

Utility Industry

Where Disruption is the New Normal



The State of the Utility Industry

The utility sector is continually evolving, and there are still many significant technologies and developments to return in. The surge in demand for utilities has a direct bearing on social development. Advanced analytics plays a crucial role in resolving the queries long faced by the utility industry in data management, supported energy, and knowledge analytics.

Disruption is everywhere, and the utility industries are no exception. It needs to adapt and pre-empt as much as possible to keep providing essential service, guard the margin, and deliver more for customers. The business is abuzz with the gossip of the improved use of renewables and connected impact on clean energy and the addition of energy efficiency programs in utility service offerings to consumers. The results of grid defection as distributed energy resources rise in demand. However, it presents a new opportunity with some risk for utilities.

The reducing prices linked with new technology, battery storage choices, electric vehicles, and changing microgrid networks need utilities to adopt an agile stance. It will ensure that the technological disruption has a maximized opportunity, rather than an out-and-out threat.

Utilities need to make substantial investments to ensure they keep up with the needs of 'prosumers' and retain the regulatory bodies in a way that informs novel remuneration models.

With analysts predicting grid equality could materialize as early as 2021, this is the right time to identify innovation and build a transformation road map and relook strategic objectives.

The coming years will see a transformation in the global energy market. The generation of energy will become more diverse, decentralized, and facilitated by a digital grid powered by automation and data intelligence. Utilities have faced a dynamic business and environmental climate, constant with their nature as monopolies with a product being vital to our standard of living and a product displaying inelastic market.

Technology Adoption in Utility Industry

Customers today have many options and may change providers when they are unhappy with the company's services. Therefore, utility firms are utilizing diverse strategies to compete and strengthen customer's confidence. The most advanced technologies aim to enhance procedures and improve customer service by offering a more personalized experience, self-service solutions, and cheaper alternatives.

Mobile Technology

The demand for real-time data access is growing to be more critical for energy and utility field workers. It has led to the fast adoption of mobile devices and tablets. Businesses in the energy and utility sector will quicken investments in mobile technologies to enable their front-line workers.

When it comes to the devices, the deployment of tablets or other mobile devices in the field will see more substantial growth than their counterparts over the next few years.

Microgrids

The utility business is migrating towards more distributed energy sources. Businesses encounter a crucial choice, analyze this opportunity to adjust and change or take it as ambiguity and collapse. Fortunately, most leading firms are contemplating to improve power grids by implementing microgrids.

Microgrids are energy production systems that can split from the primary grid and power isolated plants without a larger electrical grid. These microgrids provide vital and continuous energy.

Intelligent Automation

Intelligent automation is the automation of a company's processes, including common corporate-level and unique task-level strategies. Through intelligent automation, a business can increase its productivity and enhance its employee and customer experience. It enables us to make smart decisions through meticulous case studies and analysis and dodging duplication of data.

Promoting a New Workforce

Businesses need to understand how they communicate with new customers and reach system requirements while offering affordable and reliable energy, as the utility industry grows. It requires experts who facilitate the companies to compete in the digital arena. However, organizations are finding it challenging to find such experts.

New improvements in technology transformations need employees to learn an entirely new skill. Everything from planning to customer and field service is transforming quickly. It has led to a prominent skill gap between the aging workforce and the expertise needed to administer grids of the future.

What future holds for the Utility Industry Post-Pandemic

Safety and Security have continuously been a core value for the utility industry. In light of a global pandemic, ensuring that vital lifeline services are not disturbed has created a unique challenge. The choices utility leaders make today to protect businesses and communities from COVID-19 will undoubtedly reshape future operations.

We have noticed that, with lockdown, the market has weakened across companies that have gone through their business continuity activation.

Exercises like maintenance and new developments in the network or generation area have halted. Still, utilities have been very flexible and brave.

Supply and Demand

As lockdown worldwide has come to an end, demand will rise gradually alongside. It will take some time for them to reach pre-lockdown levels. The utility sector will likely see some plant closures and relocation of a few to be less reliant on global supply chains.

RPA (Robotic Process Automation)

Organizations across all industries are tapping resources into robotic process automation (RPA). Most of the energy and utility leaders expect RPA to continue to grow over the next couple of years.

The use of RPA during this crisis would lead to the following benefits:

- Quality
- Speed
- Customer Satisfaction
- Enhanced Productivity
- Competitive Market Position

RPA allows utilities to improve production in the utility industry by leveraging technology to complete transactional, rule-based tasks with straightforward procedures.

Energy Transition

The oil and gas leaders will expedite their diversification into renewables, storage, hydrogen, and electric mobility. There have been many statements by oil and gas companies pledging to carbon neutrality by 2050. There will likely be an expedition of transformation and energy transition for these companies.

Most players will have to relook their approach to positioning in the value chain and diversification in geographic footprints.

Smart Cities

Utilities play a vital role in communications infrastructure. They have had a long-standing influence on communities through innovation in smart cities. Utility organizations extend network infrastructure that can be shared to maintain streetlights, find water and methane leakages and usage irregularities, detect, and locate gunshots, etc.

Using the power of IoT, utilities can control conditions in real-time, while cities benefit from real-time data and the capacity to make decisions based on data.

Digital Transformation in Utility Industry

Smart grids, consumer options, and prosumer energy production build an increasingly complicated energy grid, disrupt conventional utility markets, and produce new utility industry opportunities.

Growing energy technologies, like solar, battery storage, and electric vehicles, are disputing how companies engage with customers, giving rise to the “prosumer.” New, disruptive technologies like IoT and enterprise mobility drive consumer behavior shifts. Smart devices facilitate greater consumer control over energy consumption.

As a result of their encounters with digital firms, customers now demand a digital relationship with their energy providers. They have more energy supply choices, show less patience, and are more prepared to change relationships based on their experience.

These developments are building entirely new marketplaces and new opportunities for agile, innovative businesses with diverse business models from the traditional utility.

The Utility industry must address how they respond to a quick introduction of solar, wind, battery storage, and other energy technologies. They should develop new partnerships and offerings away from the regulated business units.

Utilities must keep speed with the dynamic relationships and demands of their customers. Digitalization allows embracing new technologies that facilitate energy and utility companies to engage with customers proactively drive more favorable outcomes throughout the customer lifecycle.

IoT enables business customers to control usage beyond the meter with more granularity and more accuracy. Utility businesses have a chance to put in place services that will allow these customers to manage their energy usage more efficiently.

Despite the rapidly evolving environment, utilities must give safe, stable, cost-effective, and sustainable service. They need to implement innovative strategies and technologies more actively to change processes and decrease costs in their core business areas.

With insights from distributed analytics, the utility industry can improve smart grid capacities, increase security, and achieve new business standards and revenue opportunities.

How CriticalRiver Empowers Utility Industry!

The rising dependence on new energy sources and increasing demand for more competence need unique operational agility and digital investments for traditional operators and new players.

At CriticalRiver, we begin by exploring customer touchpoints, engagement channels, and activities needing improvement. Then we execute solutions to make the digital transformation successful.

We have comprehensive experience working with some of the world's largest utilities and producing transformational benefits. We give innovative digital solutions that increase operational efficiency, optimize expenses, and increase customer satisfaction.

CriticalRiver's most advanced digital solutions address issues and find new growth opportunities. We do so by improving the customer experience, gaining reliability, optimizing asset investments, and leveraging our industry expertise.

At CriticalRiver, we place equal importance on the three solutions to digital success:

- Customer Experience
- Business Process
- Tech Infrastructure

We go beyond helping business and forward it with smarter products, outstanding customer experiences, and more dynamic operations primed for growth.

We create digital strategies that encourage performance, deliver more refined transactions, and leverage automation and AI platforms.

Simplify and secure your IT with CriticalRiver's integrated services and digital solutions that unlock at scale and speed.

For more information, contact@criticalriver.com



CriticalRiver is a trusted digital technology consulting company with a demonstrated track record of successful technology implementations in areas such as Digital Transformation, Digital Engagement, and Digital Engineering.

We implement and offer consulting services for CRM, Supply Chain, and Integration Solutions by leveraging our skills and capabilities in cutting-edge technologies. We help enterprises simplify, automate, improve, and enhance operations and processes to scale and grow.

We are also technology partners for Salesforce, Oracle, NetSuite for consulting, implementations, managed, and advisory services. Our highly experienced consultants are experts at understanding customers' needs and delivering strategic solutions that leverage the latest technologies and industry best practices.