IDC MarketScape

IDC MarketScape: EMEA Service Providers for Digital Grid Enablement 2019 Vendor Assessment

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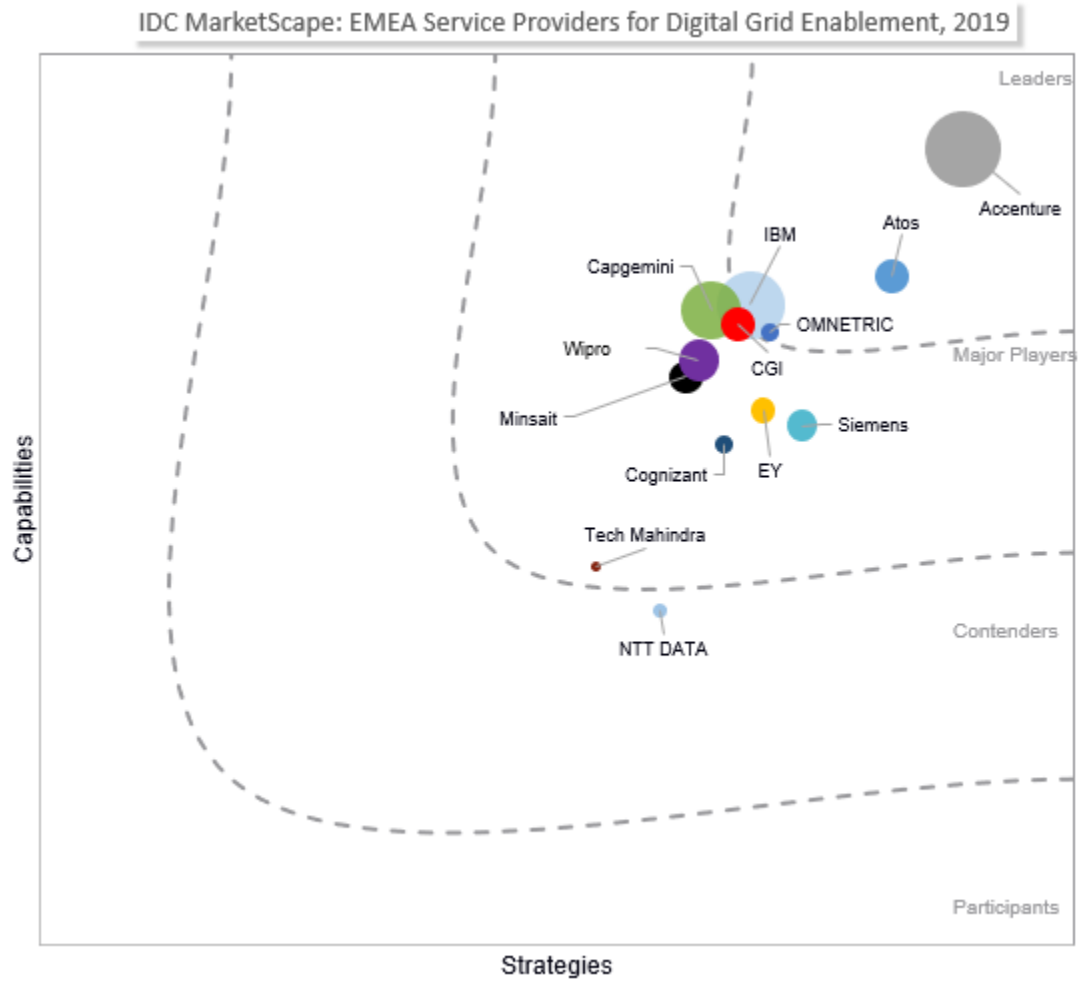
THIS MARKETSCAPE EXCERPT WAS CREATED FOR OMNETRIC

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: EMEA Service Providers for Digital Grid Enablement Vendor Assessment



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IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: EMEA Service Providers for Digital Grid Enablement 2019 Vendor Assessment (Doc # EUR143345019). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More.

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IDC OPINION

With the energy transition, the continuous rise of renewable and distributed generation, and the decreasing costs of storage/battery, electricity is becoming more pivotal. For instance, the uptake of electric vehicles (EVs) is increasingly electrifying transportation. This transformation is already posing new challenges to electric grids. Both transmission and distribution companies must revisit their business operations, enable new business models, act as market facilitators, and possibly even introduce new tariff mechanisms. For example, the ongoing energy transition in Europe could increase the grid's peak-to-baseload ratio by up to a factor of four. This will eventually lead to differentiating between grid access and grid usage as well as the definition of grid energy services with different tariffs. At the same time, energy and digital technologies offer new possibilities to grid companies such as:

- **Grid analysis and planning.** Improve the quality of data to support better grid analysis and to enable condition-based maintenance and daily load analysis. The goals are focus on investment strategies, better quality of supply, and lower maintenance costs.
- **Infrastructure operations.** Optimize operations and data-driven process orchestration, including through transparent order intake and track and trace functionality. Goals include boosting electrification and improving capacity as well as improving quality of supply.
- **Real-time energy distribution.** Real-time and predictive monitoring of energy flows, the development of market-based flexibility, better data exchange between distribution companies (distribution system operators [DSOs] or distribution network operators [DNOs]) and transmission system operators (TSOs). The goals are to avoid congestion, improve network operations, increase resiliency, and improve the quality of supply.
- **Customer, market, and data management.** Provide data management services and facilitate wholesale and retail market functioning and co-innovate and support new services and business models. Improved data availability and higher customer satisfaction are among the primary strategic goals.

With this report, IDC Energy Insights aims to support electricity companies in their selection of service partners to work with. This IDC MarketScape assesses services companies' capabilities and strategies to support grid companies' journey toward fully digital grids. It specifically looks at the following critical use cases: predictive grid control, intelligent grid management, grid simulation, microgrids, virtual power plants, distributed energy management, failure mode & effects analysis (FMEA) automation, drone-based line inspection, asset performance management, and augmented maintenance. Figure 2 in the Appendix provides an overview of the main use cases considered to assess vendors' capabilities summarizing the level of maturity of the offerings available on the market and the degree of coverage by services vendors.

Looking at the services vendor ecosystem, IDC Energy Insights sees that:

- The services vendor community is accelerating the development of specific capabilities to support digital grids. Vendor services in this domain often combine services with a wide variety of IP assets.

- Platform-based offerings are maturing and becoming a pillar of many vendors' value propositions. Cloud is becoming a strong enabler and an increasingly considered option by grid companies.
- To accelerate the deepening of competencies across operations technologies, some vendors considered in this IDC MarketScape have acquired and integrated specialized companies. They have formed strategic partnerships with energy technologies providers. In some cases, service companies have leveraged the competencies of the engineering part of their own group's organization.
- Some of the vendors analyzed consistently feature among the industry's most innovative organizations. They have dedicated innovation networks and a comprehensive ecosystem of business and technology partners to help their customers bridge the skills gap, lower technology risk and cost of ownership, and link to emerging innovation. This adds to solid thought leadership and a clear vision of the transformation of the electricity delivery ecosystem, both regionally and locally.
- Service pricing models are in constant evolution. The vast majority of vendors have introduced more or less sophisticated performance-based pricing models with output- and outcome-based models. These are very slowly supplanting classic time-and-materials and fixed-price arrangements.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

For this IDC MarketScape, IDC Energy Insights includes firms that have established a reputation working in the utilities industry, namely in the domain of grids in high, medium, and low voltage. Also, numerous vendors were invited to provide information to be evaluated in this study, but not all met the abovementioned inclusion criteria. To be considered in this report, IDC Energy Insights analysts stipulated that vendors meet the following minimum criteria:

- The vendor needs to offer a variety of services that specifically support grids' digital transformation, as defined in the scope of the report by the relevant use cases: predictive grids (predictive grid control, intelligent grid management, grid simulation, etc.), integrated distributed energy (microgrids, virtual power plants, distributed energy management, trading automation, etc.), and strategic asset management (asset performance management, FMEA automation, drone-based line inspection, augmented maintenance, etc.).
- The vendor needs to have a specific offering designed to support utilities' grid core business processes. Vendor might also offer horizontal services or IT infrastructure services, but offering this to electricity companies is not sufficient to be included in the analysis.
- IT vendors need to demonstrate that they offer a variety of services that specifically support digital grids. Firms that only have one offering for the industry were not considered.
- The vendor must be delivering services to electricity grid companies in at least three EMEA (Western Europe, Central and Eastern Europe, and the Middle East and Africa) countries.
- A minimum market share is not required. Nevertheless, the vendor must have an established international reputation of working in the utility industry, specifically addressing the domain of the analysis.
- A minimum revenue threshold is not mandatory. Indicatively, vendors should have above $50 million of estimated total revenues in the EMEA utilities market for calendar year 2018.

ADVICE FOR TECHNOLOGY BUYERS

The transition toward digital grids requires domain capabilities that cut across IT and operational technologies (OT). Many vendors in recent years have consolidated their expertise on electricity delivery and are working with electricity companies to develop new use cases.

To maximize the value from your investments, IDC Energy Insights recommends grid operators to:

- Design a transformation road map based on the principle of **horizons** to reduce complexity and sequence the delivery of outcomes. In each horizon, different **uses cases** are to be deployed, introducing the logic of a transformation journey that is designed to be *modular* – breaks the effort into chunks (use cases), delivering immediate business value; *scalable* – thinks through how the road map will evolve; and *extendable* – accommodates changes as they develop.
- Evaluate how each project and use case contributes to the creation of an enterprisewide **digital platform** optimized for data management, in which cloud-based API strategies orchestrate exchange of data across the ecosystem.
- Ensure organizational **commitment** – leadership, innovation teams, business divisions, and corporate and IT functions. Set targets to guide execution performance, measures to evaluate progress, and incentives to drive supporting behavior.
- **Engage and partner with service vendors**, paying special attention to characteristics and capabilities considered as the most critical, such as:
  - Availability of assets, tools, and accelerators that support digital grid use cases, as well as privileged relationships with a solid network of partners
  - Proven innovation capabilities that integrate the use of cloud, Big Data and analytics (BDA), cognitive/artificial intelligence (AI), mobility, and the most advanced OT technologies
  - Capability to design new business models/processes or reinvent existing ones
  - Availability of multidisciplinary resources, such as electrical engineers, IT experts, and data scientists, who possess business as well as technical understanding
  - Strong IT and OT integration capabilities

Finally, grid operators should use this report to support their vendor selection evaluation process and:

- Get an independent first assessment of vendors' capabilities in the domain of digital grids with specific reference to electric utilities' business needs.
- Integrate the shortlist of companies they might partner with or request proposals from.
- Leverage criteria used in this report to shape their own individual selection evaluation processes.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and opportunities.

OMNETRIC (a Siemens company)

OMNETRIC (a Siemens company) is positioned as a Leader in this 2019 IDC MarketScape for EMEA Service Providers for Digital Grid Enablement.

Founded in 2014, OMNETRIC has quickly positioned itself as a key player serving the needs of utilities in the distribution segment across North America and Europe. Initially a joint venture between Siemens and Accenture, OMNETRIC has been a wholly owned Siemens company since July 2018. OMNETRIC's value proposition focuses around services based on its IP offering.

Its services center around IT/OT integration, but recently, it has been focusing on other emerging topics in the digital grid domain to holistically tackle the challenges faced by grid operators. These are services "around the meter," improved integration of vast quantities of diverse types of data from IT and OT systems, conscious of privacy and cybersecurity. More specifically, OMNETRIC categorizes its offering into seven groups.

- Balancing demand and supply by forecasting and optimizing power consumption
- Defending the grid by protecting control systems, reviewing internal processes
- Enabling smart consumption by providing consumers real-time flows of information
- Managing data and analytics by applying statistical algorithms to improve grid performance
- Improving asset management by optimizing capital use in maintenance
- Managing distributed energy sources by integrating distributed and renewable sources of energy via smart power management systems
- Stabilizing the grid through grid analytics and advanced automation

OMNETRIC is also an application developer, an IT and business consultancy, and foremost a systems integrator. It offers services and has experience around digital grid use cases in the following ways:

- **Predictive grid control**. Integration of various internal and external data sources to proactively manage distribution and transmission grids, as well as in grid stabilization by forecasting and optimizing asset performance based on performance and economic conditions.
- **Intelligent grid management.** Identification of fault location, isolation, and restoration, in addition to integration between SCADA/outage management systems and smart meter data that enable preventive actions.
- **Grid simulation**. Utilization of data from sensors at a low-voltage level to simulate load flows in grids with extensive decentralized energy generation.
- **Virtual Power Plant**. Creation of a virtual power plant for a large utility and designing, configuring, and deploying the underlying energy management system along with integration of remote terminal units (RTU).
- **Distributed energy management**. Optimization of energy production, consumption, and local storage leveraging artificial intelligence.

An agile delivery model is deployed to enable rapid and flexible digital business transformation, encompassing requirement engineering, implementation sprints, quality assurance, packaged delivery, and software maintenance. Its software implementation approach is organized in two-week sprints following SCRUM methodology and collaboration between teams in Vienna, Brno, and Pune.

OMNETRIC has partnerships with companies such as SAP, Accenture, Red Hat, and Mendix (acquired by Siemens in 2018). In addition, it partners with universities (e.g., University of Texas, San Antonio, with the help of which a new reference architecture for microgrids was developed). OMNETRIC's future road map foresees expanding the scope of its market position to IoT and keeping its focus on the smart infrastructure domain.

Strengths

- The company is credited with having competent employees, bringing skills and knowledge both from the IT and the OT aspects of the energy sector.
- OMNETRIC's nimble structure enables it to bundle capabilities, operational know-how, and product heritage available across Siemens without being limited to the exclusive use of its products.
- OMNETRIC is lauded by its customers for striving to maintain a good relationship during the entire project, excelling at problem resolution.
- The company has continued to intensify its R&D efforts, thus it is increasingly recognized for its innovation capacity.

Challenges

- OMNETRIC's footprint outside North America and Europe is still limited, and it will need substantial effort to penetrate the rest of EMEA.
- The company lacks substantial outsourcing capabilities, and it is not yet equipped to manage massive business outsourcing processes.
- OMNETRIC's capabilities are strongly linked to its mother company that could make it a less interesting option for utilities with historical ties to other OT equipment partners.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well-aligned the vendor is with customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis or strategies axis indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represent the market share of each individual vendor within the specific market segment being assessed (Services for Digital Grid Enablement).

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores — and ultimately vendor positions on the IDC MarketScape — on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

This IDC MarketScape assesses the capabilities and strategies of leading service vendors to support electricity companies in transforming and optimizing their grids (high, medium and low voltage). This report focuses on the EMEA region. IDC Energy Insights believes that digital grids are a must to handle the business needs of today and tomorrow. The assessment values capabilities to support key use cases related to predictive grids (predictive grid control, intelligent grid management, grid simulation, etc.), integrated distributed energy (microgrids, Virtual Power Plants, distributed energy management, etc.), and strategic asset management (asset performance management, failure mode & effects analysis (FMEA) automation, drone-based line inspection, augmented maintenance, etc.).

This report specifically looks at the following services that vendors offer to grid companies to manage their asset-facing processes:

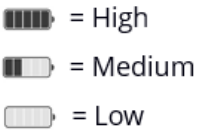
- **Business services** including:
  - **Business consulting**: This service defines the vision, goals, business architecture, security, organizational model, talent, and other business process-related dimensions to manage the IT and OT convergence.
  - **Process services**: Process services involve the transfer of management and execution of activities or single-business processes to an external service provider.
- **IT and OT services** including IT and OT systems and network implementations, IT and OT data integration, application development and maintenance, IT and OT deploy and support, and education and training that are used to support IT/OT integration.

Figure 2 provides an overview of the use cases considered to assess vendors' capabilities summarizing the level of maturity of the offering available on the market and the degree of vendor coverage.

FIGURE 2

Digital Grid Use Cases: Maturity and Coverage

	Use Case Maturity	Vendors That Scored Well
Predictive Grid Control		38%
Intelligent Grid Management		38%
Grid Simulation		31%
Microgrids		54%
Virtual Power Plant		38%
Distributed Energy Management		31%
Asset Performance Management		69%
Failure Mode & Effects Analysis Automation		31%
Drone-Based Line Inspection		54%
Augmented Maintenance		46%



Source: IDC, 2019

LEARN MORE

Related Research

- *Relevance, Risk, and Resilience: Highlights from the 2019 IDC Pan-European Utilities Executive Summit* (IDC #EUR144327719, May 2019)
- *How are European Utilities Leveraging Technologies to Accelerate their Digital Transformation in 2019?* (IDC #EUR144592919, April 2019)
- *What the Future Holds for Utilities: IDC Energy Insights' 2019 View* (IDC #EMEA44908219, March 2019)
- *IDC MarketScape: Worldwide Mobile Field Force Management Solutions for Utilities 2018 Vendor Assessment* (IDC #US41390617, February 2019)
- *Relevance, Risk, and Resilience: Peeking into Utilities' Future* (IDC #EMEA44852319, February 2019)
- *IDC Energy Insights: Energy as a Service – DX Use Cases and Horizons* (IDC #EMEA44421418, November 2018)
- *Utilities' Digital Determination: Strategies, Road Maps, and KPIs* (IDC #EMEA44389118, October 2018)
- *IDC FutureScape: Worldwide Utilities 2019 Predictions* (IDC #EMEA43108918, October 2018)
- *IDC MarketScape: IT and OT Integration Service Providers for EMEA Utilities 2017 Vendor Assessment* (IDC #EUR143345019, June 2017)

Synopsis

This IDC MarketScape assesses the capabilities and strategies of leading service vendors to support electricity companies in transforming and optimizing their grids (high, medium, and low voltage). IDC Energy Insights believes grid digital transformation is a must to handle the business needs of today and tomorrow. The report has a regional perspective covering EMEA. It analyzes quantitative and qualitative characteristics to provide metrics and context for utilities evaluating vendors in this area, examines vendors' comparative success in the marketplace, and looks at how vendor offerings will evolve. The evaluation is based on a comprehensive and rigorous framework that assesses vendors relative to the criteria and highlights the most influential factors for success in this market, both in the short and long term.

"The energy transition is already posing new challenges to grid operators. Both transmission and distribution companies have to revisit their business operations, enable new business models, act as market facilitators, and possibly even introduce new tariff mechanisms," said Roberta Bigliani, vice president, IDC Energy Insights. "Grid digital transformation is a must to handle the business needs of today and tomorrow. Key use cases will have to be implemented to manage predictive grids, integrated distributed energy, and strategic asset management."

About IDC

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