From the pages of Produce Business UK

Voice-experience technology is becoming a fast-growing opportunity for developing a powerful user experience in the Fast-Moving Consumer Goods (FMCG) world. Imagine guided recipes by voice while cooking or personalized recommendations on produce while walking in the supermarket.

At the recent Food Matters Live B2B Summit, the winner of the event's first 'hack-a-thon' was a relatively new company, London-based Rabbit & Pork, which introduced a voice-recognition technology that could revolutionize the world of food, produce, retail and how we interact with it.

Rabbit & Pork has been running as a company for three years under the TiPi Group. Essentially, they are an integrated marketing company set up with different departments and company names within the group, where some companies look at search-engine optimization (SEO) and how to drive traffic, while other companies are looking at designing creative.

Produce Business UK sat down with founder of Rabbit & Pork, John Campbell, to understand the relevance of voice technology in the food industry, the demand their company has received for it and the future of interaction with food and dietary requirements, including personalisation.

How did your company begin, and what made you realize the potential of voice-experience technology for the food industry?

"We noticed that there's going to be this new and emerging technology, which is voice

technology: Amazon Alexa, Google Assistant, Siri and so we decided that we should start Rabbit & Pork, a company whose brands can work with and understand the potential of voice technology and how they can work in the area, especially in the FMCG vertical.

We have been working on a proposition for the whole year; understanding the technology and understanding what clients are interested in, and what sorts of products can live in the kitchen, for example. We are working with companies now developing Alexa skills and Google actions so that consumers can have a conversation with the smart speakers in their kitchen, and hopefully gain some value.

One of the big areas that we notice is interested in this is related to food because the intent of people in that space is that they quite often want to get a recipe idea or want to check the ingredients, or they want to check measurements; things like the best way to crack an egg or the best way to cut up a pineapple, and lots of these smart speakers are in people's kitchens, so that's one of the key verticals that we are working on."

Where does the data come from?

"We did some research which looked at: If people ask a question to the Google assistant, what do they give back as an answer. Or in some cases, if they even got an answer back. So that's where we started with 'key phrase reports.' We started having conversations with [Nielsen Brandbank](), a company in the UK who take product information and put it into databases for retailers.

For example, they'll be able to take the fat content, the calorie content of a product, product imagery, and whether it contains nuts etc, and then be able to put that in a structured data system for retailers such as Morrisons, ASDA, Tesco or Marks & Spencer. They then can display that information on their website."

And how, more specifically does this technology work?

"The way that Google is working at the moment is that the Google assistant works on smart speakers — Google home and Google mini — but it also works on all the Android devices. So the idea is they are trying to make voice just another user input, so it doesn't matter if you're out and about, or you are using it on your phone, if you're in your kitchen and using your speaker, the idea is that you should be able to get that same consistent conversation across all of them.

Samsung has created their own system, which they are looking to implement into TVs,

fridges, washing machines and any kind of smart speakers, as well. The only difference will be whether it's for the screen because then you can see products or whether it's just going to be via audio, so therefore you know it's going to be listening to the recommendations.

When you researched these verticals what did you discover particularly in the FMCG area?

"We did these voice-search ranking reports where we asked the Google assistant 500 questions, and then we recorded the answers that the Google assistant came back with. With that information, we were then able to decipher that these are key phrases where Google can answer you, and then these are areas where they can't answer.

What we found is that on different verticals, say finance, Google is really good answering questions, as well as in the travel industry regarding hotels.

For example, what happens if someone says they want to buy some bread, or they want to know the nearest place they can buy some ice cream, what are the ingredients in a certain product, etc.? We were very interested from a data level approach to reveal what were the capabilities of the Google assistant.

Where the Google assistant cannot answer a question, that is an opportunity for a brand or a producer of that product to provide that information.

And what was the actual brief of this hack-a-thon?

Nielsen Brandbank and another company called [FoodMaestro](#) decided to host a 'hack-a-

thon.' They invited us, a team from Sainsbury's, Oracle and from Daemon Solutions. The challenge was how we can use their databases — the FoodMaestro and the Neilsen Brandbank — to create a product that would help the healthy consumer or the conscious consumer.

Our strategy was to use the Google assistant to allow people to have a conversation to say, 'Can I eat this? Can I not eat this? Can you recommend some products?' and then those decisions and all that information would be powered by those two databases.

In terms of the technology around this, how is all the information aggregated?

In the product we created for the 'hack-a-thon', there are two elements to it. One was simply fact based: So people ask, 'Can a vegan eat an egg? Can a vegan eat meat? Can they eat an avocado? Can they eat potatoes, etc.?' We gathered the most popular questions using key phrase research that allow people to understand how many people search per month for a particular key phrase. Then we created the answers from that.

The second step was to research the product recommendations. That's where the FoodMaestro database is able to tell us specific products that are vegan friendly or are Halal friendly or are Kosher, etc. So it was two elements: one was the more fact-based Q&A, which we had to generate ourselves, and the other was the product lead recommendations that were all driven by the FoodMaestro database.

It's really important that either companies that are producing products or creating consumable products provide that level of detailed information because that level of information then allows companies like ourselves or supermarkets to give accurate and precise product recommendations.

As people pick more specific lifestyle around food: vegan, low carb diet, high fat diet, or whatever it may be, people are expecting Alexa and Google websites to be able to return very specific products so when they search for a healthy chicken curry, they expect a curry that is not just technically healthy, it really is.

This is also an important element for people who have allergies. For example, if you have a nut allergy, you need to make sure that those product recommendations are accurate, because it's a matter of a health risk.

The potential seems enormous. What sort of demand for this do you have right now?

"We are having ongoing conversations with a couple of FMCG brands because they realise that their consumers are asking these questions to Alexa and to Google and they want to be able to be part of that conversation. It's important for them to get their information across correctly and there's a great chance for them to understand the consumer because they will then receive data back about what's the most popular questions people are asking about their products.

Then, the other side of things is the retailers. Let's take Tesco or Sainsbury's. As people are conducting their weekly shop online, buying produce, for example, potentially voice technology can help people make better decisions or find new products.

Finally, the other avenue we are looking at is the takeaway industry. There has been a really big change in the takeaway industry in the past five years in the UK with people using Uber Eats, Just Eat and Deliveroo. So, the opportunity again is to conceive of ways that voice technology can provide product suggestions or product refinement. For example, if one is ordering something but doesn't know the contents of a particular meal, they can turn to Google assistant about particular items matching their food requirements.

Do you see a trend in food-related industries looking towards audio?

Yes definitely, it is related to the kitchen dynamic, but also the intent of the purchase. For example, people need this information because they are about to make a purchasing decision or are trying to come up with a weekly food list and need help with that. The other thing is the kitchen dynamic and often people's hands are wet in the kitchen, chopping something or handling some kind of raw meat or something, and they don't really want to get their phone out and start to touch it.

There is a new Google Home Hub, which is the new Google assistant speaker with a screen that has been released recently in the UK. The TV campaign at Christmas shows users trying to cook a Christmas dinner while touching the phone or using their tablet with their nose; so it is that kitchen dynamic which is really interesting from a food perspective.

Where do you see the future on this going? Where could there be an even further enhancement of this space?

I think one of the things we have spoken a lot about internally is personalization. The idea is that within my household, for example, I've got myself, my wife and kid and so we all might have slightly different food preferences or lifestyle choices or maybe my kid is allergic to nuts, etc. I want the assistant to be able to suggest products or suggest meal ideas that it knows are going to be suitable for the whole family. Taking that forward, say for example, that I'm a vegan, I can still go and ask for cheese and it is going to recommend vegan cheese because it knows that that's the choice that I've made, so it is taking that level of assistance to another kind of level.

So you no longer have to explicitly say, 'I need some vegan cheese or I need a recipe that

does not contain nuts,' the assistant will just know the preferences of your household and that will make it a much quicker and a much easier and better experience.

Part of that relies on all the businesses being able to give that level of data in a structured manner to supermarkets and to recipe websites, etc., so that level of customisation is possible."

Would you say that the UK market is ahead of the curve on this? What about the US market?

One of the interesting things that we've seen is that Google has partnered with companies like Target and Walmart, which is getting almost instant delivery on some kind of products, so the idea is that you can go to the Google Assistant and say, "I need to order some products," and they can hook you up with an order to get some delivered. However, in terms of the whole customisation and personalization, I think that is still something that we have yet to see the fruition of.

I know a lot of brands are working on that.

In Asia, it is slightly different because they have developed their own voice assistant and also the culture in Asia, especially in China, is that voice is a little bit more of a natural interaction due to the fact that it takes slightly longer to write in Chinese writing on your phone. So they are more used to sending voice messages to each other or using voice-recognition technology. Due to this, there is a potential for the Asian market to jump ahead of the Western market because of the adoption of this voice technology.

And finally, what is the meaning behind your company's name Rabbit & Pork?

We are called Rabbit & Pork, which is actually cockney rhyming slang for talk, and obviously the technology is all about talking to each other!