BUILDING A DIGITAL TRANSFORMATION STRATEGY TO ENHANCE CUSTOMER EXPERIENCE

CUSTOMER'S OPPORTUNITY

Northern Ireland Water, established in 2007, is a Government owned company and one of Northern Ireland's largest employers with 1,300 professional and skilled employees. To provide a sense of scale, NI Water provides 585 million litres of safe drinking water and recycles 355 million litres of wastewater back to the natural environment every day. It costs around £460m each year to deliver water services in Northern Ireland and thousands of assets at a value of around £3bn are operated and maintained to provide these services.

As a major utility provider, delivering reliable customer service is central to NI Water's business operations. The company is constantly evolving and as part of its digital transformation strategy, NI Water was seeking to implement advanced technology that would enhance the experience of its extensive customer base.

IN OUR CUSTOMER'S WORDS

"As a utility company, we know our customers sometimes need information quickly, so don't want to be on hold with a call centre or have to search through pages of information for the answers they need. The chatbot solves this, providing quick and easy access to information and improving our customers' experience with our brand. IPI has made this transition easy for us. Its team of dedicated consultants worked collaboratively with our team, finding creative solutions to problems and making sure that the chatbot both reflected our brand and met the needs of our customers. We are delighted with the results to date and are excited about continuing our digital transformation journey with IPI."

Orla McGivern, Customer and Insights Senior Manager at NI Water

EXCEPTIONAL CUSTOMER CONTACT

HOW IPI HELPED

NI Water approached IPI to create an AI-powered chatbot for its website. After analysing how its customers like to engage and communicate, NI Water found that the majority of them go to its website first to get information. While the company had a search facility on its website, it wanted to strengthen its online resource through introducing a chatbot to help customers self-serve and find information more easily, and, in the process, reduce their need to call a contact centre.

IPI worked in partnership with DigitalCX, the chatbot and intelligent assistant expert, to design and deliver the completely bespoke technology. Initial work focused on developing the bank of content and the dialogues that the chatbot would draw from to provide intelligent and conversational answers to frequently asked questions. The 'Ask NI' chatbot has been designed to use machine learning to predict the kind of information web visitors are looking for when they type in their enquiries. In addition, it uses Natural Language Processing (NLP) to understand customers' intent and provide succinct and structured dialogue to the most commonly asked questions, whilst also providing customers with links to rich content and additional resources, such as video, when required. When the chatbot cannot provide a suitable response, it directs the customer to contact the wider business to resolve their enquiry.

Once the bank of content had been created, the project team – which comprised personnel from NI Water, DigitalCX and IPI – had to then decide on the look and feel of the chatbot, as well as the tone of the 'speech' communicated. NI Water decided on both a male and a female chatbot – who would appear interchangeably on the website – with avatars positioned on the homepage so customers could quickly and easily access answers to their questions.

The team then built a staged environment where the system was rigorously tested by internal stakeholders and continually refined before the chatbot went live to NI Water's customers.

INCREASING THE FLOW OF SELF-SERVICE

To encourage use of the chatbot, NI Water widely publicised its availability to its customer base on bills and rebranded envelopes with pictures of the avatars, driving awareness of the 'Ask NI' chatbot and highlighting how easy it is to use.

Since its launch the chatbot has delivered exceptional results. The chatbot handles 2500 - 3000 customer interactions per month and is answering 93% of questions asked, reducing pressure on NI Water's contact centre and enabling agents to focus on more complex work, which was one of the primary reasons for implementing the technology.

NI Water is consistently looking to improve this figure by refining the chatbot's answers. IPI and DigitalCX have designed the chatbot to use artificial intelligence (AI) and machine learning to actively analyse the responses given to customers, as well as the questions posed, to better understand the customers' intent and to make changes to ensure the chatbot is even more accurate.

The backend system that underpins the chatbot has also been designed so NI Water can gather vital business intelligence about how its customers seek out information and interact with the website and contact centre. Comprehensive dashboards and reporting enable NI Water to better understand the customer journey and make improvements to it based upon the findings.

Customer satisfaction with the chatbot has also been high, particularly in relation to the accuracy of the answers to questions posed. Typically, benchmarks for new chatbots are set at a 30% success rate. However, NI Water's chatbot initially performed at a 70% success rate – exceeding initial expectations, and now consistently answers 93% of questions from customers.

IPI and DigitalCX continue to support NI Water through ongoing maintenance, support and further development of the product – all working in tandem with the delivery team at NI Water. NI Water has plans to further expand the chatbot's functionality in the future to enhance the 'chatty' feel of the bot, to enable features such as smart speaker functionality, to anticipate customer queries though auto-dialogues, and to minimise the time spent by the chatbot to understand lengthy customer queries.

"Through our conversational AI platform and by working in collaboration with IPI, we have disrupted and enhanced the customer experience for NI Water's customers and driven efficiencies throughout the wider organisation. We are extremely happy with the results and look forward to working closely with IPI in the coming months to move NI Water into their next phase of digital transformation."

Lauren James, Business Development Consultant at DigitalCX.