

TOP TRENDS SHAPING THE ENERGY & UTILITIES INDUSTRY



WNS

Extending Your Enterprise

TOP 6 TRENDS



TREND #1:
Personalized Interactions
with Customers will Multiply



TREND #4:
Digitized Field Operations



TREND #2:
Digitalization will Rewire
Operations



TREND #5:
Grid Security will be on
the Radar



TREND #3:
Prosumers will Give Rise
to the Sharing Economy



TREND #6:
Business Models will Evolve
for New Market Realities



TOP TRENDS SHAPING THE ENERGY & UTILITIES INDUSTRY

A WNS PERSPECTIVE

At the crossroad of a traditional past and a 'smart' future, the Energy and Utilities (E&U) industry has been fairly successful in placing itself at a high level of technology maturity. E&U companies have invested in alternative energy sources, shifted to smarter infrastructure and leveraged digital technologies, analytics and Internet of Things (IoT). They have expanded their vision to new revenue streams and attempted to optimize costs through automation.

The next level of transformation for the industry is aimed at providing enhanced customer experience and optimizing operational efficiency costs in a highly competitive landscape. In such a context, let's take a look at some of the trends in store for this industry.



Trend #1: **Personalized** **Interactions with** **Customers will** **Multiply**

According to IDC predictions,¹ non-utility companies will digitally disrupt the landscape to capture 20 percent of the energy retail market by 2020. Driven by deregulation and competition from products and services from energy retailers, E&U companies will strive to design better omni-channel customer experiences.

Increasing 'retailization' will open more consumer-to-utility relationships in the areas of real-time billing and mobile payments, digital experiences, energy efficiency audits and home energy management. Utilities will wake up to consumers' demands for flexible choices in their usage of power with smart grids and smart meters.

Integrated solutions will be embedded with mobile, social and digital elements to enhance user experience. Better data quality and analytics platforms will empower consumers with granular, accurate and real-time details of power usage to enable better consumption. In short, E&U companies will move from supplying energy to enabling lifestyles.

A leading U.K.-based utility provider created an intuitive website to offer customers the information and insights to take control of their energy use. The provider's aim was to get customers online, make their online experience comfortable and then give them the right information to better understand their bills. The initiative has made more than 1 million customers sign into the toolkit.

Back-office and operational systems will be integrated to

¹ <https://www.idc.com/getdoc.jsp?containerId=EMEA40123816>



transform customer touch points in the areas of payments and communication. Social media will play a major role in customer support, proactive communication and preventive alerts. Integrated customer relationship management solutions will provide a slew of information about the customer that can be used to offer personalized services.



Trend #2: Digitalization will Rewire Operations

E&U companies will increasingly use social media, mobile solutions and payments, big data analytics, digital marketing, IoT, and smart

meter implementation to connect with digitally savvy consumers. Smart meter data will be the source for all measurements and analytics.

Cloud services will constitute a significant part of E&U companies' IT portfolio. Data analytics will rule in the operations and maintenance of plant and network infrastructure. Sensors will increasingly collect data to monitor asset performance for insights-driven actions on increasing reliability and availability, and reducing maintenance costs and downtime. Utilities will slash IT costs by migrating IT infrastructure into public cloud.

Cognitive systems will be an integral part of utilities' customer operations. Intelligent devices and business process management systems will constitute the digital ecosystem to deliver outstanding customer experience and operational efficiencies. Machine-learning will drive automation and intelligent analytics across huge volumes of data collected from digitized assets to provide deeper insights on asset management.

Emerging technologies will also drive the areas of battery storage, micro grid and intelligent substations as retail utility offerings. Power installations known as 'gateway hubs' will

provide integrated offerings of energy, security and infotainment.



Trend #3: Prosumers will Give Rise to the Sharing Economy

Representing the 'uberization' of the E&U industry, consumers who will design or customize products to suit their needs (prosumers) will bring a totally disruptive and asset-light business model into play. They will not only make more informed choices about energy usage, but become energy producers and storers as well. The energy prosumer will bring a significant shift in the generation, distribution, consumption and storage of energy, resulting in a shared flow of power.

A technology company with a data center in Wyoming made arrangements with the local utility provider allowing them the use of their backup gas generator to meet peak demands. The utility company avoided the costs and risks of building a new power generation facility, and the tech company could boost utilization of a potentially idle asset.

Prosumers will give rise to the micro market and transactive energy marketplace models. In this ecosystem, individuals can conduct energy transactions with one another. Distributed Energy Resources (DERs) such as solar panels, mini wind turbines and compact natural gas generators will drive the growth of prosumers.

Through participation in the 'smart grid' and changing energy management methods, both prosumers and E&U organizations will maximize the return on their assets. Commercial organizations will increasingly form independent subsidiaries to consolidate and control their own DERs. For example, Apple Energy is Apple Corporation's wholly-owned subsidiary that guarantees Apple facilities their power. They also take the excess power to the wholesale energy market.



Trend #4: Digitized Field Operations

Smartphones and tablets will offer field teams real-time data on locations, asset specification and performance data, work processes and safety directions. Wearables and heads-up displays will enable them to be more situationally aware for high efficiency. Drones will be deployed to assess pipelines

and power assets. Data from drones will be integrated with enterprise software platforms for automated work generation. This will ensure speedier responses and minimal grid disruptions.

Automation and analytics will ensure an 'always on' and real-time synchronization of field operations with back-office data. Digitally empowered workforce teams will perform administrative tasks 'on-the-go' to increase productivity and realize higher efficiencies in asset management.



Trend #5: Grid Security will be on the Radar

The rise of smart grids comes with an inevitable increase of digital surface area and a higher vulnerability to cyber threats. Utilities' strategic and operational security will therefore assume critical importance at an enterprise level. Compliance, IT, cyber security and physical security will increasingly move directly under enterprise risk management programs. IDC estimates that by 2018, 60 percent of a utilities' strategic and operational security technology will be managed at the board level.²

² <https://www.idc.com/getdoc.jsp?containerId=EMEA40123816>

Additionally, E&U companies will share cybersecurity intelligence with external partners for better risk identification and mitigation. Tighter governing frameworks and cyber security roadmaps, increased and continuous monitoring will be put in place.



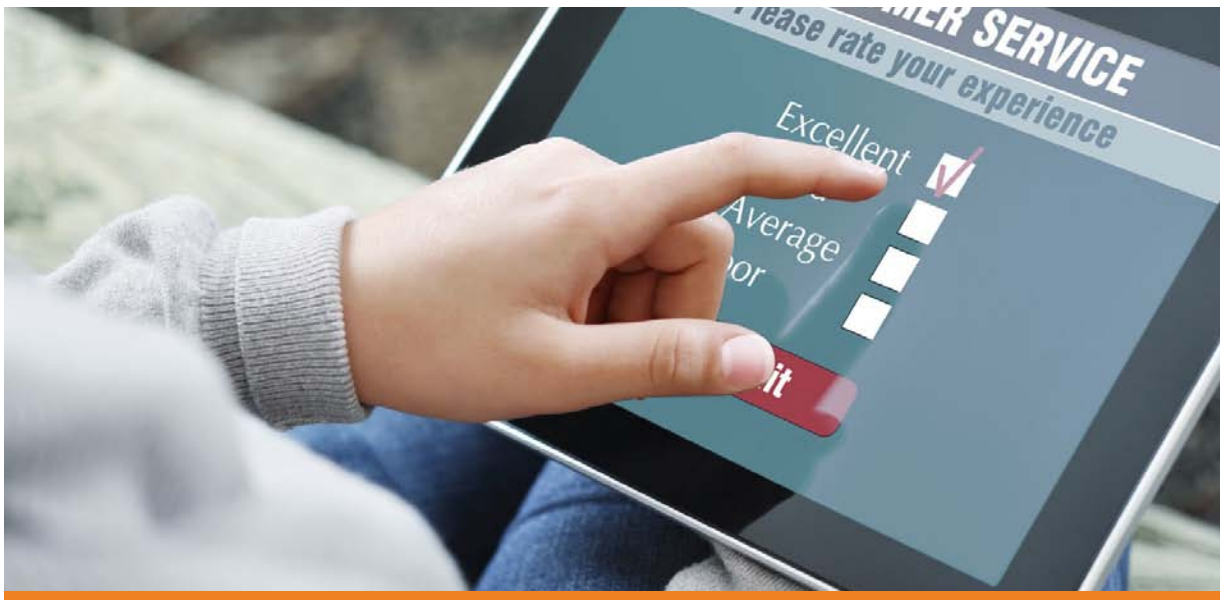
Trend #6: Business Models will Evolve for New Market Realities

With the renewables market estimated to grow by 13 percent³ in the next five years, E&U companies will consider diversification into

renewables as a means to both modernize and future-proof their business and profitability.

Companies will increasingly move away from the commodity-based model to innovative pricing models for alternative energy generation sources, energy storage and monitoring, and data analytics. These will be possible through mergers, acquisitions and partnerships. They will also explore asset-light business models that focus on product and service volumes to create revenues and profits.

E&U companies are poised at an exciting threshold of opportunities, and the next few years will see the industry rapidly adapt to innovative business models and technologies. They will create new revenue streams and leverage the power of data to create a cognitive enterprise. They will innovate operating models and customer experiences, and deploy effective cyber threat security solutions. By partnering with domain, technology and process experts they will develop the required strategy and roadmaps for innovative growth.



³ <http://www.iea.org/newsroom/news/2016/october/iea-raises-its-five-year-renewable-growth-forecast-as-2015-marks-record-year.html>

About WNS

WNS (Holdings) Limited (NYSE: WNS) is a leading global Business Process Management (BPM) company. WNS offers business value to 200+ global clients by combining operational excellence with deep domain expertise in key industry verticals, including banking and financial services, consulting and professional services, healthcare, insurance, manufacturing, media and entertainment, retail & consumer packaged goods, telecom and diversified businesses, shipping and logistics, travel and leisure, and utilities. WNS delivers an entire spectrum of business process management services such as customer care, finance and accounting, human resource solutions, research and analytics, technology solutions, and industry-specific back-office and front-office processes. WNS has delivery centers world-wide, including China, Costa Rica, India, the Philippines, Poland, Romania, South Africa, Sri Lanka, Turkey, UK and US.



To know more, write to us at marketing@wns.com or visit us at www.wns.com

WNS

Extending Your Enterprise