



AN INTELLIGENT SMS DELIVERY ASSISTANT

VIDEO TRANSCRIPT

Hi, I'm here with Georgio. We're going to talk about a piece of technology currently being displayed in our hub. Georgio is from the Innovation Programme team.

Tell us a little about the technology that you have been working on, which is all around logistics and parcel delivery.

Hi, thanks for having me. Very happy to talk about this solution. This is a chatbot – a two-way communication channel between customers and managers managing the delivery process. Now, when you have a package for delivery, you get a message saying your parcel is out and you're going to receive your package today but you cannot say you are out or unable to receive it and reschedule for another day. We are bringing this possibility with our technology. This technology will allow a friendly conversation with a chatbot, using SMS on your phone and easily with friendly language leveraging natural language processing, you can ask to get your packaged delivered to a neighbour or leave it in a safe place if you are unable to be there or just cancel using one channel of communication which is very convenient nowadays - as research shows that people are 90% more prone to using one-channel than looking to an app, looking online or calling customer service. We are using machine learning to improve customer experience by giving them smart decisions in terms of parcel delivery and asking for feedback.

What's the customer journey?

You will receive a message giving you a confirmation and giving you a choice to reschedule or cancel your delivery or delivery to a neighbour. The chatbot will pick up your reply and, for example, if you have asked for it to be left in a safe place outside, the chatbot will analyse the weather and if it is scheduled to rain, you will be asked whether you still want this to be left outside based on the forecasts and if you want to leave with a neighbour instead.

So, if I ordered something paper, it would basically turn to papier-mâché. The chatbot would ask 'are you sure you want do that? Is that the best idea?'

Correct. So, the very important part is using machine learning to understand the context of your suggestions and we need to integrate this with several APIs. The chatbot will also use a calendar API to send you a calendar invitation to remind you that your parcel is coming today or later tomorrow.

What exactly is an API?

It's an application – it's a layer that you can use to enrich your offering. So, the weather API is an open source database of weather data and you can log in to this service and integrate it with yours. We're using IBM Watson – they get the data from the weather API and processes it and sends you the message about the weather if it's forecast to rain. After you agree on a date and location, the calendar API comes into play and you are sent a notification as a reminder.



Where is the human interaction in this process? Am I just speaking to a robot at the other end?

The driver takes advantage of this because they are sent notifications in real-time as soon as you ask the service to reschedule your delivery, the driver would know what to do and whether to still deliver the package or what to do with it based on your messages. We're mitigating the risk of failed deliveries in the last mile. Failed deliveries cost £1bn per year in the UK alone so this is a big operational savings. Sometimes people just aren't home or your neighbour isn't home so it's a complicated process. It's not very easy to get it working in a friendly way as we don't want a service where you write 20 words and repeat yourself – we just want to use a couple words and the driver will find new available dates in the back-end and propose new solutions so it's very easy and straightforward and nobody has the time to think of these small logistical things.

So, with this technology, there are clear mutual benefits for the logistics company and the customers?

Yes, and by using machine learning, the service improves. We will use your previous communications to improve the back-end; the operation manager will understand the metrics, all this feedback and past performances to decide what training the drivers may need or different arrangements to complete in the company so that's another big point of the solution.

Are there any other uses which you can use this technology?

Any ticket services such as concerts and flights. It's still a demo so there's a lot of space for improvements and a lot of space for getting more into the details of providing specific solutions.

So, actually understanding your customers better so we know that they do this so we can provide them with this!

In fact, what we do in the IP is we don't label our solution for a specific industry or client; we build a general solution for different clients within different industries.

That's brilliant. Really informative and it sounds like a cool piece of tech. Favourite Sweet?

Cola Bottle.

It's a popular option. Thank you so much for talking to us.