



A REAL CONVERSATION STARTER



**The voicebot solution
transforming Revenue**

GAME-CHANGING CONVERSATIONS

Tax. Known for complexity over customer service, it's not the first place you look to for innovation inspiration. Unless you're The Office of the Revenue Commissioners in Ireland (Revenue).

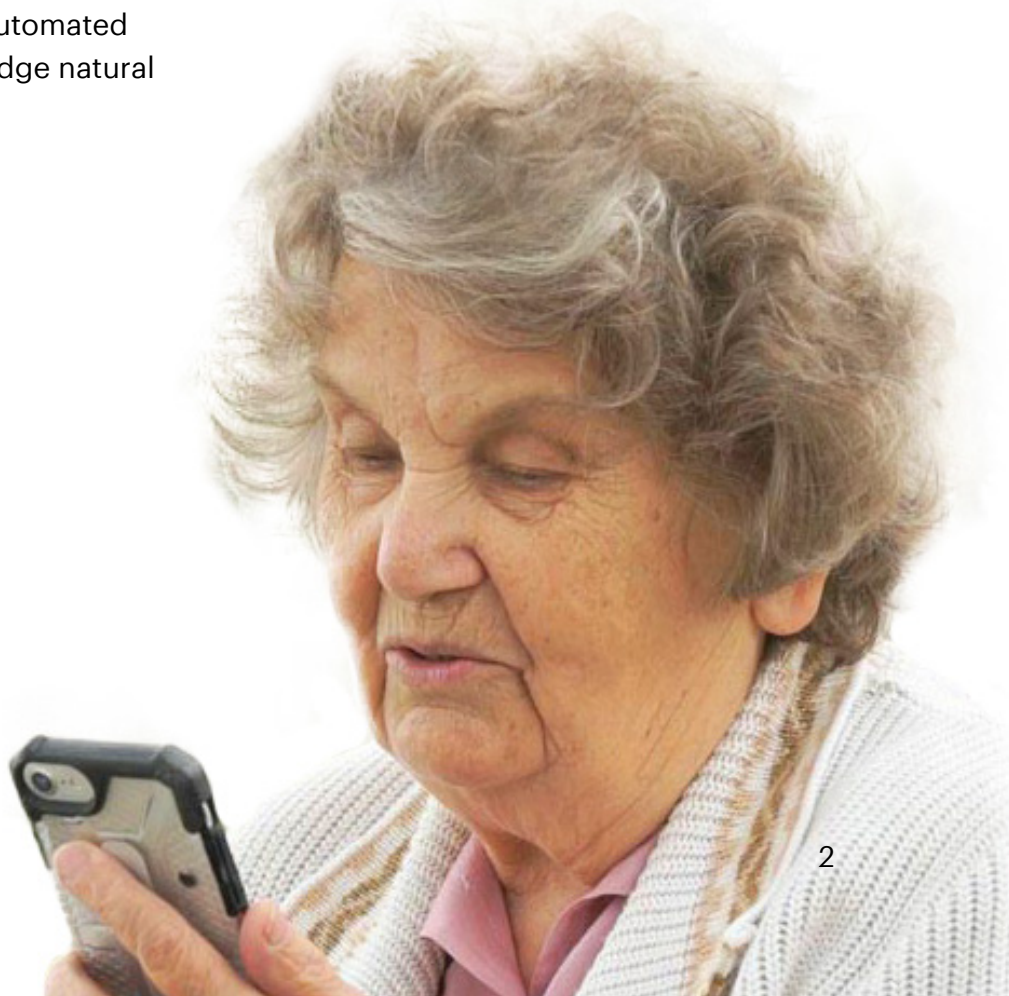
In a world-first, Revenue saw the opportunity to better meet customer needs using new technology—delivering game-changing outcomes.

With the telephone being the most common channel for contact, Revenue receives more than **three million calls** a year. They're not all complex enquires, but they all still require, time, attention, and friendly assistance.

For John Barron, CIO at Revenue, this customer service demand represented the perfect chance to take advantage of artificial intelligence (AI) automated services, as well as cutting-edge natural language processing.

The bold vision was to make a significant shift both technically and culturally—reimagining a new approach to call handling. Revenue took a subset of calls related to tax clearance, to pilot a fresh approach to managing customer calls.

The aim of this pilot was to prove the technology and offer a 24/7 automated service, providing the most efficient, effective experience for customers.

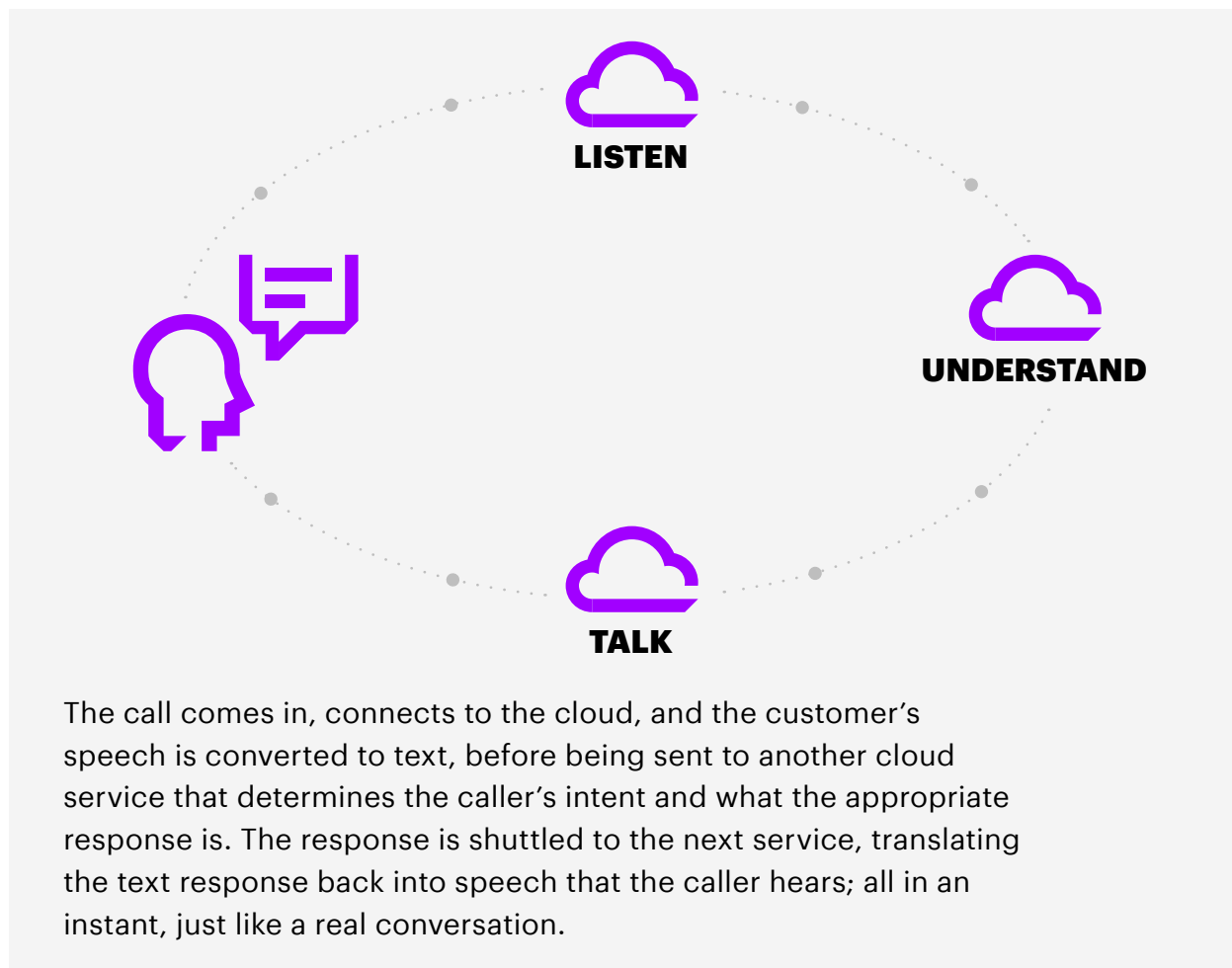


THE HEART OF A VOICEBOT

From the beginning of Accenture’s voicebot partnership with Revenue, it was crucial that the customer stayed at the centre of this innovative approach to services.

Revenue wanted an AI-powered, conversational virtual agent that could actually take a call, understand the caller and answer the questions to the customer’s satisfaction—talking the way the customer does.

Accenture’s Taxpayer Survey showed that more than a third of customers were already using AI in their day-to-day lives and that 70% wanted more personalised services¹, so the focus was to create a human-like interaction with the technology:



¹ <https://www.slideshare.net/accenture/meet-your-new-taxpayers-agent-accenture-digital-taxpayers-research-2017-82138639>

Meeting this specification and the need for a truly human experience required the combination of multiple technologies and specialist teams.

As part of the development process, Accenture's Liquid Studio London provided expertise on both AI and Voice Experience Design—which enabled the project to run smoothly and quickly. The team used the Accenture Conversational AI platform as an accelerator to reduce the time to market to only a few months, and improve the flexibility around incorporating new innovations in the future.

Early on, testing showed that the questions the voicebot asked needed to be very specific, so customers could

follow a path, rather than allowing for an entirely free speech interaction. Even so, the solution ended up comprising over 200 unique dialogue steps, addressing 18 possible use cases, and the capability to recognise 21 intents. It drew together speech detection, text-to-speech and natural language processing technology.

And at every stage, our North Star was the needs of the customer, and how those could best be accommodated.



TALKING THE CUSTOMER'S LANGUAGE

“ Despite what people think, having something answering the phone is not that common – most of the AI work is with Chatbots where people type in something. We're taking actual calls.”

John Barron, CIO

The Office of the Revenue Commissioners, ROI

Following extensive testing and customer validation, Revenue's voicebot went live in July 2018, and it didn't take long to demonstrate its success.

Within the first six weeks it had already handled over 2000 calls, but more importantly, it was popular with customers.

Like the voicebot, the results speak for themselves:

- 50-60% of calls are handled from start to finish by the voicebot
- 70% of first-time applicants engaged with the voicebot when submitting their application
- 75% of tax clearance holders were

able to retrieve an Access Number

- Only 10% of calls were transferred due to failure to understand

The voicebot even helped an 86-year-old gentleman complete a clearance application, when under normal circumstances he would have been issued with a paper form.

The bottom line: this world-first answered Revenue's needs and is delivering improved customer service, reduced costs and increased efficiency.

THE NEXT STEPS

As citizens demand more from public agencies, including intuitive and responsive 'living' services that fit seamlessly into their lives, organisations will need to drive digital transformation forward.

This project is a prime example of how future systems can be designed to adapt to humans rather than expecting humans to adapt to technology.

Revenue has not only achieved its vision, delivering a one-of-its-kind capability in the public service space, it's now in the position to innovate across the organisation. This new system is future-focused and ready for the next step on a journey of innovation. By embracing adaptable, dynamic and above all human-centred technology, Revenue is ensuring it is ready to serve the ever-changing needs of its customers, now and in the future.

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