Case Study: Oil & Gas

AI-powered virtual assistant increases user satisfaction by 60%

A Norwegian energy provider enhances the user experience, improves self-service and reduces tickets for its IT service desk with the implementation of a virtual assistant (VA) powered by artificial intelligence (AI) and based on natural language understanding (NLU).

The IT service desk serves as the face of any organization, controlling all the communications between IT and the rest of the business. It’s not only a communication platform but also a critical factor in addressing users’ challenges and thereby helping them enhance their productivity.

Our client, a leading global provider of products, systems and services to the oil and gas industry, supports 22,000 employees through its IT service desk. The service desk handles incidents and service requests, along with user communications, at the instances of outages and planned changes to services. Employees were relying on traditional support channels, including phone, email and web help desk,

At a glance

A Norwegian energy player faced challenges with its traditional IT service desk. We implemented an AI-powered VA for the client, enhancing the user experience and productivity with faster resolution, promoting self-help solutions and enabling auto-escalation of tickets, as required.

Outcomes

- Deflected 36% of emails to the VA and live chat.
- Handled approximately 3,500 user interactions per month.
- Resolved 58% of user queries.
- Averaged 60% user satisfaction feedback.
for any communication with the IT service desk, resulting in an inefficient customer support process. Increased call volume was one of the major issues with the company's IT service desk. The client envisioned limiting voice calls without affecting service quality.

Apart from this challenge, the energy player’s IT self-service portal lacked interactive content, a knowledge base and self-help capabilities. Inefficient processes and resolution delays were affecting employee satisfaction and productivity.

Cognizant helped the energy player overcome its service desk support challenges and align its strategy for digital transformation and digital workplace services.

**Redefining the traditional IT service desk with the Cognizant WorkNEXT™ AI-powered service desk**

The Cognizant team identified the client’s need to move from its existing legacy IT support system and provide an AI-based next-generation digital support channel that would address the core issues relating to the user experience. This would also help the company promote and implement self-help capabilities.

The energy player also wanted to deflect service desk communications from traditional and costly communication channels to a virtual assistant to increase efficiency and productivity. Our team worked extensively to identify opportunities where users’ IT issues could be resolved through self-help capabilities by leveraging a cloud-based, next-gen digital solution. Cognizant’s WorkNEXT offering provides an integrated virtual assistant powered by AI and based on NLU. We implemented the VA on the client’s intranet portal for easy accessibility. It offers users a digital experience with self-help solutions, guides and instructions to resolve common IT issues.

**VA, first-line agent for basic queries and incidents**

As a first-line agent, the VA handles basic customer queries, reports incidents and provides level-zero resolution using conversational flow troubleshooting, self-help documentation and robotic desktop automation scripts deployment. The cloud-based VA, which provides one-of-a-kind integration with software, the client’s on-premises IT service management system, comes with an AI-based NLU capability.

The VA shows the five latest open incidents for status check and follow-up, posts live-chat conversations, auto-creates tickets in BMC Remedy and captures chat conversations as a work log for audit. It also has an option for auto-escalation to a live agent if the VA is unable to understand or answer any particular query.

We implemented a graphical user interface dashboard for bot performance monitoring and offline custom reports. In addition, we created a knowledge base at the backend that consists of over 500 articles, as well as a list of frequently asked questions and how-to articles for enabling the VA to improve its learning curve on the go.
With the VA implementation, the energy player transformed its legacy-based IT service desk to an AI-based next-generation, digital support channel that addresses the core issues of the user experience. We also helped the company promote and drive self-help capabilities and align with its digital transformation strategy of providing cloud and digital workplace services. The Cognizant team identified opportunities where approximately 12% to 15% of users’ IT issues could be resolved through self-help capabilities, thereby improving user experience and satisfaction.

**Looking ahead**

Overall, the implementation of the VA in the client’s IT service desk enabled the automation of high-volume, low-value and repetitive tasks so help desk agents have more time to attend to tasks that require human intervention. So far, the energy player has optimized its service desk with four full-time equivalents and released others to take level-two roles in other technical departments. With further bot optimization through self-learning, the company plans to release additional resources in the future to make the business more efficient and productive.

The energy player’s future roadmap includes:

- Enabling Norwegian language support within the VA.
- Providing translation services between Norwegian and English for live chat.
- Possibly integrating a service request module to improve the resolution rate.
- Allowing major incident notification to users through the VA.

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**About Cognizant Digital Systems & Technology**

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