IDC Energy Insights: Worldwide Utilities Platforms and Technologies

The climate change–driven planetary imperatives of decarbonization and resource conservation are ushering in a period of accelerated change in both the supply and demand sides of energy and water systems equations. This is pushing the envelope of traditional utility processes and regulation, driving a profound rethinking of business, operating, and information models across the industry. Spurred by rapid digital technology evolution, utilities' IT and business leadership around the world are reimagining how to deliver on their commitments for safe, secure, reliable, and affordable supply while delivering on their newfound purpose to providing essential business and technical platforms in coordination with solution and service providers in order to successfully navigate the ever-changing and evolving energy transition.

The *IDC Energy Insights: Worldwide Utilities Platforms and Technologies* research and advisory service is designed to support utility IT and business leadership, as well as their tech suppliers. It enables leaders to make strategic technology decisions about core operational systems, cloud-enabled application modernization, data management and governance, AI/ML and automation, future of work tools and practices, cybersecurity, and data protection and data privacy — all with a view to driving more efficient operations and improving economic, social, and environmental outcomes for all stakeholders.

APPROACH

IDC Energy Insights collaborates extensively with energy and water utility decision-makers around the world, empowering them to harness technology for accelerated business transformation, operational and cyber-resilience, and strategic investment planning and risk management. Our service delivers unique analyses and comprehensive data through proprietary research projects, ongoing dialogues with industry experts, utility executives, ICT vendors, and professional services companies. Drawing on decades of utility industry experience, our global analyst team leverages a wide range of expertise and intellectual property from IDC.

TOPICS ADDRESSED

Throughout the year, this service will address the following topics:

- Utilities' accelerated adoption of technologies and platforms such as cloud, digital twins, new-generation communication, edge computing, IoT and sensors, AI/ML, and GenAI and their impact on business performance, operations, and customer and employee experience
- Best practices around utilities' physical security and cybersecurity-related initiatives and operational resilience
- The convergence, integration, and combined governance of operational technology (OT) and IT to improve security, operations, and capital planning
- Trends related to the utilities' main IT applications for plant and network life-cycle management (e.g., SCADA, A-EMS/DMS, Historians and ODM, DERMS, EAM and APM, CMMS, FSM, MDM), market operations, and reporting (e.g., MMS, ETRM, ESG)
- Insights into how utilities can make the most of their IT services providers as they reinvent and tap into new revenue streams
- Evolution of business and IT operations automation and human-machine collaboration
- IDC MarketScape and IDC ProductScape evaluating technologies and providers servicing the utility industries
- IDC DecisionScape to plan and execute digital transformation initiatives and programs

KEY QUESTIONS ANSWERED

Our research addresses the following issues that are critical to your success:

1. What are utilities' IT investment and spending priorities, drivers, challenges, and innovation areas?
2. How are emerging demand and regulatory requirements driving new data management infrastructure, governance, and security?
3. How can legacy modernization increase efficiencies and reduce costs, ensure regulatory compliance, increase asset resiliency and return on invested capital, and generate new revenue streams?
4. How can utilities leverage innovative technology use cases across AI/ML, cloud, IoT, drones/robots, digital twins, and so forth?
5. What are the winning strategies for working more closely with a broader ecosystem of technology partners, and what technologies are they using to do so?
6. Which technology services firms and solutions providers are supporting utilities with running, complying, and innovating existing and new processes?

WHO SHOULD SUBSCRIBE

This advisory service is ideally suited to support digital/IT executives and operations and business managers in both regulated and unregulated energy and water utilities on their digital journeys. In addition, it provides technology suppliers with cutting-edge knowledge on the adoption of technologies impacting the utilities landscape. Senior executives will appreciate the unique insights into how technology is transforming the electricity, gas, and water utility industries.