

### 31 Spotlight - Orbisk on food waste technology

**Lukxmi Balathasan** [00:00:06] Welcome to this bonus episode of The Food Fight podcast from EIT Food.

**Matt Eastland** [00:00:11] In these episodes, we want to shine a light on new projects and agri-food startups and hear about their efforts to fight for a better food future. This week we're handing over to Olaf van der Veen to tell us about Orbisk, the startup providing a solution to reduce the high volumes of wasted food in restaurants.

**Olaf van der Veen** [00:00:35] Hello my name is Olaf van der Veen. I'm the CEO of Orbisk. And we're part of the EIT Food Rising Food Stars – and we're fighting for the future of food because our food system is broken currently, we're wasting away more than we should. And that being a disaster – it also provides for a big, big opportunity for all of us to do better.

[00:00:57] So what we do at Orbisk is we focus on food waste monitoring in the hospitality sector (for now).

[00:01:04] What's going on in restaurants - in restaurants there's a bin in the back of the restaurant and there's heaps and heaps of food going in there every day. About 10 to 30 percent of everything that's being bought is going into the waste bin in the back. And there's no information whatsoever on the volumes, the type, and the reason for that food goes to waste. What we focus on is to fully, automatically register what is going to waste and why. We do so by employing artificial intelligence technology in order to register the food, going to waste in that bin. We outfit the waste bin with a weighing scale and a camera unit and every time you throw something away, a picture is taken of that throwing away action, quantifying how much of that is going to waste, but also by means of computer efficient technologies, seeing from the picture what sort of ingredients were going to waste. Was that lasagne? Was that zucchini being cut? Was that green apples or just bread buns? We will be able to tell you in a fully automated way, not interrupting your process in the moments so your staff can go back to what they do and love best – cooking the food or serving it to their guests. And still, you get the insight on the level, so that you can optimise your buying, you can optimise your producing, wasting significantly less. And by that, improving your sustainability and improving your profitability at the same time.

[00:02:29] The reason why I knew this should be addressed came to me a couple of years back when I was in a hotel with my girlfriend. And we're people [that] like to sleep in. In fact, we need to set our alarm clocks to make the breakfast buffet generally, even though it only ends at 11:00. But we, like many times before, we were the last guests to arrive. We still got to eat all of the pristine foods, but at the same time, we saw the staff starting to clear out this breakfast buffet – and there was so much pristine food just being taken out to the back. And I was absolutely confident that all of that pristine food went into the waste bin. That's when I saw this sort of a "disaster" unfolding in front of my eyes, imagining that this was exactly going on in every other hotel in this city, in this country. But at the same time, I saw the opportunity. What if they didn't have to waste this? How can we help them to do better, so that less of that food is going to waste? And imagine how much that would cost them.

[00:03:25] I'm a firm believer of sustainability. But in the end, I don't care if the person using my product does so to become more profitable, or more sustainable, or both at the

same time, because the result is going to be to the same – that sustainability will improve for whatever motivation they have.

[00:03:45] The reason why this technology is here now is actually twofold. On the one hand, this problem is so humongous that we need to solve this food waste problem. Together in the United Nations we've agreed we will reduce food waste by 50 percent in only 10 years from now. This is one of the initiatives. The volume in the hospitality sector is incredibly big, and this is one of the things that needs to be done in order to even have a chance of making this goal. On the other end, A.I. and computing technology has taken such a leap in recent years that this is now something that was just sheerly impossible before. So we're at this intersection; that we have this problem that needs to be addressed today, and on the other end, technology now being ready to be able to alleviate this problem and help you in everyday life. And that's the opportunity we saw to help the restaurants every day, by reducing their food waste.... Increasing their profitability will also be an incentive to do so... so people are actually incentivised to start reducing. So it came together real nice, actually.

[00:05:00] For now, we're only focussing on the hospitality business because the problem is already big enough as it is right there. We have ambitions to also help, for instance, in the health care industry where there is allegedly something like 60 percent of food going to waste. I firmly believe, in fact, that the technology that we are developing right now, will have its impacts on the health care industry as well.

[00:05:23] And then on the other end, aviation. [There's there is also] a lot of food going to waste that's also being lifted in planes to about 10 kilometres in the air. Imagine what sort of environmental impact we could prevent when we also have those kilos reduced. So I believe that this technology will have so many more applications, with our end goal of one day also helping consumers in their own kitchens, to reduce food waste as well, because still the biggest volume of food is going to waste in consumer kitchens. I have a lot of ideas on that, but one thing at a time. But we do firmly believe that this technology will have so many more applications once it's available at scale.

[00:06:04] When joining Rising Food Stars, I really wanted to be a part of this big consortium, really trying to change the food system, but I really didn't know what to expect, being a small company. And it took a while, I went to this conference in Budapest and met all of these major companies that were involved with. And I was quite "mind blown" by the sheer size of the consortium, but also somewhat uncomfortable because I really didn't know what my place would be. But then after meeting a lot of brilliant people there and being in touch with them after - and I now found my place and I found the way I can reach out to relationships that I would otherwise not have, through the network of EIT Food.

[00:06:45] They will be sponsoring us in a project with one of their partners. We have some financial support, which is really good for a company at the stage that we're in. We get a lot of exposure through their network like in this podcast, but also other initiatives. We're getting some visibility and some traction in Europe and our ambition is to apply this solution at scale. So that's exactly what we need. So far, I'm really happy about it.

[00:07:14] So one message for the food system I would have (and I'm not just saying this for my own purpose) is to start measuring. Measuring is the start of everything that you can do. It gives you the "inside" of what you need to do. And at some point, it gives you the grip, to realise if the actions that you're taking are truly of effect, or were just, joking each

other. So start measuring where one solution. But there's a lot more than what we do for a lot of different branches in the food waste sector. But the only way you can truly better what's going wrong, is to start measuring and work from there.

[00:07:56] Our hopes for the food waste industry - is that it still needs to be disrupted. There's a lot of great initiatives going on, us being one of many, that are needed to do things differently. Our vision is that we can truly live in a world without food waste. I think it can be done but there's a major need for change in order to achieve that. But with the initiatives still to come, and already present, I think we're on the right track... But definitely not there yet and we are pursuing that change. In fact, I dream of our products not being required anymore someday because there is no food waste to measure.

**Lukxmi Balathanan** [00:08:41] Thanks for listening to this bonus episode of The Food Fight podcast.

**Matt Eastland** [00:08:46] To find out more and to learn how you can get involved in the fight for a better food future, head over to [eitfood.eu/podcast](http://eitfood.eu/podcast).

[00:08:57] For more information on Orbisk, please head over to [all.Orbisk.com](http://all.Orbisk.com)