ACCELERATING DIGITAL TRANSFORMATION IN THE ENERGY INDUSTRY
Over the last decade, disruption has been common across industries, even before the pandemic emerged. As a result, one distinctive change has been the slow shift of power to the customer. Furthermore, as customers became more technology savvy, their expectations rose exponentially.

Consider the change in the telecom and energy & utility sectors. Telecom firms consume energy through the edge, radio access, base stations, and datacenters, leading to operational concern. On the other hand, energy providers consume telecom infrastructure to communicate through interconnected devices and smart metering and grid systems. As a result, advanced energy solutions will be required to expand network capacity and infrastructure. In addition, these energy solutions will further help network operators select the right energy providers to support them. Beyond this, at Infosys, we have observed synergies between the telecom and energy industries.

Customers who were earlier satisfied contacting the services provider when there was an issue, today, however, they wish to engage across the sales, order, and service journeys. The telecom industry's monopolistic environment is being shaken up by the demand for superior customer experience propelled by a digital transformation. However, players in the energy and utility sector are carefully orchestrating a move from the monopolistic state. In addition, disruptive technologies such as cloud, IoT, blockchain, and analytics lay the foundation for hyperscale frameworks that cater to complex and flexible pricing, quoting, contracting, and ordering processes.

Salesforce has exploited the synergies between these two industries to create a metadata driven industry data model which makes CRM or CPQ solution implementation more value-adding by making pricing, promotions, and rules for the energy industry more flexible. Although the two industries do not follow the same processes, there is a significant match in how both implement Salesforce CRM or CPQ/OM solutions. As a result, an electricity provider can better control products and pricing and streamline order processing and fulfilment, like in the telecom industry.

Infosys has been an ace partner to several telecom players on their digital transformation journeys. We tap into a vast pool of talent, solutions and services that comprise Infosys Cobalt and expertise from the Salesforce Industries cloud (Vlocity) practice. In addition, we possess mature process frameworks and a center of excellence. Combined, this potent expertise from Infosys helps usher in the next-gen energy era by capitalizing on the synergies between telecom and energy industries in digital transformation.

This paper presents the synergies on the digital transformation path that accelerates transition for a highly regulated yet liberalized energy market.

![Figure 1 Areas where there are synergies between the telecom and energy industries](image-url)
The Infosys value-add

Infosys Cobalt offers a wide range of solutions and services crafted for similar digital transformation journeys.

Here are a few examples that illustrate the synergies on the digital transformation path and some of the foundational solutions.

**Superior customer experience with initial prototyping and design thinking**

- New market models, including distributed energy resources (DER), demand side management (DSM), and the need for rapid decarbonization and deregulation, have introduced many changes in the energy sector. For instance, customers must be able to explore various kinds of products, compare and purchase them easily, just like how telecom firms enable customers to shop for products such as fiber and broadband over the Salesforce Experience Cloud. Our framework helps users gain insights to create prototype models for displaying products and pricing details by utilizing Vlocity APIs. In addition, it shows template screenshots and custom details, helping clients get a quick demo to make an informed decision. With this, utilities can provide a superior customer experience.

- Utility customers like telecom expect self-serve channels to obtain order status updates, view and pay bills, raise concerns while shopping online. Our solution achieves headless architecture and back-end operations by harnessing Vlocity’s features and Digital Commerce APIs. In addition, the reference architecture framework drastically reduces the initial prototyping and design timeline while also ensuring speedy acceptance from business stakeholders on the recommended path.

- Synthesizing the design thinking process is key to casting wider design options and evaluating economic and technical trade-offs till a design is shortlisted in the SAFe agile framework. Infosys’ architecture playbook for the purchase and order journey provides a detailed view of the journey through online channels facilitating quick offer generation and promotional launches.

**Faster time to market and a product led approach**

- Energy products and associated cost components can easily be configured using a metadata driven shared product catalog of Vlocity. Solar panels, fuel cells, photovoltaics, energy estimate analysis, meter usage check as-a-service can be configured as bundled products for a DER system based on a parent and child product concept. Different rates can be applied and controlled via the CPQ framework based on a combination of attributes for multi-site customers or locations.

- The sales and marketing functions focus on campaigns and segmentation, leads and accounts, guided sales, marketing strategy and planning. On the other hand, the services function aims to be always available for customer queries. Digital transformation, where CTI connects with the utility’s telephony system and the interaction launcher of Vlocity, can boost customer servicing. In addition, energy retailers (investors, cooperatives etc.) can use an omnichannel contact center to provide a seamless customer experience.

- The transition to a digital landscape can be accelerated by the catalog driven workflow, EPC/CPQ and order breakdown features for utility companies. In addition, order management helps manage energy contracts, while Salesforce’s Field Service suite optimizes the agent and technician experience by enabling smart workforce management. This is especially useful as both the telecom and energy industries require field technicians to resolve field related activities such as broadband installation and energy equipment troubleshooting.

- The deployment checklist and detailed DevOps plan process provide the workflow or a guided path during project execution. In addition, our asset maps the release process flow in different phases, beginning with an environment backup for existing components and migrating new code components with code reviews and quality checks to make the stakeholders aware of the complete process.
Bolt framework to handle flexible industry needs

- Telecom operators mostly follow the portal or API based order intake journey to bring together partners and agents to a single channel. Energy partners may decide to place orders via API or newly installed DER/DSM frontend channels. Distribution or transmission companies may also sell the order to partners via the exposed APIs. The solution uses Vlocity out-of-the-box standard API callouts through an SOA gateway from external systems. In addition, Infosys Cobalt has a robust error logging framework for an HTTP callout that uses a platform event to publish errors or payloads to which any external application can subscribe for notification.

- Multi-currency and vendor service solutions help represent product pricing and quotes in the local currency. Localization is possible because of our guidelines and additional customization to invoke pricing classes to calculate charges based on vendor cost and markup.

- Industry data models such as meter, premise and service points help maintain data standardization and extend the core Vlocity data model while also providing telecom data model flavors. In addition, Salesforce E&U cloud has a rich set of process accelerators that helps build smart offerings avoiding custom code-based development. The low-code no-code platform is based on an industry data model and a pre-configured vertical solution for both industries.

- Move in and move out features with or without CPQ are available in the Vlocity process library. Telecom firms have traditionally exploited MACD features to change, amend, and control the order lifecycle. This avoids errors such as inflated bills and establishes a quick refund process.

Consumers wield power in today’s supply-demand equation. Extending this to the utilities industry, customers want to control usage based on peak time consumption. Due to rapid deregulation and the growing influence of DERs and analytical tools, customers can consume energy cheaply while flexibly and securely controlling energy prices. Rapid deregulation increases the load on digital frontend channels as energy retailers must engage with customers as part of their multiple roles across generation, transmission, and distribution. As customer demands and expectations rise, utility firms must quickly gear their systems and processes to address the changes.

This is where Infosys’ Salesforce practice can add tremendous value. The combined power of Infosys value-additions and Salesforce industries cloud offerings such as digital process automation, advanced pricing and promotion, energy trend analysis and template generation capabilities can fast track digital transformation in the energy and utility sector.

About the Author

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Deepak has nearly twenty years of experience in domain consulting and platform advisory services for enterprise applications across the telecom BSS, utility, and manufacturing verticals. Having been closely associated with Salesforce industries cloud (Vlocity) based digital transformation journeys, he takes a keen interest in observing industry trends and is passionate about emerging technologies. In addition, he loves traveling and exploring nature mysticism.