Revolutionising customer experience with conversational AI

NTT DATA organised the first ever hackathon with Tesco Mobile with the aim to explore how chatbots and AI can transform the customer experience journey.

The idea of the hackathon comes from the open-source community and has been adopted by many businesses as a low-risk way to foster creativity and give their software developers a chance to put forward their own novel solutions to business challenges.

Tesco Mobile wanted to apply the hackathon idea to conversational AI but it had limited experience in this field and so it asked long-time partner NTT DATA for help.

The client

Tesco Mobile is a mobile virtual network operator (MVNO) that operates in the United Kingdom, Ireland, Slovakia, and the Czech Republic.

The brand is owned equally by British retailer Tesco PLC and Virgin Media O2 Ltd, which operates the O2 network in the UK.

The company benefits from the cross-selling opportunities provided by its phone shops in Tesco supermarkets and offers discounts to customers who participate in its Tesco Clubcard loyalty scheme.

To stand out in the highly competitive UK marketplace, Tesco Mobile puts great emphasis on customer service, calling itself the "customer champion brand". It has been recognised as the best network for customer service by Ofcom, the UK telecoms watchdog. However, customer service has traditionally been very labor intensive and so Tesco Mobile, like other mobile operators, wanted to look at new, more cost-effective ways to serve its customers through automation strategies.

The challenge

Tesco Mobile recognised it needed to modernise its contact channels and make its customer service more cost-effective by offloading some routine interactions from human agents to a conversational AI.

But it had limited experience using conversational AI and was worried that the move, if not handled correctly, could backfire and negatively impact its users. It had to ensure it got the balance right between automation and customer experience.

It also wanted to ensure that any new systems developed in accordance with its Agile transformation plan. This centers on the use of Agile tools, techniques and ways of working, specifically the use of Agile Squads, which are small groups of people responsible for specific value streams instead of larger teams.

It needed a suitable partner capable of helping it address the challenges of organising the hackathon, and chose NTT DATA, partly because of its strong track record working with Tesco Mobile.

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We have been working with NTT DATA for a number of years. We find them extremely responsive and helpful. It's a joyful partnership because it's about helping us fill in the gaps of what we don't have. "

Sally Marriott
Chief Technical Officer
at Tesco Mobile

The solution

Tesco Mobile chose to use a hackathon approach to gain experience using conversational AI technologies applied to various use cases without the pressure of delivering a viable product.

NTT DATA was selected to support and facilitate the initiative, and it helped with the due diligence and during the four-week preparation phase prior to running the hackathon.

Three multidisciplinary teams involving 24 IT professionals participated in the hackathon and each team was free to choose a particular use case:

- One team investigated how best to use a conversational chatbot to automate the typical customer service flow.

- The second team looked at the challenge of chatbot-to-human handoff, which is necessary when a chatbot cannot understand what the customer wants and has to be done in a way that is as seamless as possible.

- The third team investigated the application of chatbots to conversational commerce. The aim here is to facilitate the customer journey on a website, particularly for a common actions such as a customer wanting to change their address.

Three vendors of conversational AI solutions were invited to participate in the two-day hackathon: NTT DATA, LivePerson and Salesforce.

Each team was tasked with delivering a working prototype and a presentation at the end of the hackathon.
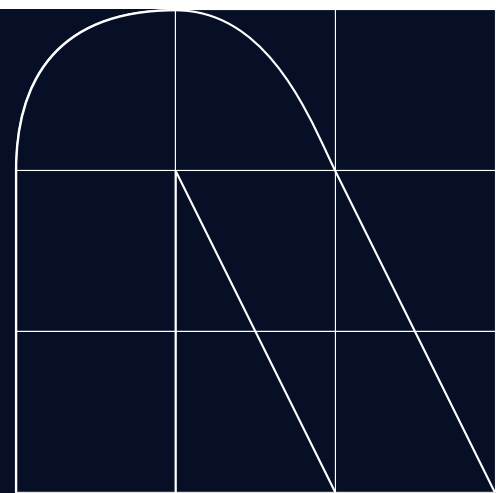
The results

Each of the teams successfully delivered a working prototype of a solution for its chosen use case. The event enabled each team to leverage their knowledge, experience, and passion to the fullest extent. This setup allowed each team to develop unique experiences centered around the selected technology platforms. As a result, each team created a different demo with unique use cases based on the initial guidance provided.

The tangible outputs from the hackathon included a WhatsApp chatbot to access historical customer information and provide tailored advice and web chatbots that were able to escalate complex queries to human agents.

> " The whole idea was to work with Tesco Mobile to go beyond the hype around AI and make it real. So we started a hackathon, which is where great initiatives can begin. "
>
> **Francesco Palma**
> Conversational AI Practice Leader
> at NTT DATA UK & Ireland

Next steps

After the experience acquired during the hackathon organised by NTT DATA, Tesco Mobile is now evaluating the next steps to take with contact automation.

It has seen the advantages of using chatbot technology, but recognises the importance of ensuring high levels of customer service and so adoption of conversational AI and other AI technologies will be done gradually.

The hackathon has enabled Tesco Mobile to develop its technical skills and knowledge by leveraging existing APIs that NTT DATA helped develop and these APIs form a foundation for future product development.

Why NTT DATA

Tesco Mobile has been working with NTT DATA for almost a decade and it wanted to build on that relationship and leverage NTT DATA's skills and experience in contact automation, to modernise its legacy contact automation platform.

The trust acquired over that time was evident in Tesco Mobile choosing NTT DATA to support and facilitate the hackathon designed to explore conversational AI use cases and technologies, which are areas where NTT DATA has specific expertise.

For further information

www.es.nttdata.com