybersecurity, etc., help clients leverage its strength in providing IT services.

Strengths

Strong IT/OT integration capabilities: Infosys augments its strong IT capabilities around system integration, cloud, AI and other new-age technologies with OT capabilities to provide latest solutions to power and utilities companies. Infosys IoT Solutions include grid modernization, smart metering, digital twin, predictive maintenance, asset management, etc.

Strong capabilities focused on new-age technologies: Infosys helps utilities accelerate application development lifecycle through automation, IPs, open source and licensed third-party tools. The company's business blueprints, proprietary tools and accelerators for utilities, strong product partnerships, industry expert networks and niche capabilities gained through the acquisitions of firms such as WongDoody/ Brilliant Basics (CX/UX), Simplus (Salesforce) and Kaleidoscope help drive next-generation business for clients.

Strong partner ecosystem and nearshore capabilities: Infosys has a robust partner ecosystem in the utilities market, comprising enterprise platforms (Oracle, SAP and IBM) and hyperscalers. In addition, it has multiple academic collaborations with Cornell, Purdue and Stanford. The company has further strengthened its IT capabilities for utilities in North America with nearshore centers in Mexico and Canada, along with U.S. innovation hubs.

Caution

Infosys should aggressively pursue deals in North America to cover major parts of the utilities value chain. In addition, it should further leverage its integrated *Domain + Software + Services* capabilities to drive its digital transformation strategy for clients.

Grid Modernization

Who Should Read This Section

This report is relevant to power and utilities companies in North America for evaluating the providers of grid modernization services.

In this quadrant report, 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.

The shift toward clean energy and decarbonization changes the market dynamics in the power and utilities sector. The transition to net-zero technologies, increased advent of distributed energy resources (DER) and the accompanying prosumer revolution creates a challenge for utilities in terms of demand and power quality and reliability.

Severe climate events and cyberattacks increase the levels of risk. Although utilities invest in cybersecurity solutions, 20-45 percent of utilities operations are not actively protected by their security programs. The T&D grid also faces increasing pressure to integrate new technologies such as electric vehicles (EVs), distributed solar generation, and energy storage rapidly, safely, and economically.

As the energy demand continues to rise, dated assets, the high cost of renovating or building new infrastructure, the lack of digitally skilled workforce and flexible pricing models place an additional burden on the system.

To address these challenges, utilities prioritize rapid grid modernization and invest in a resilient and secure power grid, distributed power generation and renewable energy sources.

A majority of North American utilities already invest or plan to invest in energy storage deployment, utility business model reforms, smart grid deployment, distribution system planning, advanced metering infrastructure deployment and time-varying rates to improve reliability, reduce costs and deliver enhanced CX with better insights and control of their consumption.

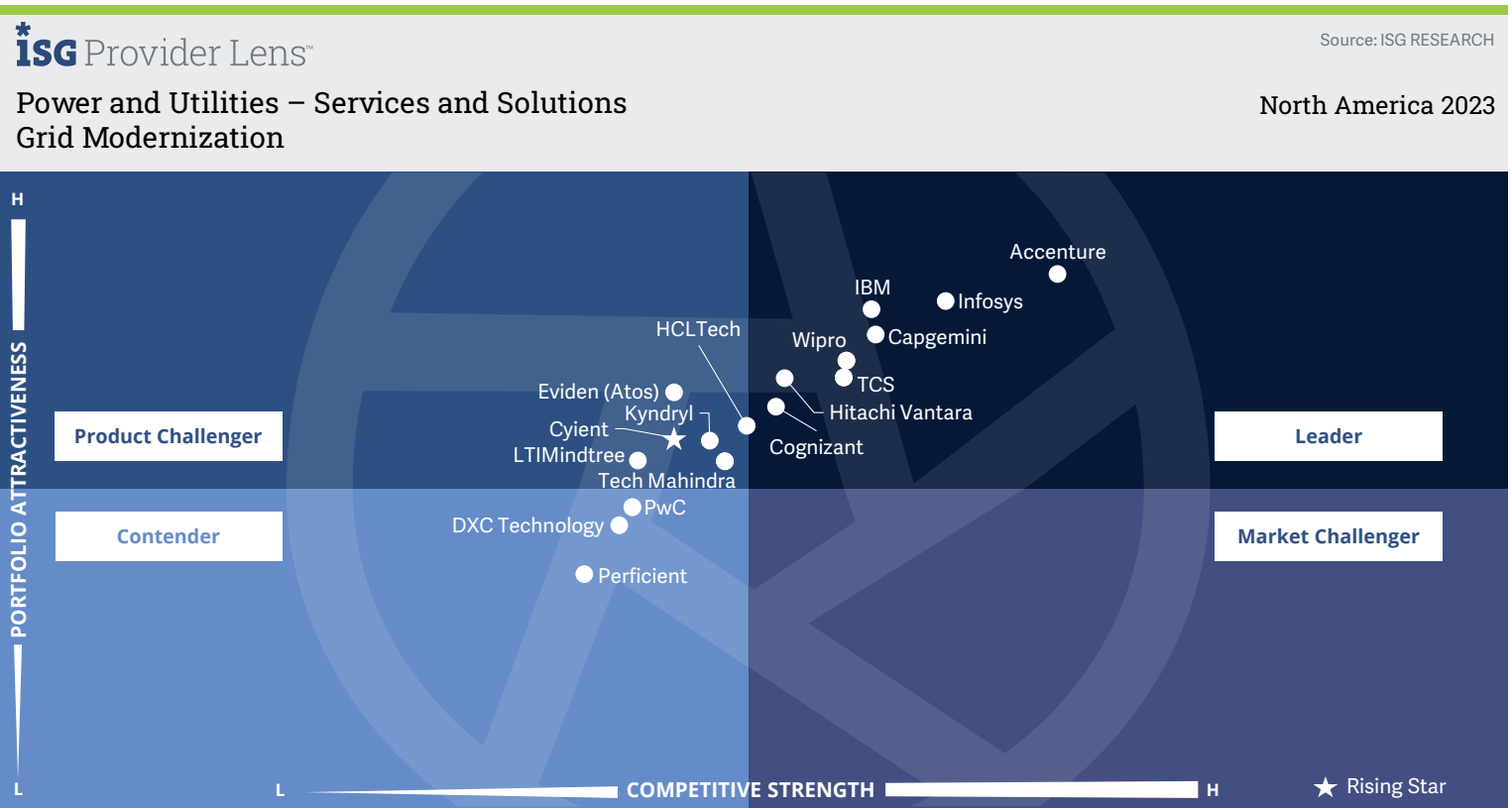
While utilities initiated some of these grid modernization efforts, local or state-level policy or legislative drivers propelled most of the efforts.

Operations professionals should read this report to understand providers' relative positioning and capabilities that offer end-to-end grid modernization to deliver high efficiency and effectiveness.

Marketing and sales professionals should read this report to understand the relative positioning and capabilities of providers that can help them to harness grid modernization services effectively.

Digital professionals should read this report to understand how providers of grid modernization services enhance their digital transformation initiatives for improved CX and how they compare with one another.

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



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

Swadhin Pradhan

Definition

This quadrant assesses service providers offering grid modernization and related services in the power & utilities sector. The services include grid modeling, distributed energy resources management system (DERMS), advanced distribution management system (ADMS), geographic information system (GIS), voltvar 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 – leading to an improved, reliable, and optimized grid infrastructure.

Eligibility Criteria

1. Exposure of **working around grid modernization** and related services for clients in the market
2. Demonstrate **successful grid modernization-related engagements** (past and present) with at least three power & utility companies
3. Provide offerings and services in more than one of the following areas:
   * Grid modeling
   * Grid management (distribution and operations, scheduling and dispatch)
   * Grid optimization and resilience
   * Demand planning, forecasting and outage management
   * DER technology selection, strategy and roadmap
   * DER aggregation and integration
   * DERMS
   * EV charging integration
   * ADMS
   * SCADA
   * GIS
   * VO
   * Advanced metering and smart grid services
   * Distribution automation services
   * Integration and value realization
4. Expertise in **applying next-gen technologies**, including automation, analytics, IoT, AI, cybersecurity, cloud and blockchain
5. Demonstrate **strong partnerships** with industry associations, regulatory bodies, technology firms and startups, specializing in power & utilities
6. Offer **referenceable power & utilities case studies**

Observations

Grid modernization, being a highly specific and niche capability, is dominated by large IT players with a strong technology and engineering background. However, players such as Hitachi Vantara and Cyient use their industry and domain expertise, along with IoT capabilities, to develop a suite of products focused on EVs, DER, advanced distribution management system (ADMS), AMI 2.0 and sustainability/net zero.

Some of the solutions offered by various players are around grid modeling and planning, grid management and operations, grid optimization and resiliency, and grid analytics. Moreover, the companies focus on building energy transition solutions to expand their offering portfolio as utilities are increasingly optimizing their energy sources.

Furthermore, providers with a strong portfolio of grid modernization offerings enhance the solutions by integrating advanced analytics, AI and automation, RPA, and the cloud. The need for developing OT capabilities drives IT companies to forge partnerships with large OT players such as Schneider, Infor, ABB and Bentley.

In addition, most players in this space are actively engaged in M&As and partnerships with selective niche players to provide and expand their capabilities. While most utilities in North America are still reluctant to put supervisory control and data acquisition (SCADA), grid and network data on cloud, some providers build solutions to help utilities start the cloud journey.

From more than 100 companies assessed for this study, 18 have qualified for this quadrant, with eight being Leaders and one Rising Star.

accenture

With its strong industry and functional expertise, **Accenture** leverages its joint venture Avanade and strategic acquisitions and investments to offer grid modernization solutions. In addition, its solutions benefit from capabilities across Accenture units.

Capgemini

Capgemini leverages its partnerships with grid and network management players and focuses on energy transition to drive its smart grid framework. The company benefits from its strong engineering, digital innovation and consulting capabilities.

cognizant

Cognizant's grid modernization solutions are led by its proprietary grid management solutions such as GridOne and end-to-end advanced metering infrastructure (AMI) capabilities. In addition, recent acquisitions such Utegration has helped it expand its grid management portfolio.

Hitachi Vantara

Hitachi Vantara combines its strengths around IT system integration, domain consulting and OT platforms to provide grid modernization solutions. The company leverages its relationship with Hitachi Energy and Lumada to gain capabilities in grid modernization.

IBM

IBM's grid modernization solutions focus on the clean electrification journey of utilities. The company also leverages its portfolio of products such as TRIRIGA®, Maximo® and Environmental Intelligence Suite to provide grid modernization solutions.

Infosys

Infosys continues to double down on grid modernization by forging new partnerships. Its recent partnership with GE Digital will help utilities drive a reliable, resilient and sustainable grid. The solutions are complemented by analytics, AI, RPA and cloud.

TCS TATA CONSULTANCY SERVICES

TCS has deep domain expertise across all major aspects of grid modernization for utilities. The company plans to create more in-house IP-based solutions focused on digital twin and partners around engineering, OT and other tech enablers.

Wipro's grid modernization capabilities include SI services for leading geographic information system (GIS) and ADMS products apart from a comprehensive portfolio of proprietary and partner solutions. Recent acquisitions have helped the company expand its capabilities in areas such as smart grid communication.

Cyient

Rising Star **Cyient's** grid modernization solutions are driven by its deep industry, engineering and IT/OT capabilities. The company has a portfolio of data, analytics and GIS-led grid management solutions.

Leader

"Infosys has a wide portfolio of grid modernization solutions developed and offered through partners and aligned to its energy transition services."

Swadhin Pradhan

Infosys

Overview

Infosys is headquartered in Bengaluru, India and operates in 54 countries. It has more than 343,200 employees across 247 global offices. In FY23 the company generated $18.2 billion in revenue, with Financial Services as its largest segment. Its utilities practice spans across electric, gas and water. The company has a dedicated CoE for grid modernization to build solutions and services for all grid modernization domains. Infosys' NextGen Grid helps accelerate DER/EV integration, which is a major area of focus for the industry.

Strengths

Focus on key industry pain points: Infosys, through its grid modernization services and solutions, focuses on key trends shaping the future of the power and utilities industry such as DER, EV adoption and focus on sustainability. For example, it develops energy-as-a-service (EaaS) digital platform with BP and uses it to help utility clients meet their sustainability goals.

Grid modernization solution portfolio: Infosys' grid modernization practice provides solutions around grid modeling and planning, advanced grid management and grid resiliency and analytics. In addition, the grid modernization offerings are enhanced and supported by horizontal digital service offerings focused on analytics, AI/ML, RPA, blockchain, cloud, AR/VR/XR and metaverse.

Focused partnerships: Infosys works with various partners to develop grid modernization solutions. Earlier this year, it partnered with GE Digital to offer next-gen grid management solutions as part of its energy transition offerings. The partnership will help the company leverage GE knowledge and drive product transformation and joint GTM strategy. In addition, it has partnered with product vendors to develop solutions on grid modeling, grid operations, energy storage, EaaS and others. The collaboration with the Stanford Bits and Watts program drives grid modernization.

Caution

Infosys should showcase and market its grid modernization solutions leveraging its solid ecosystem of alliances and partners in the utilities space, which includes companies such as AutoGrid, GE, Nexant, ABB, Schneider, OSI Soft, SAP, IBM and Hyperscalars — AWS, Azure and GCP.

Enterprise Asset Management (EAM)

Who Should Read This Section

This report is relevant to enterprises in the power and utilities industry in North America for evaluating the providers of enterprise asset management (EAM) services.

In this quadrant report, 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 and optimization and workforce efficiency.

Recent advancements in digital capabilities have transformed the utilities industry's approach to asset management, resulting in more efficient and effective management of assets. But the adoption rate is not commensurate with the rapid pace of innovation. Utilities with aging physical assets and paper-based legacy systems cannot leverage innovations that boost reliability. In addition to the dwindling pool of skilled talent, increasing regulatory scrutiny and mandates, changing legislations and surging cyber risk, utilities must deal with the revenue changes caused by the tougher economy and volatility arising from increased growth of renewables and distributed energy resources (DERs).

Some utilities effectively address the challenges by investing in intelligent, integrated, cloud-based EAM systems.

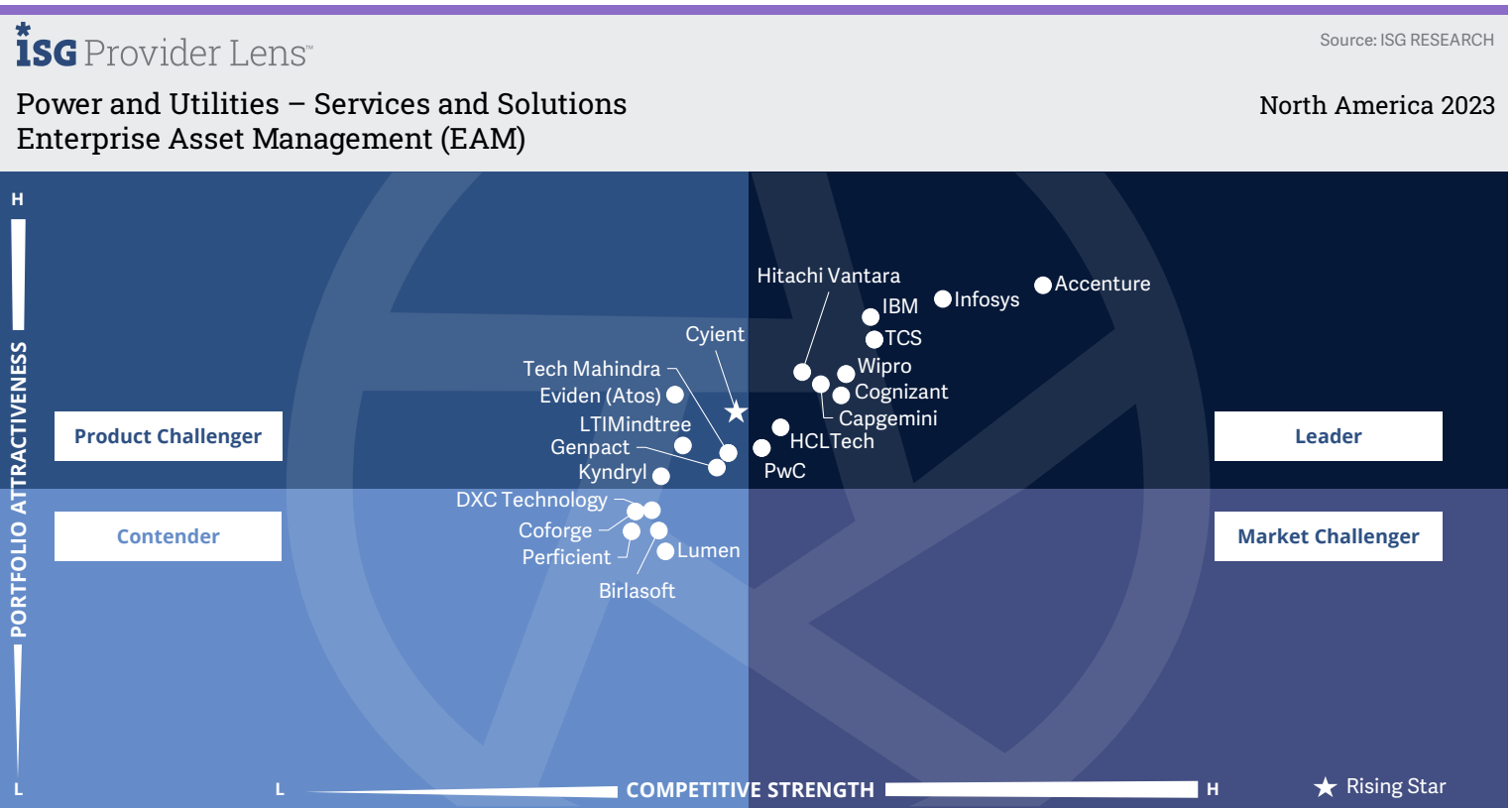
North American utilities have witnessed significant growth in deploying EAM solutions in recent years due to strong investments in technology, rigorous R&D activities and increasing adoption of preventive maintenance systems. Similarly, EAM service providers invest in surpassing traditional asset management to include predictive asset management, data science and integration capabilities to reduce cost and offer better flexibility and decision-making.

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

Digital professionals should read this report to understand how providers of EAM services enhance their digital transformation initiatives for improved Cx and how they compare with one another.

Operations professionals should read this report to understand providers' relative positioning and capabilities that offer end-to-end EAM to deliver high efficiency and effectiveness.

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



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

Swadhin Pradhan

Enterprise Asset Management (EAM)

Definition

This quadrant assesses providers offering EAM services and solutions to clients in the power & utilities space. The 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 service and remote monitoring. They enable client companies to increase asset performance and extend their useful life and reduce operational costs.

Eligibility Criteria

1. Exposure to **enterprise asset management** for clients in the power & utilities industry in the country/region
2. Demonstrate **successful EAM-related engagements** (past/present) with at least three power & utility companies
3. Provide **offerings and services** in at least one of the following areas related to EAM:
   * Asset health management
   * Failure prediction
   * Work and labor management
   * Supply chain transformation
   * MRO management
   * Computerized maintenance management system (CMMS)
   * Controls management
   * Warranty management
   * Geographic information system (GIS)
   * Digital EAM solutions (based on AI and machine learning)
   * Analytics and reporting
   * Field management services
4. Expertise in **applying next-gen technologies**, including automation, analytics, IoT, AI, cybersecurity, cloud and blockchain, for client engagements in this space
5. Demonstrate **strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in power & utilities
6. **Referenceable case studies** for various services and solutions across the value chain

Observations

The EAM space is dominated by large IT players such as Accenture and IBM, as well as Indian services companies with deep expertise and domain knowledge gained from working across asset-intensive industries. EAM software from companies such as IBM (Maximo®), IFS, Hexagon, Hitachi and PTC dominate the power and utilities industry in North America. In addition, lately, companies are also looking to set up partnerships with small niche players that offer innovative solutions/technologies in the power and utilities industry.

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 companies exhibit strong EAM capabilities, drawn from industry expertise, focus on talent with deep knowledge in next-gen technologies and engineering and related solutions.
In addition, providers are also looking for partnerships with product companies to build on their intellectual property.

Leaders continue to look at M&A and proprietary EAM platforms to offer industry specific EAM solutions. These proprietary platforms and products use technologies such as digital twins, AR, VR, mixed reality (MR) and 3D technology in the asset management space. Field service management and workforce management are areas in which many providers are seeking to expand and add capabilities.

From the 100 companies assessed for this study, 22 have qualified for this quadrant, with 10 being Leaders and one a Rising Star.

accenture

Accenture provides asset management services and solutions through its Industry X digital offerings. It leverages third-party integration around products such as Maximo® and SAP to provide intelligent asset management solutions.

Capgemini

Capgemini's EAM solutions are a mix of proprietary platforms, products and partnerships with leading EAM software and platform vendors. Capabilities around industry 4.0 and engineering coupled with utility industry expertise are its differentiators.

cognizant

Cognizant has targeted EAM solutions and accelerators for utilities, along with the IBM Maximo® upgrade kit and other accelerators. The company has significant focus on Maximo® suite for EAM offerings and has a dedicated CoE.

HCLTech

HCLTech delivers the HCL Asset Management solution (HAMS) focused on supporting IBM Maximo® and SAP solutions. The company, through its partnership with SAP, also offers maintenance, repair and overhaul (MRO) solutions to asset-intensive industries.

Hitachi Vantara

Hitachi Vantara provides asset and work management solutions along with add-ons such as safety and compliance management offerings through the Lumada suite of business applications. The company continues to innovate in this space with a focus on the cloud.

IBM

IBM integrates its Maximo® application suite with capabilities around IoT and AI to offer a single platform of EAM solutions. It further leverages its consulting capabilities to provide an end-to-end asset management offering for the power and utilities industry.

Infosys

Infosys' EAM solutions encompass asset, workforce, field service management and geospatial solutions, offered through leading products such as ClickSoftware, CGI ARM suite, Tensing, SAP IS-U, GE, ESRI and Oracle Utilities.

PwC provides asset maintenance and optimization solutions to its clients in the power and utilities space through its Utility Edge solution. In addition, the company works closely with SAP, Oracle and PowerPlan technologies to drive EAM initiatives.

TCS continues to expand its EAM services and solutions portfolio through partnerships across geographies. Recently, in the U.S. and Australia, it expanded into Oracle Field Service on Cloud (OFSC), IFS (Clevest), Microsoft Dynamics 365 Field Service Management and Infor EAM.

Wipro's EAM solutions are driven by Industry 4.0 that leverages technologies such as IoT, digital twins, AR, robotics, wearables and video with modern analytics solutions. The company has a set of EAM solutions focused on the transmission and distribution (T&D) segment.

Cyient

Cyient is a Rising Star and offers EAM solutions that are a blend of industrial IoT solutions, big data and advanced analytics. The company leverages plant and product engineering along with digital solutions to help optimize CapEx and operational costs.

Leader

"Infosys drives its EAM solutions with a focus on being the preferred digital transformation partner — a focus enhanced further by its cloud-first strategy."

Swadhin Pradhan

Infosys

Overview

Infosys is headquartered in Bengaluru, India and operates in 54 countries. It has more than 343,200 employees across 247 global offices. In FY23 the company generated $18.2 billion in revenue, with Financial Services as its largest segment. The company's utilities practice spans electric, gas and water. The Infosys EAM practice combines utilities domain expertise, industry best practices and leading products to drive digital transformation in asset management. The company is forging new partnerships with platform providers such as Salesforce and ServiceNow to develop industry-specific solutions and build on opportunities provided by the infrastructure bill in the U.S.

Strengths

Comprehensive EAM portfolio: Infosys' EAM solutions focus on work and asset management along with geospatial offerings. The solutions are built around its Digital Energy Orchestrator (DEO), which combines its capabilities across domains, products and core Engineering/IoT solutions. In addition, the company has invested in a core predictive asset maintenance AI framework for utilities called KRTI 4.0. Other solutions such as the Infosys XR Platform enable enterprises to create AR experiences to improve field service operations.

Partnership with key EAM product players: Infosys has partnerships with industry-leading product companies across work, asset and geospatial areas. The company's asset management partners include SAP, IBM, IFS, Oracle, and ABB, while the geospatial partners are ESRI and GE and the workforce management partners are Salesforce, IFS-Clevest and Microsoft. It is also leveraging tools such as IBM Envizi for sustainability in the EAM space and is a Platinum Partner with IFS.

Experienced talent pool: Infosys' EAM practice focused on utilities has more than 2,000 experts. It also leverages its wider consulting and execution team comprising domain, process and technology experts to differentiate its offerings. It has a localization and global talent strategy, which helps it to hire local talent.

Caution

Infosys should continue to collaborate with product OEMs and vendors to build and expand its EAM solutions. In addition, it should look to further showcase its niche partnership with IFS, IBM Envizi and Salesforce and digital EAM offerings such as Maximo® offered as a SaaS solution.

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

Who Should Read This Section

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

In this quadrant report, 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 faced in the region.

Utilities face unprecedented competition from new entrants. Due to the availability of more provider options, consumers demand cost-effective and flexible services with exceptional delivery. In addition to changing consumer preferences, economic issues and reducing margins further burden the utilities to invest heavily in CX to attract and retain customers. Even regulators turn to customer satisfaction metrics to determine the fate of utilities companies in a process known as performance-based regulation.

To address these challenges, North American utilities invest in several CX innovative technologies such as self-service customer portals, digitized consumer interactions, RPA/AI-enabled chatbots, website optimizations and data-rich smart home technologies to optimize customer journeys and experiences.

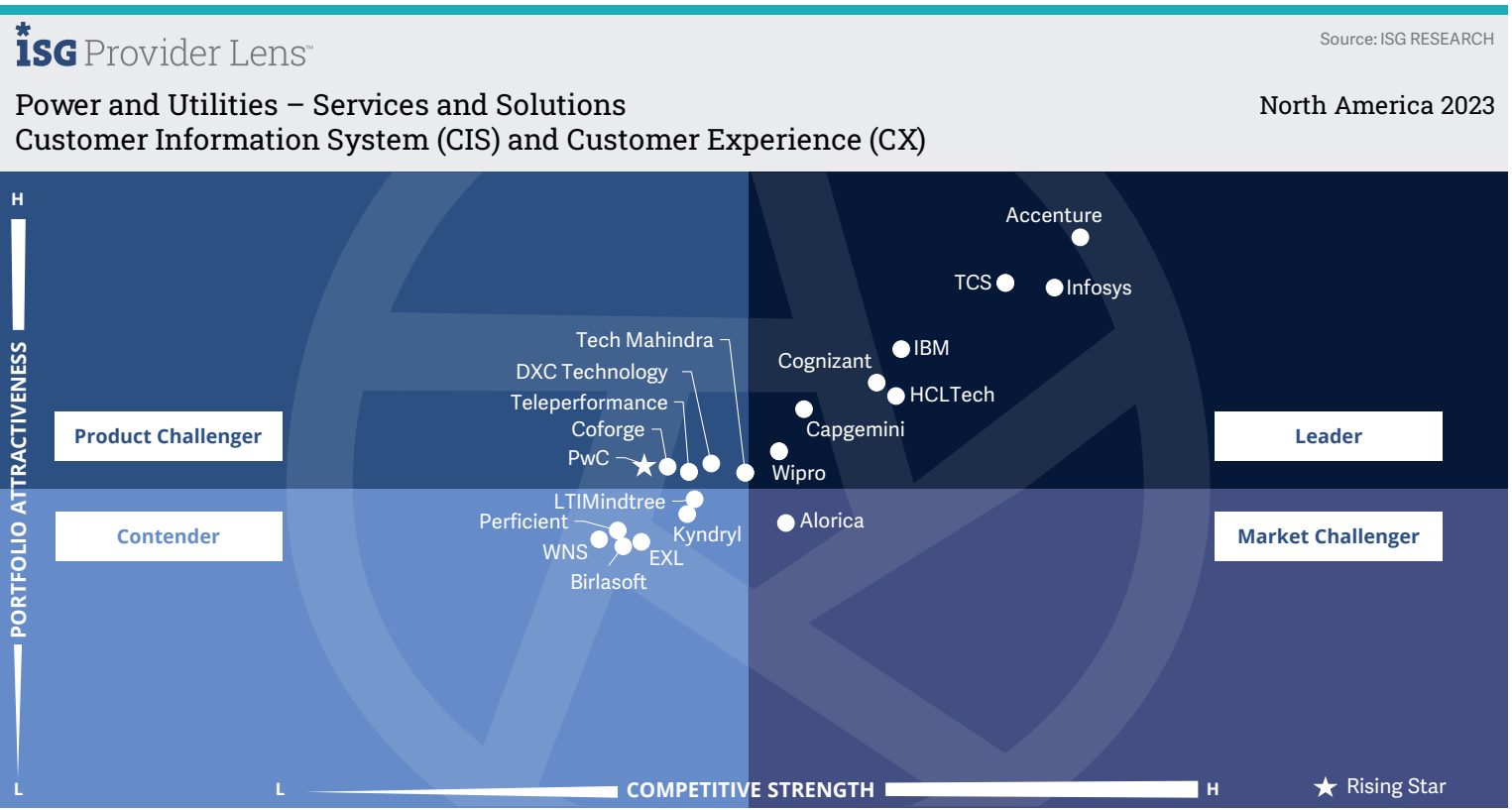
The service providers help utility clients to implement data-driven CIS/CX solutions and sustainability-related services underpinned by their own and partner solutions and accelerators.

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

Digital professionals should read this report to understand how providers of CIS/CX services enhance their digital transformation initiatives for improved CX and how they compare with one another.

Operations professionals should read this report to understand providers' relative positioning and capabilities that offer end-to-end CIS/CX to deliver high efficiency and effectiveness.

Marketing and sales professionals should read this report to understand the relative positioning and capabilities of providers that can help them harness CIS/CX services effectively.



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 CIS-related meter-to-cash (M2C), customer service and business process solutions in the power & utilities sector. These 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, enabling an enriched customer experience (CX).

Eligibility Criteria

1. Exposure to **working in CIS and CX** for the power & utilities clients in the market
2. Demonstrate **successful CIS-related engagements** (past and present) with at least three power & utility companies
3. Provide at least one of the following **offerings related to CIS and CX**:

- Meter-2-cash
  - 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 contact or call centers (customer interaction)
  - IVR services
  - Consumer engagement (social media, virtual assistant and chatbots)
  - Customer self-service
  - Relationship management

4. Ability to **adapt to changes** in regulations, compliance, rate structures and evolving billing and retail needs
5. Expertise in **applying next-gen technologies**, including automation, analytics, IoT, AI, cybersecurity, cloud and blockchain, for client engagements in this space
6. **Strong partnerships** with industry associations, regulatory bodies, technology firms and startups specializing in power & utilities
7. **Referenceable case studies** for various services and solutions across the value chain

Observations

The CIS and CX space is fast becoming the key focus area for utilities companies as consumers become prosumers, looking for CX at par with other service-based industries. In addition, the rapid adoption of electric vehicles (EVs) and a focus on energy transition have triggered the need for more efficient CIS/CX solutions. Providers with strong business process management (BPM) capabilities are combining best-of-breed CIS solutions to drive digital CX. The field is dominated by large traditional system integrators (SIs) and BPO/BPM players that have partnerships with leading players such as Oracle and SAP that have CIS offerings for the power and utilities industry.

Providers are also looking to players such as SEW, Powercloud, ENESK, Nexant, and Milestone to drive innovation and solution development in the CIS space. Large providers have many tools and accelerators in addition to product solutions for adding value.

In addition, companies are looking to integrate new age technologies such as IoT, edge, analytics, AI and ML and the cloud, in particular, to execute the strategy of power and utilities companies to provide digital solutions in the CIS space.

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

accenture

Accenture, through its strong partnership with SAP and Salesforce around various CIS solutions, provides solutions around omnichannel digital CX, customer insights, contact center solutions in consumer and non-consumer areas and sustainability.

Capgemini

Capgemini's CIS and CX solutions are data-driven offerings, providing key insights to facilitate customer transformation and customer care. The company continues to invest in tools, technologies and platforms to enhance business outcomes for its customers.

cognizant

Cognizant provides targeted CIS and CX solutions for the power and utilities industry through UtlityOne Engage and UtilityOne Insights, an integrated CX solution. In addition, the acquisitions of Utegration and EI-Technologies have further expanded its CIS solutions.

HCLTech

HCLTech, as part of its CIS and CX portfolio, fosters enterprise transformation, brand experience and digital process optimization for clients through its solutions. It has dedicated CoEs for utilities in the U.S., the U.K., Ireland, the Philippines and India.

IBM

IBM offers customized CIS and CX solutions, driven by its focus on AI (Watson) and hybrid cloud. Its software portfolio helps it further customize CIS solutions for the utilities industry. In addition, Envizi, its ESG offering, has strengthened its capability to provide services focused on sustainability.

Infosys

Infosys's CIS and CX offerings cover various aspects of customer systems and initiatives to address the growing needs of prosumers. It offers Salesforce, Oracle, and Microsoft CRM solutions, at scale, and complements them with its strong SAP and Salesforce practice.

TCS TATA CONSULTANCY SERVICES

TCS provides innovative offerings integrated with AI. Through Crystallus, a preconfigured solution suite, and partnerships with SAP, Salesforce and Oracle, it provides implementation and managed services for CIS and CRM products for utilities.

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

Wipro's CIS and CX solutions are cloud-based and implemented through its partnerships with leading hyperscalers and CIS vendors. In addition, it is partnering with niche partners to improve its offerings to clients seeking cost-effective solutions.

PwC, Rising Star, brings together its deep industry, advisory, operations, and risk management capabilities to drive CX solutions. The company's CIS and CX solution, Utility Edge Customer Empowerment, is built on Salesforce.

Leader

"Infosys is focused on enhancing and building advanced CIS and CX solutions and offerings through partnerships and proprietary accelerators."

Swadhin Pradhan

Infosys

Overview

Infosys is headquartered in Bengaluru, India and operates in 54 countries. It has more than 343,200 employees across 247 global offices. In FY23 the company generated $18.2 billion in revenue, with Financial Services as its largest segment. Infosys' CIS services comprise offerings that leverage its knowledge-based AI platform and deep business/functional/technology expertise to digitalize contact centers; undertake CX transformation; and modernize metering, billing and payment systems. In addtion, the company's utilities CIS transformation footprint includes process consulting, technology modernization, and risk management.

Strengths

Wide range of CIS offerings: Infosys's CIS offerings and solutions cover almost all aspects of CX and information systems. The CIS transformation solutions are underpinned by proprietary and partner solutions and accelerators. For CIS, it has more than 100 tools and accelerators such as Infosys Prosumer Toolkit, Utility AMI-360 and NIA Chatbot. In addition, the company's focus on technologies such as IoT, edge, analytics and AI/ML helps it provide digital solutions in the CIS space.

Focused initiatives and partnerships: Infosys has strategic partnerships with Oracle utilities, and EY for CIS solutions. It also has dedicated investments and strategic initiatives on next-gen SAP roadmap (S4 HANA and Industry Cloud). In addition, it offers Salesforce and Microsoft CRM solutions, at scale. Its other partners include SEW, Powercloud, ENSEK, Nexant, and Milestone.

Strong talent pool: Infosys is focused on building a strong talent pool with deep domain and digital expertise. It has partnerships with leading universities such as MIT, Cornell, Purdue and Carnegie Mellon. The company's utilities customer service practice has more than 3,500 experts serving over 30 clients. In addition, its SAP and Salesforce practice has more than 20,000 and 5,000 consultants, respectively.

Caution

Infosys should look at other utilities segments such as water and gas to expand its client base. The company should also look to set up partnerships with small boutique firms to penetrate the SME segment of the utilities marketplace.

Appendix

Methodology & Team

The ISG Provider Lens™ 2023 – Power and Utilities – Services and Solutions study analyzes the relevant software vendors/service providers in the global market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research™ methodology.

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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 services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of June 2023, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

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

The study was divided into the following steps:

1. Definition of Power and Utilities — Services and Solutions market
2. Use of questionnaire-based surveys of service providers/ vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities & use cases
4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
5. Use of Star of Excellence CX-Data
6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
7. Use of the following key evaluation criteria:
   * Strategy & vision
   * Tech Innovation
   * Brand awareness and presence in the market
   * Sales and partner landscape
   * Breadth and depth of portfolio of services offered
   * CX and Recommendation

Lead Analyst

Swadhin Pradhan

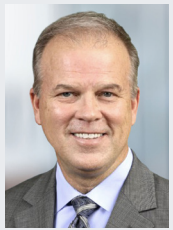
Senior Manager and Principle Analyst

Swadhin Pradhan brings two decades 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 the manufacturing, energy and resources industries.

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 the ISG Provider Lens™ program. 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 the Institute for Integrated Learning in Management (IILM), New Delhi, and an engineering degree in electronics and telecom.

IPL Product Owner



Jan Erik Aase

Partner and Global Head – ISG Provider Lens™

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 research director, principal analyst 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.

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Founded in 2006, and based in Stamford, Conn., ISG employs more than 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.

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ISG Provider Lens™

AUGUST, 2023

REPORT: POWER AND UTILITIES INDUSTRY – SERVICES AND SOLUTIONS