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Warding off COVID-19 and Preparing for a Resilient Future: EDF UK's Operating Model Transformation

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EXECUTIVE SNAPSHOT

FIGURE 1

Executive Snapshot: Warding off COVID-19 and Preparing for a Resilient Future — EDF UK's Operating Model Transformation

This IDC Perspective focuses on EDF UK's digital transformation journey across different technology areas and the benefits it reaped when COVID-19 struck. The pandemic spurred the company to accelerate its transformation by removing obstacles, hastening decision making, and helping advance cultural change across the organization, which unleashed benefits at scale. EDF UK's maturity road map and plans show promise for it to become a wholly driven insights-based organization.

Key Takeaways

- In some way or another, all utilities and energy suppliers have been on a "digital transformation" journey. However, the seriousness and speed at which EDF UK was able to adapt and demonstrate resiliency during the COVID-19 crisis are noteworthy. EDF UK has long been supported by TCS across many areas of its transformation and is innovating under the TCS Business 4.0 framework.
- The company's agile and DevOps practices enabled it to mobilize its entire workforce to work from home (WFH) in six to eight weeks.
- By ensuring the resiliency of the organization's IT backbone in its operations, the IT department was seen as a true partner in supporting business goals and capable of maintaining key business service-level agreements (SLAs).

Recommended Actions

- **Relationships are more important than solutions.** Having a partner that works to solve your issues without considering if it fits into the original scope of work will make an enormous difference.
- **Foster solid collaboration between IT and business.** IT must be perceived as a true partner in supporting business goals and maintaining key business SLAs. This was exponentially critical in the frantic first weeks of the COVID-19 pandemic, when IT had the opportunity to become a true enabler of business and service continuity for utilities.
- **In-house ad hoc capabilities should not be underrated.** Keeping some capabilities in house gives additional agility and control of prioritization and benefits. There is no substitute to having your own businesspeople that can understand processes and deliver when you unleash them.

Source: IDC, 2021

SITUATION OVERVIEW

This IDC Perspective focuses on EDF UK's digital transformation journey across different areas, including cloud, security, agile, digital workplace, and automation, as well as the benefits it reaped when COVID-19 struck. The pandemic also spurred the company to accelerate its transformation by removing obstacles, hastening decision making, and helping advance a cultural change across the organization, which unleashed benefits at scale. EDF UK's maturity road map and plans show promise for it to become a wholly driven insights-based organization. IDC interviewed EDF UK Chief Information Officer Kelvin Wing and Director of Back Office, Asset and Revenue Operations Christopher Dalley on the company's journey from "doing the basics brilliantly" to leveraging digital technologies to embed resiliency into its core business.

IDC Energy Insights' Case Studies Series

IDC Energy Insights' case studies series provides utilities with fact-based and independent views on interesting projects implemented across the world. They focus on new business models, digital transformation (DX) initiatives, IT and operational technology (OT) solutions implementations, and more broadly, energy technology initiatives that contribute to innovation and sustainability. Collaborating with utility companies and technology providers personnel directly involved in such projects, IDC Energy Insights analysts gather all relevant information and analyze the approaches taken and the solutions' performance in meeting stated goals.

Why This Case Study?

In some way or another, all utilities and energy suppliers have been on a "digital transformation" journey. However, the seriousness and speed at which EDF UK was able to adapt and demonstrate resiliency during the COVID-19 crisis are noteworthy. It removed obstacles and hastened decision-making and furthered cultural change across the organization that unleashed benefits at scale, promising to continue to do so with its maturity roadmap and plans.

Background

EDF UK is an incumbent operator in the U.K. utility market and part of France-based EDF Group. EDF UK was formed in 2002 and operates in both power generation and energy supply, counting more than 5.7 million customers.

Having been liberalized for over 30 years, the U.K. supply market is arguably one of the most challenging utility markets around the world. It features an informed energy consumer base, high customer switching rates, long-standing competition from new entrants and increasingly niche digital pure-play suppliers, and stringent rules and price caps from regulator Ofgem.

The COVID-19 pandemic only exacerbated difficulties for energy suppliers in an already highly competitive environment. EDF has faced increasing bad debt (especially with unemployment rates climbing and furlough schemes ending) and a significant rise in the volume of calls to its contact center. It also found itself having to accommodate almost 100% of its workforce working from home overnight while maintaining undisrupted operations.

To its advantage, EDF UK had previously embarked on a decade-long DX journey that helped the company quickly adapt to the new and extreme working environment. The first few weeks of COVID-19 also set the pace for fast decision making, spurring the company forward like never before – a silver lining.

Doing the Basics Brilliantly Leading up to COVID-19

Back in 2018, EDF UK entered a new phase of its DX journey with the overarching goal of enhancing customer experience (CX) and transforming the business (for instance, by tackling high

business and IT costs and system constraints stemming from its mainly on-premises technology architecture). Specifically, the company sought to improve efficiency, reduce overheads and operational costs, improve the agility of systems and processes, create a flexible work environment, and enhance employee effectiveness by providing the right devices, tools, and information. EDF UK aspired to get ahead of competition with customer centricity, high personalization, amplification of convenience and value for money through customer service, and continuous product innovations.

EDF UK selected TCS – specifically the "TCS Business 4.0" framework and its cloud, intelligence, agile and automation methodologies – to support it in this new journey. Within the TCS Business 4.0 framework, EDF UK kicked off a data strategy project in 2018. It sought to address problems inherent to data being siloed in each department with no real governance, and hence being leveraged only for standard operational tasks and not impacting business decisions.

EDF UK's partnership with TCS, which started in 2009, has become well established. In 2018, the company renewed its business process services (BPS) contract for 4.5 years to include close to 1,300 TCS professionals. EDF UK's IT department is supported with 600 resources between onshore and offshore, its front office is supported with around 500 resources, and shared services is supported with 60. In 2018, the technology and business service provider was also awarded a voice contract for five years aside from a five-year infrastructure and application maintenance support contract for the entire business in 2016.

Between 2018 and early 2020, EDF UK was able to achieve numerous customer satisfaction milestones, from moving up the Citizens Advice league table to raising its Trustpilot score to "excellent." From an operations perspective, it improved its European Institute of Innovation & Technology (EIT) SLAs for security and integrated monitoring as well as automation for business services and the digital workplace. The company also achieved lower business downtime, put in place a digital foundation with the early adoption of AWS Cloud and DevOps/Agile tools, and established a data lake to lay the foundation of its "data-driven organization." In October 2020, EDF UK's data lake went live; a month later, it was made available to users.

Finally, EDF UK also managed to bridge the gap between the lines of business (LOBs) and IT, putting in place initiatives to improve the internal and external perception about the IT department's support of business goals.

COVID-19 Spurs EDF UK Further on the Road to Resiliency

EDF UK had long been on a journey to build its digital foundation, a process slowed down by lack of governance and slow decision making, as is often the case in large organizations. When COVID-19 hit, EDF UK was faced with unprecedented challenges that triggered the company to hasten the pace of its transformation, with the first few weeks of the pandemic setting the pace for faster decision making.

From a customer operations perspective, the company handled three to four times the call center volumes it had registered during the same time the previous year (2019). This led to a rise in average wait times, which increased customer complaints. In turn, outstanding volumes impacted business KPIs such as faster switching, accurate and timely billing. Sudden disruption on business-as-usual operations included having to quickly switch from a 100%-work-from-office setup to a WFH arrangement. Employees' remote working in turn impacted the volume of support the IT department needed to provide to the entire organization.

Despite immediate hardships, EDF UK's operations proved resilient and the handling of critical business processes, such as contract renewals and billing, was not affected. In its COVID-19 business continuity plan, the company enabled over 1,200 worldwide BPS associates (including

call center advisors) to work from home. Fast solutions for desktops/virtual desktop infrastructure that comply with data security and governance models were set up to guarantee 100% business as usual for EDF UK customers. Innovative ways to use SMS, chat, calls, and emails were leveraged to aid customer support volumes. In partnership with TCS, the company lunged to implement agile and DevOps best practices, which enabled it to deliver and improve faster, leveraging digital technologies. Within eight weeks, the entire WFH workforce was working agile. The adoption of Microsoft Office 365 (part of the company's 2019 Digital Workplace strategy) was also accelerated for collaboration, while the delivery of productivity and digital solutions was amplified using DevOps practices (e.g., AWS Workspaces rollout). Company culture was significantly affected by the adoption of agile and acceleration of DX, and IT was seen as a true enabler supporting business goals and maintaining key business SLAs throughout the pandemic. In fact, none of its business-critical services have failed so far during the COVID-19 crisis, and no SLAs have been missed.

The Importance of Automation at EDF UK

Robotic and intelligent process automation (RPA/IPA) has been a big focus area for EDF UK, which saw it as a strategic asset that would drive the business to new levels of operational performance. In 2017, the company put in place plans to be able to industrialize the deployment of automation and scale its impact across the business by using Blue Prism Cloud.

The pandemic brought about unique challenges — such as the rapid lockdown measures imposed on its offshore partner — that EDF UK was able to mitigate quickly and less expensively using its existing "digital workforce" of bots and intelligent agents. For example, 32,000 smart meter installation appointments were scheduled that had to be cancelled. EDF UK leveraged RPA to cancel appointments, notify customers, and temporarily halt the deployment. The work carried out through RPA, estimated at 3,000 to 3,500 man-hours, was completed by bots sending letters and email in just one day.

Another area in which EDF UK has been able to significantly leverage RPA is lump customer acquisition when Ofgem reallocates customers from energy suppliers that have gone bust to so-called "suppliers of last resort." Most recently, EDF UK was given 360,000 customers belonging to Green Network Energy; it also received 134,000 customers from Toto Energy in October 2019 and around 8,000 from Solarplicity in August 2019. When this occurs, EDF UK leverages RPA to correct meter reading and complete customer details, cleansing incoming information and integrating it quickly. By doing so, EDF UK is "turning a workforce into a task."

During COVID-19, EDF UK witnessed a small but significant uptake in digital channels, an area that IDC Energy Insights has repeatedly highlighted as an issue for energy suppliers to address (see *Energy Consumer Discovery Series: Interactions and Communication Channels (Part 2)*, IDC #EUR146883220, September 2020). EDF UK is now looking to enhance its digital channels and develop broader self-serve capabilities, exploring how RPA can play a role in the short term.

Since the beginning of its automation journey, EDF UK had a large-scale vision, wanting to leverage the benefits of RPA to tackle more than 900 processes running at the time. Its first major milestone was for the investment in RPA to be cost neutral within the first year; to do so, it automated 50 processes. To obtain the biggest benefits by reducing errors and completion times, it looked to automate tasks within complex processes that were frequently executed, such as billing and updating customer information. It also had to have no detrimental impact on customer service or experience.

The company built its own automation center of excellence (COE) as it valued being independent in governing its RPA capabilities. It initially worked with a partner to get the COE up to speed and help it build a framework and playbook to be able to deliver automation internally to the business. It currently has a team of more than 20 people — made up of business process experts that are close

to the business — that help the company understand its imperatives and processes and enable it to accelerate at scale. Thanks to the COE, EDF UK has been able to reuse components written for other processes, thus multiplying the speed of its RPA program. Over time, the company has built up an RPA library of over 1,000 reusable components that it can tap into to hasten the development of new automation use cases.

To date, EDF UK has 100 automated processes running across 15 business areas and 11 underlying systems. It has passed 7 million transactional tasks handled by bots to date, equivalent to saving around 100,000 man-hours.

Lessons Learned and Next Steps

Post-COVID-19 Charter

As it weathers through the COVID-19 pandemic, EDF UK is sailing ahead at full speed on its transformation, embracing the TCS Business 4.0 framework to continue to embed resiliency into its core business. The company will be working on the following actions:

- Focusing on debt collection strategies to improve cash flow and reduce bad debt
- Tightening governance on complaint management, onboarding customers on digital contact channels, and promoting self-service with a view to reduce operational costs while providing excellent CX
- Continuing the rollout of better workspace technologies (such as AWS Workspaces, Microsoft Office 365, and Windows 10) and implementing a persona-based digital experience and secured access to information
- Accelerating and industrializing digital adoption, continuing its cloud migration to reduce technical debt, and deploying SecOps and AIOps to provide better governance, scale, and operational resiliency and to improve handling of critical business processes with AI and self-healing
- Setting up platform services for rapid experimentation and development (cloud-native DevOps tools) and defining DevOps models to become product based, to make the IT organization continuously leaner and more agile

These are also summarized in Figure 2.

FIGURE 2

EDF UK's Maturity Road Map

Source: IDC Energy Insights based on TCS input, 2021

With the TCS Business 4.0 framework, EDF UK will also be able to leverage platform services for rapid innovation and testing. The company is undertaking a very significant cloud migration, with its newly launched data lake it is now focusing on extracting value and measuring benefits, it wants to have a 100% DevOps model and is on a mission to fully integrate automation into its daily operations.

Going the Extra Mile with Automation

In the short term, EDF UK will focus on attended automation to increase the scope of support of live operations and dynamic decision making with "humans in the loop." IT also sees an opportunity to use optical character recognition (OCR) technology to triage customer emails or meter reading submissions and to submit these into their systems.

Other areas EDF UK is exploring include telephony automation, where AI capabilities are used in interactive voice response (IVR) automation (including natural language processing and text-to-speech/speech-to-text conversion); neural networks for inquiry classification; and call triage. This presents a significant opportunity in terms of service improvement and financial savings. Finally, when it comes to machine learning, the energy supplier expects debt management to be a key focus area, especially as COVID-19 significantly aggravates energy suppliers' bad debt risk.

ADVICE FOR THE TECHNOLOGY BUYER

In some way or another, all utilities and energy suppliers have been on a "digital transformation" journey. When COVID-19 hit, two years' worth of DX was compounded into two months. Based on

this case study and the testimonials gathered, below are some lessons learned for other utilities or energy suppliers on a similarly disrupted journey:

- **Relationships are more important than solutions.** Surround your company with an ecosystem of partners it can rely on when things go south. In those situations, having a partner that works to solve your issues and works on the best outcomes without considering if it fits into the original scope of work can make an enormous difference.

- **Foster solid collaboration between the IT and business.** For the best outcomes, IT must be perceived as a true partner in supporting business goals and maintaining key business SLAs. This was exponentially critical in the frantic first weeks of the pandemic, when IT had the opportunity to be a true enabler of business and service continuity for utilities.

- **Transparency with employees will sink or swim a project.** Especially when creating a hybrid digital and human workforce, it is imperative that employees are educated and nurtured to understand how technology is being adopted to support them and not to replace them. Technology should add value to employees as well as to customers.

- **In-house ad hoc capabilities should not be underrated.** Keeping some capabilities in house gives enterprises additional agility and control of prioritization and benefits. Most importantly, there is no substitute to having your own businesspeople that can understand processes and deliver when you unleash them.

LEARN MORE

Related Research

- *Utilities Smart Customer Operations Quarterly Update: October-December 2020* (IDC #US45820021, January 2021)
- *What Products and Services Are Consumers Most Interested in that Energy Suppliers Could Sell Untapping Potential New Revenue Streams?* (IDC #EUR147168920, December 2020)
- *Energy Consumer Discovery Series: Customer Experience, Customer Journey, Products and Services (Part 3)* (IDC #EUR147017520, November 2020)
- *IDC FutureScape: Worldwide Utilities 2021 Predictions* (IDC #US45816020, October 2020)
- *Energy Consumer Discovery Series: Interactions and Communication Channels (Part 2)* (IDC #EUR146883220, September 2020)
- *Energy Consumer Discovery Series: Consumer Satisfaction Atlas (Part 1)* (IDC #EUR146767120, August 2020)

References

- Interviews with:
  - Kelvin Wing, chief information officer, EDF UK
  - Christopher Dalley, director of back office, asset and revenue operations, EDF UK
  - TCS team supporting EDF UK
- "Utilities and Energy Customer Transformation Story: EDF UK." Blue Prism video. https://www.blueprism.com/resources/videos/utilities-and-energy-customer-transformation-story-edf-energy/.

Synopsis

This IDC Perspective focuses on EDF UK's digital transformation journey around cloud, security, agile, digital workplace, and automation, and the stimulus COVID-19 provided for it to pick up the pace. In one way or another, all utilities and energy suppliers have been on a "digital

transformation" journey, but the seriousness and speed at which EDF UK was able to adapt and demonstrate resiliency during the COVID-19 crisis are noteworthy. This removed obstacles, hastened decision making, and helped advance a cultural change across the organization, which unleashed benefits at scale. The company promises to continue to do so with its maturity road map and plans to become a wholly driven insights-based organization.

"Besides the myriad of digital technologies EDF UK quickly embraced in the past year in the face of the COVID-19 pandemic, it is the attention it sows in its relationships with partners, its customers, and employees that is really impressive," said Gaia Gallotti, associate research director, IDC Energy Insights "A company that values relationships more than solutions is one that can count on its partners in times of need to ensure its operations are resilient and business SLAs are met."

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