

CASE STUDY

How one utilities business used AI to anticipate and prevent customer complaints



A national utilities business receives daily calls to its helpdesk, on matters including complaints, inquiries, issues, emergencies, and connection updates. The company was aware that the aggregated information from calls contained invaluable insights that could reveal patterns in customer behaviour and prevalent challenges, as well as how the helpdesk team approached and handled enquiries.

Those insights would allow targeted preventative measures and procedural improvements, but the company did not have a way to extract that information and present it accessibly enough to extract its value.

The challenge

Calls to the helpdesk generated unstructured data, which by its nature is difficult to store or analyse.

The evaluation process has traditionally involved a monthly audit of a random sample of audio recordings. Unfortunately, that process cannot capture a meaningful sample size to present representative challenges and sentiments, which means it cannot inform the leadership's decisions.

The solution

Agile built a proof-of-concept solution using a large language model (LLM) and sample of helpdesk calls. We trained the model to extract a short summary of the call, the reason for the contact, the call sentiment, the presence of profanity, and the duration of the call. The model:

- ✔ Ingested data from dummy-generated calls
- ✔ Transcribed calls using Microsoft Azure and stored them in a database
- ✔ Extracted information using OpenAI's GPT 3.5 Turbo model
- ✔ Stored the results in an Azure Synapse database
- ✔ Powered dashboards to provide insights from the data

The result

The successful proof-of-concept demonstrated the model's ability to process audio recordings and extract structured information, which could then be tabulated and used to inform dashboards that:


- **reveal** market sentiment
- **recognise** patterns in calls that point to underlying or chronic issues
- **anticipate** future complaints and queries to resolve them earlier

That data can also reveal potential improvements in call-handling, to strengthen customer service procedures and training. The business can now feel confident in introducing the AI model into its customer service process.

Transform your business with AI

AI can unlock revolutionary potential for your business, and in many cases the transformation required demands a bespoke approach. Agile's expansive range of expertise means we are the one partner that you need to tailor and develop the AI model for you.

- ✔ **Our methodology** delivers value early on and in continual increments
- ✔ **Our consultants** have a deep understanding for UK frameworks and EU regulations
- ✔ **Our data scientists and engineers** are highly qualified in AI applications and related systems

 **To confidently unlock AI's transformative potential for your business**

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