MHD SUPPLY CHAIN

GIVING FOOD A VOICE

When food spoils before it can even reach the customer, everybody suffers – especially suppliers who spend so much time, energy, and resources putting out the product to begin with. Luckily, Escavox's food visibility solution is here to help. *MHD* caught up with CEO Luke Wood to learn more.



ight now, we lose between five and 30 per cent of our horticulture to waste, and between three and five per cent of our meat," says Luke Wood, CEO of Escavox, a company specialising in supply chain visibility provision for food producers. "We are paying to throw away perfectly good food that doesn't need to be discarded, simply because we lack the information to manage and control it."

That there should be more waste in fresh food supply chains than in others isn't surprising when you're dealing with a perishable good. But that just means the stakes are higher for food producers sending products through the supply chain. It's a challenge compounded, Luke says, by the fact that food supply chains aren't vertically integrated.

"What we have are many producers, multiple carriers and logistics providers, and several retailers," he says. "This forms a complex, many-to-many-to-many relationship. Food is also distinct in that its value changes in the supply chain because it physically changes properties. A pair of jeans remains a pair of jeans no matter where it is in the supply chain, and we're just debating cost as we go along."

Thus, when something goes wrong – a strawberry turns into goo somewhere in its journey – it's difficult to discern why, and who's responsible.

"The food world is littered with this shell game of accountability – who created the problem, who can be held accountable for the problem, and who can be charged for the problem?" Luke says.

If only the food could speak for

Enter Escavox, whose name roughly translates to the "voice of the food", which offers producers an easy-to-implement means of tracking the

food they send out from despatch to destination.

Escavox's solution is comprised of smart hardware IoT devices and intelligent software.

"We send out a tracking device

- about the size of a small mobile
phone - to food producers," Luke
says. "It uses phone technology
to communicate; it's completely
independent and runs by itself. The
producer then drops the device in at
the point of the pack - normally one
per pallet - before it goes out the
door."

These devices register time, temperature, location, humidity, light and motion, reporting data to the producers every half an hour.

The data is easy to access through Escavox's browser-based platform, although it can be adapted by tech savvy users, too.

"If you're a top-end user, you can access via API and extract the data into your platform. If you're a regular user, you go onto our web service and have a look at the data. We'll be sending alerts out, updating you in real time."

For a low profit margin industry, where there is an in-built incentive to shift the blame for spoiled produce, Escavox's visibility solution is a boon.

Like all great ideas, it seems obvious in retrospect. How did Luke and the Escavox team come up with it?

"Much of my career has been spent in the supermarket sector – first at Sainsbury's in the UK, later at Woolworths in Australia," he says. "At one point I was leading a supply chain system redesign at Woolworths, overseeing warehouse systems, transport systems, inventory control, automation, on a large scale.



Woolworths are known as "the fresh food people", and we wanted to get products to the shelf quicker and in better condition. We started working on how long it takes to get berries through the chain and realised that we didn't really know. The more we dug, the more we realised nobody actually knew."

The hardware to track the data existed, but the data itself didn't. And as receivers of goods rather than producers, the incentive structure wasn't there for supermarkets to devise such a solution themselves.

Luke was working with Nicola Sanderson and they decided to set out on their own to create the solution. As it happened, Chris McLoghlin – 2018 Horticulture Australia's Young Grower of the Year – was independently working towards the same end.

"We had a meeting and realised we were all exhausting ourselves working towards the same goal, and that we could achieve it if we worked together."

While retailers might benefit from the data, it's producers who sorely need it, as they need a way of assuring the quality of their product and proving it to other stakeholders in the supply chain.

"It all starts with risk mitigation," Luke says. "The first thing is making sure the load arrives at the customer in the right way. If it's a retailer, it's about preventing rejection. If it's an exporter, it's about making sure it gets accepted at the port and secures the expected price."



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Having access to the right tertiary data also means that producers can make informed and provable claims about their responsibility within the supply chain.

"It really empowers producers and allows them to hold their own in an often-tough industry," Luke says.

Beyond solving a tangible, on-the-ground problem that has long plagued producers, Escavox's visibility solution is a plus for the environment, economising not only on food waste but also on wasted mileage transporting defective products.

In June, the International Fresh Produce Association (IFPA) released its Future Trends Report for Australia and New Zealand at Hort Connections in Adelaide, identifying six challenges which, if not addressed, will cause significant negative outcomes for food producers in the next five years: climate change, food loss and waste, supply chain issues, labour costs and availability, water availability and sustainability of inputs.

To address these challenges, the report recommended the uptake of several technologies. Among them was "real time tracking and traceability", which it defined as the "Use of digital technologies to monitor the movement of produce as it travels through the supply chain to its destination and beyond to a customer [and that] provides end-to-end oversight and transparency of products."

Which is precisely what Escavox is offering. Happily, it's an instance of traditional economic incentives aligning neatly with sustainability incentives.

"Today we face both price pressures and environmental pressures," Luke says. "But by managing one, we can reduce the other. We have the ability to do better, and we have a window of opportunity where nobody has to lose by doing it because there is so much waste baked into the system. It's not a zero-sum game."

Proof of Escavox's success is in the pudding, with the company quickly gaining both clients and new team members to service producers across

"We now have more than 150 clients, most of whom are producers," Luke says. "We have working relationships with all the retailers here in Australia. And we've developed a whole logistics network around our devices to ensure our own sustainability."

Escavox has built a strong reputation among producers because they're delivering something no one else is.

"We don't have direct competitors,"
Luke says. "There are many device
companies out there, but they're all
trying to build a very generic device for
many different purposes. None of them
are really suited to food and its unique
needs – so we built our own.

"There are many software solutions out there that can help you manage your assets for a supply chain. Everyone can tell you how the asset is working, but nobody is optimising for the product. We don't see anyone else in the world doing what we're doing."

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