

Energy Insight from OMNETRIC

Analytics in the real world

An evolutionary approach to combining the best of traditional systems and new solutions



In a changing technology landscape, utilities' mission remains constant: to keep the lights on. Honoring this mission, while making sense of an unprecedented volume and velocity of data and technology choices can be a challenge.

An overnight shift to digitization and automation in data processing is unrealistic. But by combining the best of traditional approaches with new solutions, utilities can evolve to smarter use of their data to improve grid operations and reliability.



At OMNETRIC, we believe that what exists in data processing can be combined with what is emerging to address utilities' specific pain points with data management tools and data models tailor-made for the job.

Striking the right balance between traditional and innovative analytics approaches – to maximize the return on data processing investments – opens a world of opportunity.

Imagine the power of analytics to:

- illuminate the present and future behavior of users – and the stress they apply to the grid – to enable better long-term planning
- support daily operations, identifying critical situations before an outage occurs, monitoring metering performance, predicting the performance of equipment, and assisting with fault location, isolation and service restoration
- structure and control metering rollout and other plans and strategies
- provide a window into assets' future performance
- predict individual behaviour, as opposed to a whole region's average.

By better understanding information streams generated by the business' operational systems, utilities can improve grid operation and reliability. OMNETRIC can show you the possibilities.

Our aim is to help utilities ramp up their crucial data integration and analytics capabilities, to help uncover hidden value through smarter exploration of traditional systems or new data sources.

With our feet on the ground at global customer sites, we combine domain, data, business, and technology expertise with proven methods, models and frameworks to put utility data to work. We adapt existing, and introduce new solutions using proven technologies and our deep and broad global experience to meet utilities' requirements.

The starting point is to control existing data through traditional means such as process integration projects and data quality initiatives. Once these are mastered, utilities can enter new territory, integrating new sources of information they previously did not fully understand or dare to touch. This combination of old and new data management methodologies will help ramp up crucial capabilities within the organization, equipping it for the smart grid age.

Do you require data provisioning in real time or “right time”? Is speed or quality the first priority? Should data be stored on premise or in the cloud? Should traditional datamining tools be used or would new discovery technologies be more suitable? Should you use in-device, in-memory, in-database or in-stream data processing technologies?

OMNETRIC’s technology agnostic Energy Insight team can help you to make the right decisions, protecting and optimizing investments and maximizing value.

Improved IT-OT integration was the premise upon which the OMNETRIC joint venture was originally founded: to create a company where Siemens and Accenture could share talent and IP, thereby bridging the silos between the two worlds of engineering and information technology. It is this focus on integrating IT and OT that makes us uniquely equipped to help utilities manage the data coming from these two sources, to integrate it and analyze it as a whole, yielding richer insights.

The OMNETRIC Energy Insight service team brings together a deep understanding of the business and technology dimensions of an organization to improve decision making and the way how utilities stabilize the grid, balance supply and demand, manage assets, integrate renewables and enable energy efficiency.

We can provide a rapid-deployment solution that provides quick general indications (data discovery), a rock solid foundation with high quality data that delivers a 100-percent accurate single version of the truth (data integration), something in between, or both.

EXPLORE: OMNETRIC Smart Grid Data Discovery approach

The OMNETRIC Smart Grid Data Discovery approach is a rapid-deployment solution that includes the skilled input of our data scientists but requires no up-front data integration effort. It lets utilities interrogate and explore unknowns, delivering insight faster. Data discovery can make use of almost any available data to find correlations, provide quick answers, indicate trends and probabilities, uncover dormant potential, and enable utilities to ask new questions – questions they didn’t know to ask.

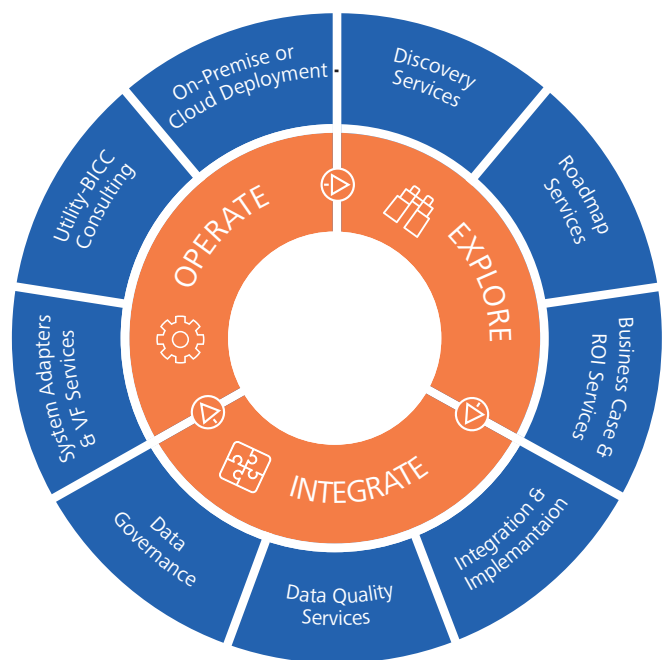


Figure 1: OMNETRIC's Energy Insight services

INTEGRATE: Smart Grid Logical Data Model

A logical data model serves as a roadmap for achieving data integration throughout an organization. Our Smart Grid Logical Data Model includes thousands of attributes and entities in CIM-compliant data structures, and provides interfaces with various operational core systems to accelerate implementation speed and reduce risk. Our Smart Grid Logical Data Model is technology-agnostic and can be used independently of most database technologies. It is the foundation needed to create a single version of the truth.

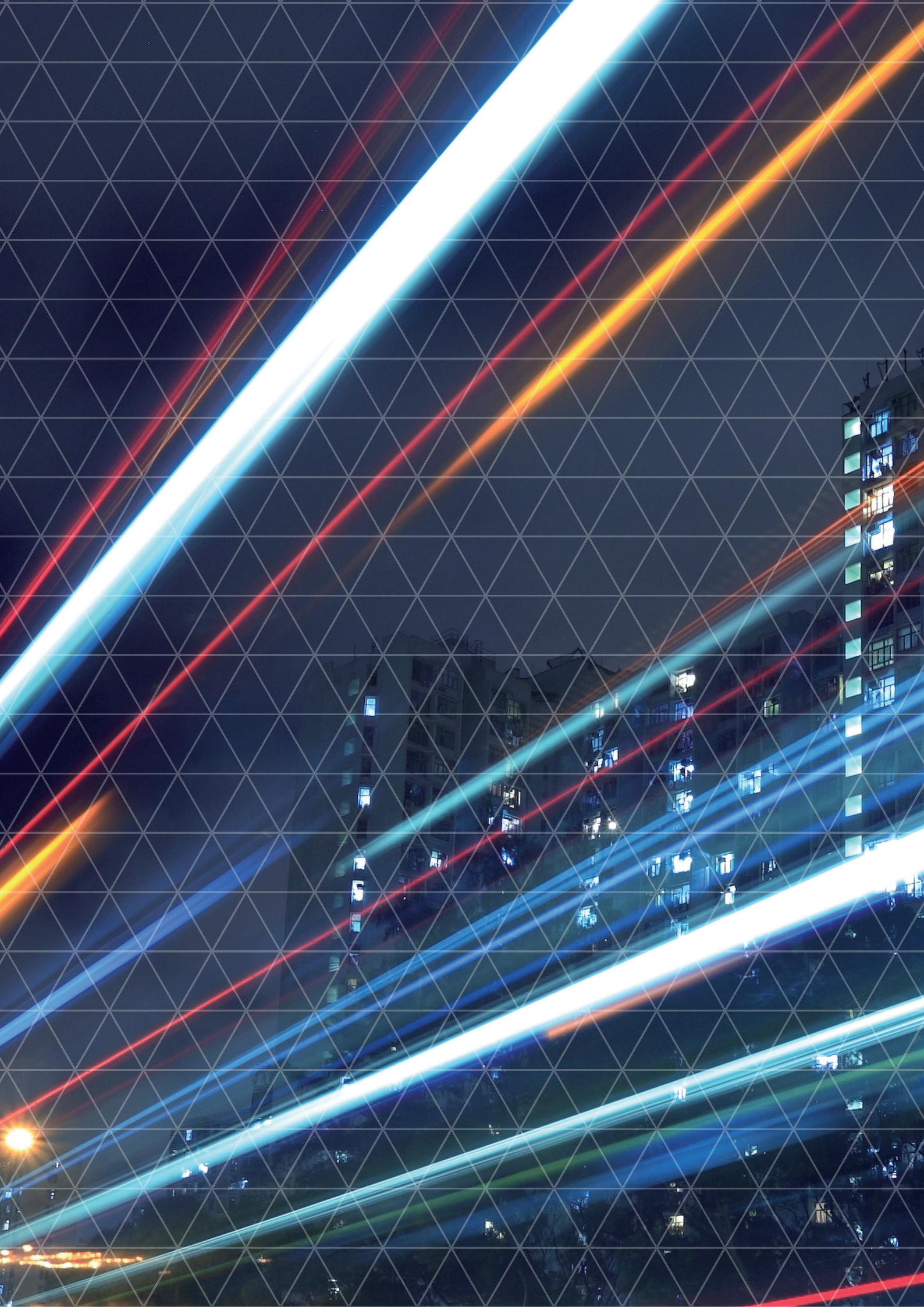
OPERATE: Smart grid applications

To monetize insights from data exploration and integration, they need to be acted upon through integration into the utility’s daily operations. To achieve this, OMNETRIC offers a rich set of prebuilt analytical smart grid applications, and develops new applications with clients to meet their requirements. Applications can be deployed on-premise or hosted in the cloud, and moved seamlessly back and forth as needed.

Ready to get started?

OMNETRIC can help you get started with analytics to improve grid efficiency and reliability quickly and easily.

1. You select an area of highest return:
EXPLORE – INTEGRATE – OPERATE
2. We add available assets to accelerate your value generation process
 - a. Our data discovery platform and services
 - b. Our Smart Grid Logical Data Model
 - c. Our ready-to-deploy analytics applications
3. You choose your favorite deployment model
 - a. Cloud-based
 - b. On premise
 - c. Build your own
4. We deliver. You benefit.



www.omnetric.com

About OMNETRIC

OMNETRIC is dedicated to helping energy providers reap the benefits of the digital energy system by integrating their energy operations with IT to support their business goals.

Our global team of engineering, IT, security and data experts brings extensive industry experience to help customers discover and exploit data intelligence to capitalize on industry change, and realize new business models.

Helping customers since 2014, we are an inventive, technology services company.

For more, visit www.omnetric.com.

OMNETRIC is a Siemens company.

Get in touch

Business requests
request@omnetric.com

Marketing and corporate communications requests
pr@omnetric.com

Careers enquiries
www.omnetric.com/vacancies

About OMNETRIC Energy Insight

Our Smart Grid Data Discovery approach is an integral part of our Energy Insight service offering. It helps utilities uncover the value within available data quickly and affordably, and to steer their analytics strategies to achieve swift, targeted value delivery. OMNETRIC's Energy Insight is all about smart grid analytics. We help utilities to explore and integrate data, and implement and operate analytics solutions to help them better plan, design, construct, extend, operate, and maintain transmission and distribution (T&D) assets and networks.

Our solution architecture includes a utilities logical data model that leverages IT/OT outputs, integrates and applies them to deliver benefits in areas such as revenue protection, transformer maintenance and load management, substation equipment management, T&D asset management, outage management, system modeling, power quality optimization, advanced distribution management, demand response and management, security management, micro grids, and real-time network operations.

In conjunction with OMNETRIC's other four service offerings – Smart Markets, Grid Operations, Strategic Advisory and Business Transformation, Architecture, Integration and Technology – Energy Insight presents a comprehensive, integrated offering to support clients in the energy sector with innovative solutions for a smarter grid.