

SUCCESS CASE 51.2025

"There Will Be Light"

AUTOMATIC GENERATION AND
UPDATE OF OUTAGE
SCHEDULES



THE CHALLENGE

The main objective of the project was to provide DTEK Grid customers with clear, timely and convenient information about the electricity supply schedule. At the start, the company faced several obstacles. Service channels were heavily loaded, and the dispatcher service was under pressure. Dispatchers had no means of quickly calculating a shutdown scheme after receiving a command from NPC "Ukrenergo." Customers also lacked a clear schedule that could reliably indicate both the availability and the absence of electricity.

THE SOLUTION

This response combined digitalisation with national coordination. A unified outage schedule was developed together with all DSOs in the country. To ensure a fair distribution of electricity among consumers, the company developed a calculator capable of generating outage schedules. A daily schedule was introduced without any zones of uncertainty, limiting communication to whether electricity would be available or not. Publication of the schedules was fully automated and integrated across the company website, the chatbot and partner resources through an open API. These partners included electricity supply operators and city utilities. Customers were proactively informed of any changes to schedules via push notifications in the chatbot.

MAIN ACHIEVEMENTS

A single, unified outage schedule was created and adopted nationwide by all DSOs. The process of calculating schedules no longer required a "creative" approach, as an automatic tool was developed that took into account previous customer outages to ensure equitable distribution between consumer groups. The publication of updated outage schedules was simplified and fully automated, with no need for the involvement of intermediate participants such as dispatchers, call centre staff, website designers or IT teams. The digital audience grew to 9.6 million active users of the chatbot and website. Customers were given access to personalised, detailed information about outages through any channel, while integration with partner platforms further expanded the audience and strengthened outreach.

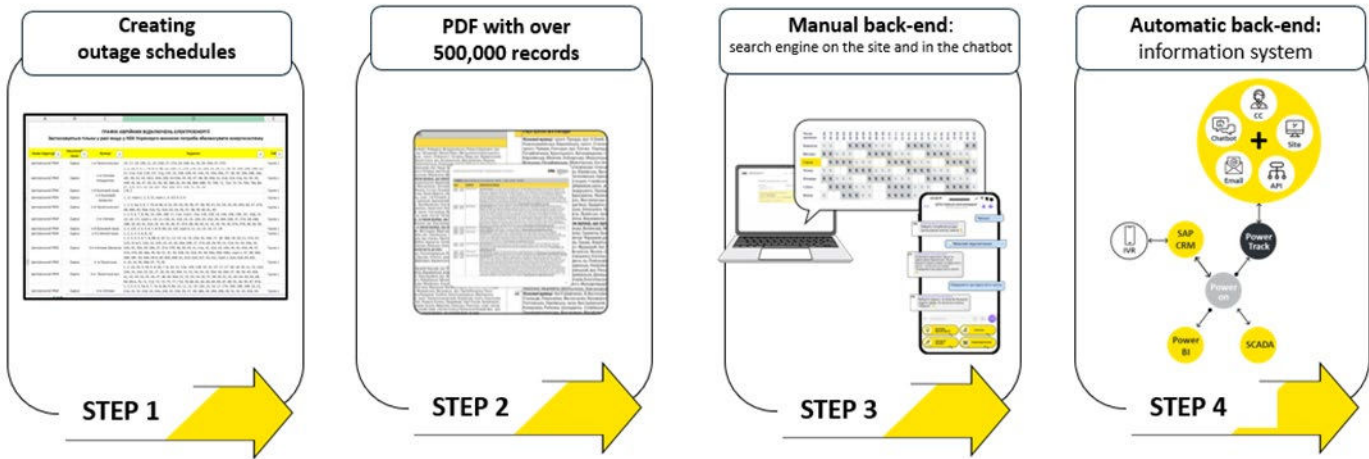
KEY SUCCESS FACTORS

The impact was measurable across several dimensions. Monthly calls to physical service channels decreased from 1.9 million to 1.1 million. The time needed by the dispatching department to calculate schedules fell from 60 minutes to 3 minutes. Group switching intervals were halved from 60 to 30 minutes. Guaranteed intervals of power availability increased from 2 hours to at least 3.5 hours. The speed of updating information in digital channels improved from 30–60 minutes to just 5 minutes. The active digital audience expanded 6.5 times, rising from 1.5 million to 9.6 million.

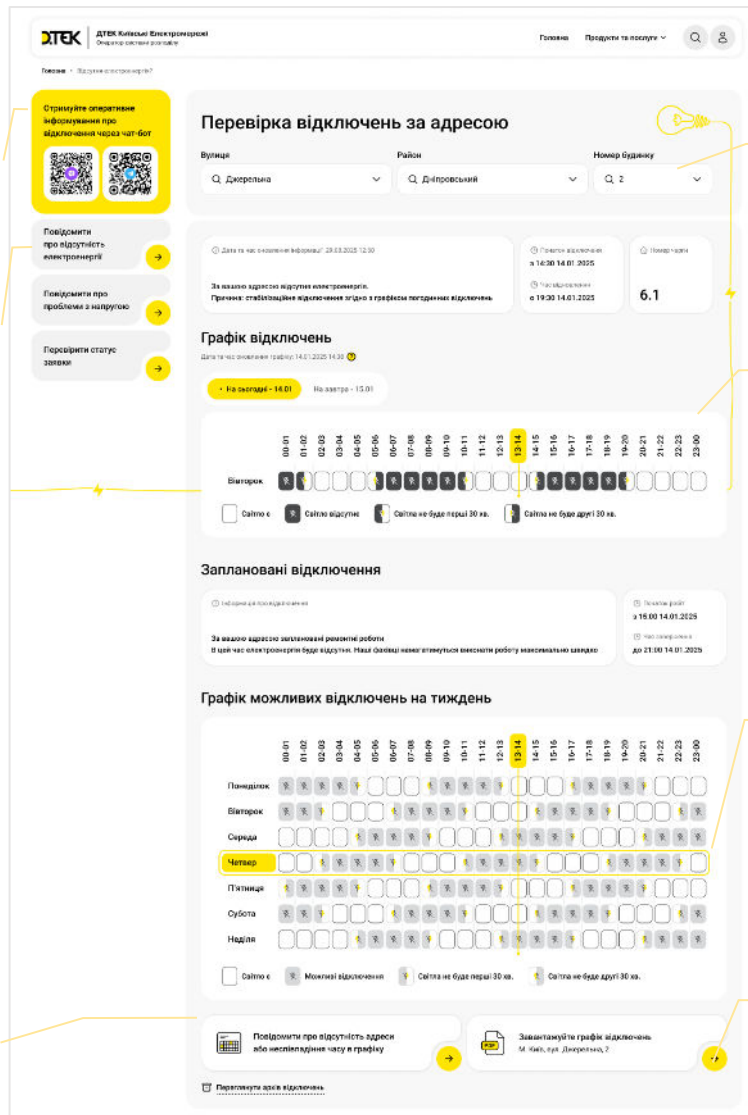
WAY FORWARD

The next step is the digitalisation of the information system through an upgrade of the IT landscape. This will include an automatic information system covering all types of events, from accidents to planned and emergency outages. It will also incorporate automatic switching and load redistribution, with dispatchers assuming a monitoring role only. The system is intended to be scaled to encompass all outage types. In parallel, a communication matrix will be implemented, assigning fixed information channels to each customer segment, defining the specific message formats to be used, and ensuring they are adapted to the type of event.

EVOLUTION OF THE SERVICE



EXAMPLE OF A WEBSITE PAGE DISPLAYING AN OUTAGE SCHEDULE



Customers can scan a QR code to connect directly to the chatbot (Viber, Telegram) and receive proactive information about outages, without needing to search the website.

The platform provides useful links to create requests related to power outages or voltage issues, and to check the status of such requests when the matter is not connected to scheduled outages.

To review the schedule or report an outage, customers only need to contact the address provided.

Customers can view the outage schedule for today and tomorrow through a simple switch. The schedule features a clear division between zones of availability (white) and absence (black) of electricity, without zones of uncertainty or switching. It uses half-hour intervals and displays the current status with a real-time timeline.

For planning beyond the next day, customers are offered an indicative weekly schedule. White areas show periods where electricity will definitely be available, black areas indicate confirmed outages, and grey areas mark times where availability is not yet determined.

A notification button allows customers to inform the company if an outage at their address does not correspond to the published outage schedule.

Customers who wish to keep a record of their schedule can download it directly in PDF format.