NAVIGATE YOUR NEXT. IN UTILITIES

The challenge of digital transformation for utilities

The utilities industry is undergoing a radical transformation toward a clean energy future, with a more digitally connected and self-healing grid. Utilities need to make significant capital investments to replace aging infrastructure and explore new capabilities like the Smart Grid. At the same time, they are under regulatory pressure through the rate-approval process to fund these investments. With more industrial and residential customers moving toward solar and other distributed energy resources, the market dynamics are putting utilities under tremendous pressure, both on network and demand response management. Additionally, utilities are challenged to modernize their aging workforce with the latest technologies and prepare them for the future.

On the other side of the table, the Millennials and Gen X earth-conscious customers want a variety of tariff options, real-time tools to understand their consumption, the option to use green energy even at higher prices as well as omnichannel customer interaction that is accessible anywhere, anytime. The customer-focused approach and the desire to stay relevant in this ever changing technical landscape are driving utilities to transform and embrace new technologies and processes at lightning speed to prioritize customer experience as a measurable goal. Several utilities are upgrading their enterprise capabilities to fit customer-centric architectures.

And this is where we come in. We can help you get from where you are, to where you aspire to be. Our extensive experience in understanding the domain and the legacy and the newest technologies can help you get from where you are, to where you aspire to be by defining the utility of the future.

And you can do this without 'wishing away' the rich legacy that is the foundation on which your utility's success has always been created. You can navigate, step by step, toward new digital opportunities while leveraging your traditional strengths.

We help you do this by bringing you:

a. Artificial intelligence-powered core competencies to build a deeply automated foundation that serves up vital insights to prioritize execution of change

Market dynamics like distributed energy resources, customer self-generation, and depleting energy demand in certain cases, are putting utilities under tremendous pressure to control costs. There is increased activity on merger and acquisitions to consolidate portfolios to get scale of operations. So it is imperative to ensure that 'keep the lights on' activities are done with lowest cost to serve.

- Keep the lights on - We can help utilities with optimized managed services operations both on technology and process, utilizing a mix of AI-powered automation and service improvement framework. Our unique Run-Improve-Transform framework ensures that operations transform from IT service-level agreements (SLAs) to business outcomes. For example, for some of our utility clients, we have ensured business SLA dashboards to measure business key performance indicators (KPIs) like % **Accounts Billed Successfully** which scan and connect multiple IT systems like MDM, CIS, and processes across meter reading, billing, and exceptions to track end business outcome. Our application portfolio rationalization frameworks ensure that we continue to transform and optimize the portfolio as we continue to support it.

- Automation and robotic process automation (RPA) - Utilities have limited resources, but they are under significant pressures to do more with existing infrastructure, and people. It means that utilities are seeking transformational change in the ways they manage their business, to become more flexible, responsive, and efficient at using their resources. RPA has the potential to change that, since it can be owned and controlled internally (after an initial period of design and specification),

and therefore does not have the same risk associated with moving functions outside the organization.

Additionally, RPA can be adapted to the vertical-specific needs of utilities more quickly, and can be devised so that each implementation is unique and matches the needs of each utility and its regulatory environment and infrastructure more closely. We are one of the leading RPA vendors specifically targeting utilities in their RPA strategy, having supported a number of companies in the sector in automating processes. We have implemented automation solutions for utility clients targeting a mix of vertical-specific and enterprise functions, including corporate shared services, billing, IT operations, customer service, supply, and transmission/distribution network operations.

- Intelligent and connected grid needs more integration, automation and cognitive learning. Essential improvements in building the intelligence into the grid, by way of its operations capturing, performing the analytics to improve the way it is being operated. We apply predictive analysis to mobilize the auto-healing of network emergencies proactively, leading this network intelligence to self-healing across the network. We help in modernizing the grid by enabling the intelligence to accommodate the versatile assets and consumers' participation from distributed generation to distributed energy resources into the grid.

b. Agile digital at scale to create new enterprisewide capability that delivers unprecedented levels of business performance transformation with customer delight

Many utilities are heavily investing in transforming their utility platforms to be more agile, flexible to meet emerging customer, regulatory and market demands, and integrating them with other systems

like field services, outage management, work management to ensure service reliability. We can help accelerate these transformations based on utility reference architecture and best practices. For example, **PACE (Pre-configured and Accelerated CIS enablement) solution** is a collection of best practices, customer service maturity models, tools, accelerators, and preconfigured solutions required for a customer service transformation in its various stages. This allows utilities to leverage our inventory of leading practices for business processes, organization roles, and technology architecture to accelerate and deliver the program. In our experience, these accelerators have reduced 25% of duration for the program and significantly reduced the risks for these transformation programs. Similarly, we have accelerators in other areas such as field service management, work and asset management, grid management.

c. Always-on learning to drive continuous improvement by transferring digital skills along with ideas from a cross-section of industries and innovation ecosystems

Continuous reskilling and learning for your workforce – both human and digital - in an enthusiastic embrace of experimentation will be the biggest challenge you must tackle as you look to transform. While constantly 'training' and fine-tuning your digital labor, you will also need to refactor your people talent pool with new-age skills such as customer experience design, customer empathy, and journeys-based product design, and even advanced algorithms and data science expertise. Scrum masters, agility coaches, machine learning engineers and full stack architects will become as essential as conventional customer service or field service agents – to build your 'digital utility workforce'. And this ecosystem must be empowered to bring to life ideas relevant for utility consumers that sometimes come from the world outside of conventional utility service – much like leading techno-giants of today – Amazon, Google, or Uber.

We will share our entire talent value chain to recruit, train, and refactor your human resources, lend out innovation assets, including our ecosystem of innovation partners, 'train' your algorithms and business processes to amplify automation outcomes, oversee the digital labor force, and continuously improve your digital road map from one next to the next.

Our differentiation. Why Infosys?

- AI-powered core re-energized by Infosys Nia, our next-generation intelligent automation platform, that brings machine learning together with deep knowledge of utilities to unearth critical insights and industrialize the core process landscape

- Agile digital at scale delivered through our integrated digital utility platform comprising solutions for customer care and billing, field service management, grid management, data management, channels, cognitive automation, APIs, cloud-based analytics and security. Its ready-to-deploy, built-in use cases reduce time-to-value for your initiatives in the new digital ecosystem

- Always-on learning from our innovation ecosystem enriched by alliances with utility product vendors and niche firms. This enables us to ably steer you through the entire transformation cycle – from solution consulting, implementation, and customization to evolution and support

This value is greatly multiplied when coupled with the advantages of our in-market technology and innovation hub dedicated to utility co-innovation - with clients and partners

- Our delivery excellence ensures these evolutions such as grid modernization, smart grid, transactive energy framework are delivered systematically

- Infosys tailors the best practices to the utilities based on the business processes that are in place and leveraging them by reengineering them to the best business process which are applied effectively to improve their energy efficiency and revenue improvements business cycle

- The consumer becomes a prosumer into the grid, which causes the network to be more strengthened to handle the bi-directional power flow transactions. At Infosys, we ensure clean, consistent, and updated utility network models in response to the dynamic switching behaviors of the network. Our approach in enabling this through many business systems ensure the data model, topology, and network relationships are intact

- Infosys has been at the forefront in helping utilities in leveraging modern technologies for utilities to adopt advanced technologies - cloud, blockchain, IoT, AR, VR

- We have been consistently assisting utilities in building self-sufficiency by their IT/OT convergence and merger of technology with power to build the 'Smart Ecosystem'. We have also enabled community independence through microgrid, micro controllers, and enabling the on-grid / off grid dynamic switchovers, which have been a major challenge for utilities in their daily operations

- Infosys enables 'auto-healing' in the utilities grid, by way of empowering our key analytical strengths, such as predictive analytical capabilities, proactively leading the network intelligence to self-healing across the network

For more information, contact askus@infosys.com

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