An energy giant takes the leap into AI automation

ENN taps into hyperautomation to boost productivity

by Kristin Johnson

5-minute read

ENN Group Co., Ltd. is deeply committed to solving the energy challenges of tomorrow with the technology of today. The green energy giant—which serves customers in more that 80 cities in China and beyond—has long been at the forefront of technological innovation in the industry. Its ultimate goal: to drive clean energy options that improve the quality of peoples' lives.

In early 2020, the onset of COVID-19 required thousands of the company's office-based employees to shift to working from their homes almost overnight. Demand for IT services related to remote working—such as requests for VPN permissions and password downloads and resets—instantly skyrocketed. IT help desk personnel were overwhelmed.

Fortunately, ENN was on the cusp of rolling out a new virtual assistant that combined AI from IBM watsonx® Assistant and IBM Watson Discovery technologies, as well as automation capabilities of the IBM® Robotic Processing Automation (RPA) solution, to interpret and respond to IT employee service desk requests.

Within a half a day, the virtual assistant helped enable thousands of employees with the technology they needed to work remotely. Previously, that effort would have taken days—perhaps even weeks.

The company's digital automation journey had started well before COVID-19 began making headlines. A year earlier, it introduced a virtual employee—"Little ENN Assistant"—into its Financial Sharing Center.

Based on IBM RPA technology, the automated financial assistant performed basic back-office tasks, such as pulling reports or handling monthly ledger booking. It was a resounding success, completing 2,000 – 3,000 tasks per day, implementing over 70 business scenarios resulting in millions of dollars of value and reducing processing time by 60%.

And that was just the beginning. As a complex, multifaceted company, ENN faced climbing operating costs, growing customer expectations for top-notch products and services, constantly changing business requirements and an ongoing need to keep employees satisfied. The company was ready for the next step in its automation journey: hyperautomation. Named by Gartner Research as the top strategic technology trend for 2020, hyperautomation combines automation with AI to drive actions based on intelligent decision-making.

Time to respond to thousands of employee help desk requests

0.5

days

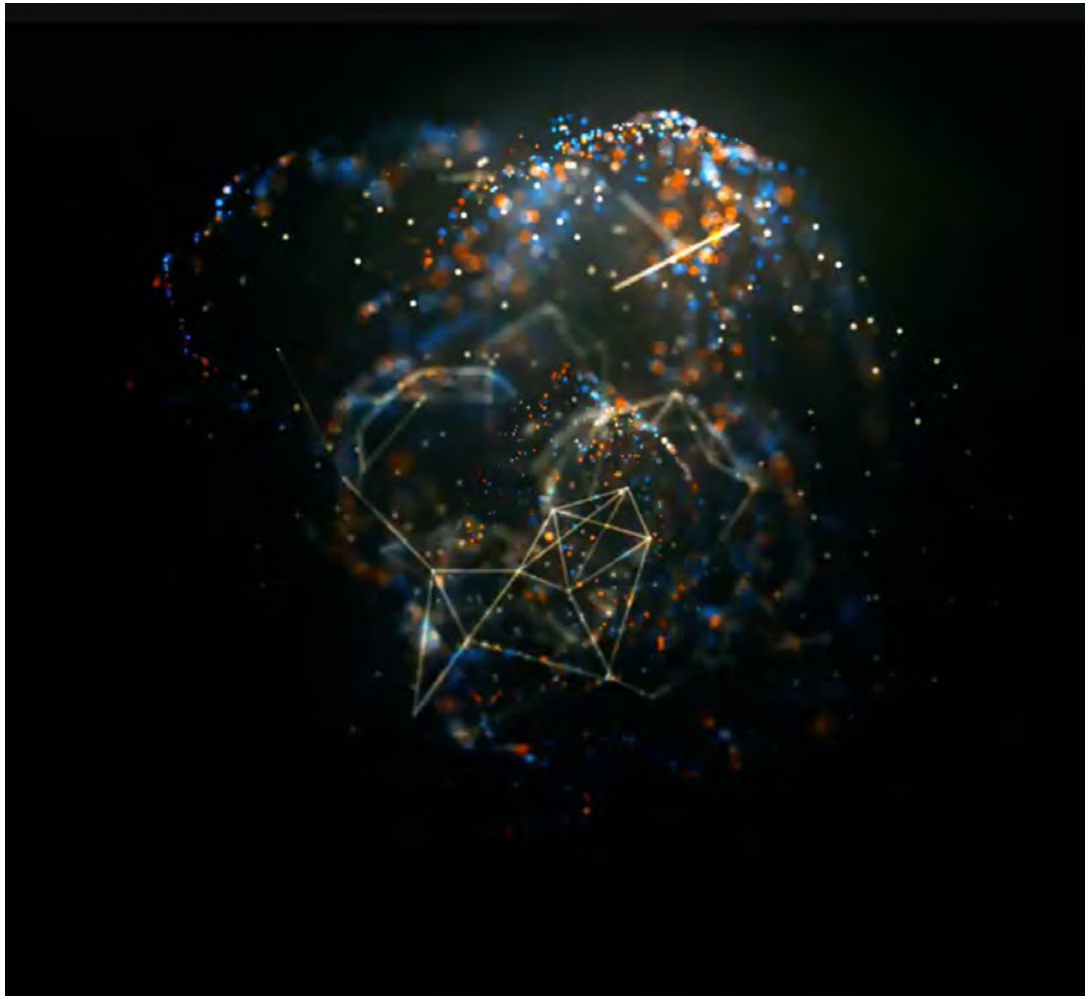
Time to get new virtual assistants up and running

2

days, versus multiple weeks

Two hands + one brain

To that end, ENN chose to build upon its existing IBM RPA foundation, incorporating the AI capabilities of the IBM Cloud Pak® for Automation offering combined with IBM Watson Assistant and IBM Watson Discovery solutions, both of which run on the IBM Cloud Pak for Data platform. This single platform provides ENN with a foundation for future solutions, as well as the ability to consolidate, operationalize and govern data from across its operations, reducing costs while eliminating data silos.

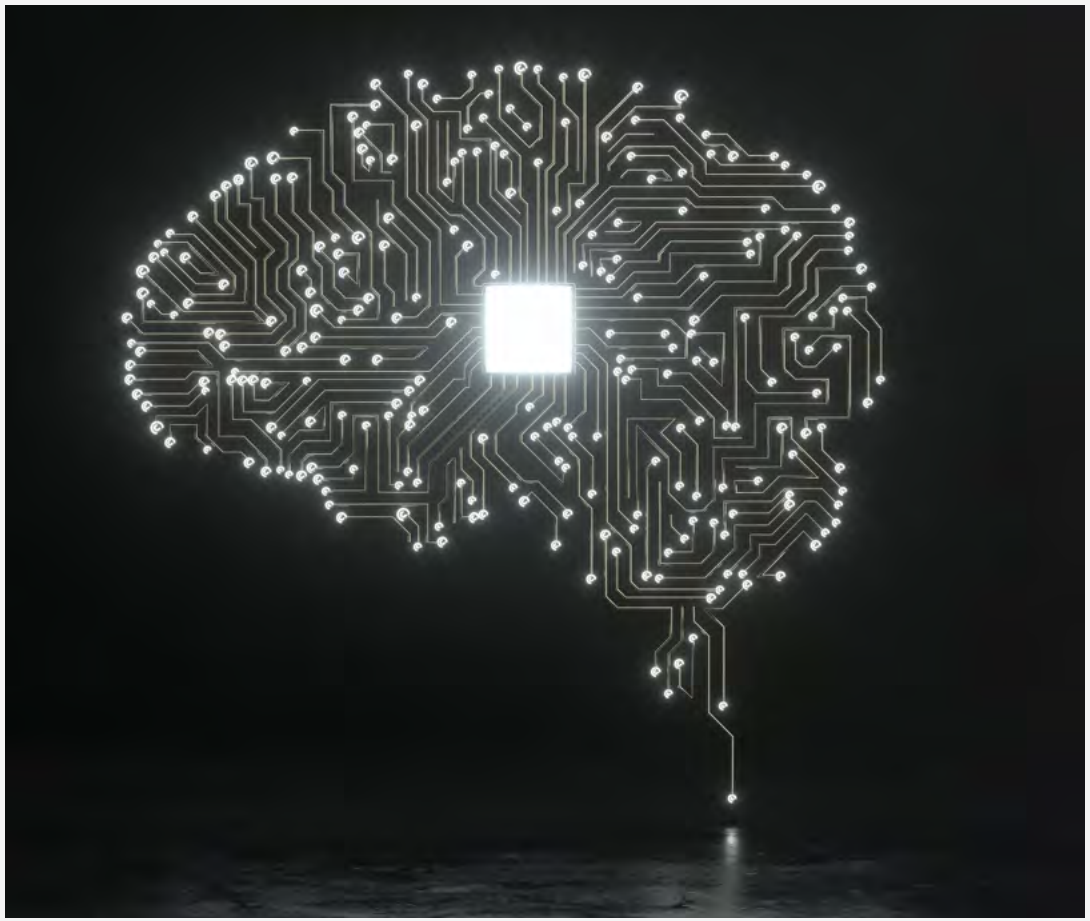


The choice was well-founded: IBM Watson Assistant software was named as a leader in conversational computing by analyst firm Forrester in 2018, and the Watson Discovery solution garnered "Best Innovation in Natural Language

Processing (NLP)" in the Alconics enterprise AI awards in 2019. On top of that, IBM Cloud Pak for Automation offers the convenience of pre-integrated automation technologies and low-code tools, so clients can design, build and run automated applications and services quickly and at scale.

With IBM Watson technology providing the "brain" of AI, ENN's updated virtual AI assistants are able to query users on intent, then pass that information over to IBM RPA's "two hands" of automation to perform appropriate actions.

The use of these intelligent virtual assistants now spans employee and customer self-service functions. The IT desktop services AI assistant launched at the beginning of the pandemic continues to apply the IBM Watson Assistant and IBM RPA solutions to query and assist employees with their IT requests.



For finance-related issues, an AI assistant, also built on IBM watsonx Assistant technology, supports complex multicycle conversations and interactions between diverse internal business and finance teams and the Financial Sharing Center, shortening

communication cycles and granting access to financial data based on authorization and business need.

Customer-focused AI assistants provide business and IT services to customers. Customers can get their questions answered—such as the status of a bill payment—quickly and easily, improving the customer experience while reducing operating costs.

An employee AI assistant provides ENN's 50,000 employees access to information housed in hundreds of business systems. Employees can get status updates on internal processes, such as expense reports, without logging into individual internal systems or performing manual queries. Using the IBM Watson Discovery solution, the virtual assistant can intelligently search enterprise and knowledge databases

to help customer service personnel answer complex customer questions.

And an "expert" assistant, also powered by IBM Watson Discovery technology, parses through large volumes of unstructured and structured data—such as that found in manufacturing manuals, development files and internal user guides—to provide employees easy access to information previously unavailable or only accessible through time-intensive training or searches.

Reaping the rewards of intelligent automation

For ENN, the advantages of its IBM solution are clear. The technology is easy to implement without extensive coding experience. For example, with ENN's customer service assistant, employees familiar with customer service conversation logic can easily develop and train chatbots using their configuration interfaces.

Turnaround time for getting virtual assistants up and running is quick. Previously, ENN spent up to two months setting up a virtual assistant. Now, with IBM Watson Assistant, that time—including intent training—is mere days, resulting in lower labor costs and faster deployment.

What's more, the solution embraces open source and can expose data, processes and models in the form of APIs, enabling collaboration with business partners and improved customer service. And finally, because IBM Watson technologies have been developed with best-in-class AI and natural language understanding (NLU), organizations can have a working solution up and running faster with less training and data to improve its performance.

In moving toward the future, ENN has demonstrated that it boldly embraces new intelligent working methods and is committed to achieving end-to-end automation to better serve its customers, its employees, the industry and the company itself.

"Our AI automation platform provides employees with personalized AI skills, helps employees perform daily tasks, frees them from repetitive daily tasks and unleashes their creativity and imagination."

Li Qiang
IT Platforms Executive, ENN Group Co. Ltd.

About ENN Group Co., Ltd.

ENN is a multinational, vertically integrated supplier of energy. Founded in 1989 and headquartered in Langfang, China, it has more than 100 subsidiaries and focuses on energy distribution, solar energy, energy chemicals and the development of energy technologies. ENN provides gas storage and distribution services to more than 80 cities across China, employs more than 50,000 people and reports total assets of more than CNY 40 billion. In 2019, the company listed annual revenues at CYN 164.5 billion.

Solution components

- IBM Cloud Pak® for Automation
- IBM Cloud Pak for Data
- IBM® Robotic Process Automation with Automation Anywhere
- IBM watsonx® Assistant
- IBM Watson Discovery

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