

Reimagining Food Waste

How Rethink Ireland fuelled FoodCloud's growth

RETHINK IRELAND

Our Social Innovation Fund

Executive Summary

In May 2018, Rethink Ireland and AIB agreed a 3-year, €2,580,000 investment in FoodCloud's vision to minimise food waste across the Irish food supply chain. The investment was made possible thanks to a multi-year total commitment of €1.8m from AIB which was part-matched by the Department of Rural and Community Development. A previous investment of €220,000 in FoodCloud's technology gave Rethink Ireland the confidence to deliver the ambitious investment goals of doubling their annual tonnage moved in Ireland and becoming financially sustainable by the end of 2020.

Rethink Ireland's Growth Fund focuses on supporting scalable, social innovations to achieve widespread impact and transformative change in Ireland. The investment was a first for the Growth Fund as FoodCloud was deemed to have a highly scalable social enterprise business model that could ultimately reinvest its profits back into its mission of reducing food waste and increasing social inclusion.

The Rethink Ireland / AIB investment breakdown included €2,250,000 in cash grants and €240,000 in non-financial support. Cash payment triggers were agreed on a yearly basis linked to FoodCloud's strategic plan targets that included building its team, technology and financial resilience for the next stage of accelerated growth. The investment placed a strong focus on rebuilding FoodCloud's technology platform, Foodiverse, to make it the 'go to' choice for international food redistribution organisations and, in turn, drive revenue growth and sustainability.

Over the duration of the investment period (2018 to 2020), FoodCloud invested in three key drivers - people, products and processes - to be ready for operating at scale. They completed a merger, grew their headcount 36% (42 to 57), and strengthened their management team and Board. They committed to rebuilding their technology platform, improving supply chain logistics and implemented bespoke software to manage their growing charity and store base which increased 25% (10,000 to 12,500).

These key drivers were implemented whilst managing a 70% increase in annual income (€2.55m to €4.35m) as a result of the merger, and 91% increase in tonnage moved (6,875 to 13,116) over the investment period. The green shoots of these drivers are beginning to manifest in efficiencies at scale as demonstrated by the 10% increase in tonnes saved per employee (218 to 240).

FoodCloud have managed an incredibly challenging period of organisational change, operational growth, and concluding with a global pandemic, over the course of the Growth Fund investment period. They exit the investment with a highly skilled team, world class technology platform that could revolutionise food redistribution at a time of climate crisis, and are well positioned to support Ireland in achieving its 2030 UN sustainable development goals.

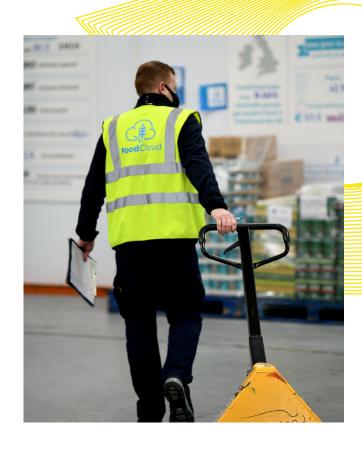
There was no single defining moment in the growth of FoodCloud, the social enterprise founded eight years ago by IseuIt Ward and Aoibheann O'Brien. Instead, there were many, with the founders navigating a range of issues faced by most businesses: seed finance, governance, mergers and expansion as well as others unique to the nonprofit sector. Through a series of in-depth interviews, this is the inside story of how Rethink Ireland and AIB turbo-charged a promising social enterprise and helped it double its impact in Ireland and become financially sustainable as it tackles both food poverty and climate change.

TOM LYONS AND SEAN KEYES

On a video call in February 2021, Deirdre Mortell and Iseult Ward began reflecting on the unparalleled events of the previous 12 months, a period where Ireland had careened between various social and economic lockdowns as a result of Covid-19. The conversation centred on a single question: what if?

The restrictions had caused supply chains to seize up. With volunteers cocooning, many charities had effectively been mothballed. Meanwhile, with restaurants closed and panic buying setting in, the demand for food purchases had surged.

As they spoke, Mortell, the chief executive of Rethink Ireland, and Ward, the co-founder and chief executive of FoodCloud, began asking some simple, yet profound, questions. What if Covid-19 had struck six to 12 months earlier? What if the crisis had struck before FoodCloud was really set up for the unprecedented level of expansion that was to follow?



Instead of being frozen in the eye of the storm, Mortell said that FoodCloud was ready for it. "It is a huge tribute to the organisation, its leadership and the team that they had the ambition and fearlessness to get through an absolute storm," she said.

Ward agrees: "We stepped up as an organisation during Covid-19. We had the confidence and strength to respond quickly. We couldn't have done that without the capacity we built in the last three years. We'd never seen as many inbound requests for food from charities ever before. It was the first time in our history when we were running out of food."

Founded in 2013, FoodCloud collects fresh surplus food directly from local retailers using an app, and then gives charities access to large quantities of redistributed food through their hubs or partners. It may seem like a simple concept, but it is a demanding logistical jigsaw with thousands of partners in multiple locations and huge volumes of orders.



By Christmas Eve 2020, FoodCloud had redistributed the equivalent of 100 million meals to community and charity groups in Ireland and Britain. It had worked flat-out during the pandemic as its three Irish hubs in Cork, Dublin and Galway, distributed 75 per cent more food in 2020 than they had in 2019. Over 650 charities benefited, and tens of thousands of people were fed during a time of national crisis.

"We doubled the amount of food redistributed in Ireland from an average of 25 tonnes per week in February before the pandemic to over 60 tonnes per week," Ward said. "We couldn't have done it without Rethink Ireland and our partner AIB, the supermarkets and food producers who work with us, our supporters, the charities and our team."

In addition, FoodCloud played a role internationally, especially in Britain, where it had worked with its partners on redistributing 26.2 million meals in 2020,

a rise of 38 per cent the previous year. In all 9,500 charities and local groups gained access to food.

The other big benefit of saving food from being thrown into landfills was that it reduced the amount of CO2 going into the atmosphere.

Global research group Project Drawdown estimated that reducing food waste was the number three solution to reversing global warming. FoodCloud, Ward said, had rescued 42,000 tonnes of food from going to waste, which was the equivalent of 134,397 tonnes of CO2.

"Rethink Ireland invested in FoodCloud as an organisation, so we were able to respond to the crisis," Ward said. "We'd gone through such big changes with them. It was wonderful to see the response to Covid-19 by our team. Every single person agreed, we're going to get as much food out to people as we possibly can, no matter what."

Before Rethink Ireland

Iseult Ward first got interested in the ideas of food waste and food poverty while studying business and economics in her early 20s in Trinity College Dublin. "I loved the idea of doing something that could have a really positive social and environmental outcome," she said.

In 2013, she met Aoibheann O'Brien, a banker with JP Morgan in London who had returned home to Ireland to complete a postgraduate course in environmental science. They were both interested in creating a social enterprise around food waste and so FoodCloud was formed.

FoodCloud realised from early on that they needed to develop a technology platform that was capable of allowing them scale. They also knew that they needed a consistent source of quality food so decided to focus on supermarkets as their source of food. There were no formal guidelines around food donations at the time so they worked on developing them with the Food Safety Authority of Ireland (FSAI).

A stalwart of the London Stock Exchange, more than one of every five euro spent on groceries in the Republic of Ireland goes to Tesco. It is the biggest supermarket chain in Britain and one of the biggest in Ireland, a powerhouse with global sales of more than €70 billion.

Yet, even like a modest corner shop, it cannot sell all of the food in its stores. This means it has to throw out food which goes into landfills where it releases methane, a damaging greenhouse gas. It is a problem that Tesco was acutely aware of for years - from both an environment and a food poverty perspective. It knew it was throwing out good food while some people in the communities near its stores went hungry.

About ten years ago, it decided that reducing food waste was a priority. Over a video call, Christine Heffernan, group communications director with Tesco and a member of its executive committee, recalled how one of the world's biggest companies chose the then tiny FoodCloud to help it fulfil this vital mission.

"Iseult and Aoibheann were very, very compelling," said Heffernan, who studied history and political science at Trinity. "They had a real passion for what they wanted to do. I think part of the challenge for charities and startups working with an organisation like Tesco is that we have such scale that it can be hard to find a route in."

FoodCloud's solution, Tesco felt, was simple when it first heard about it after one of its team bumped into O'Brien and Ward at a conference. This led to Ward and O'Brien approaching Tesco to see if it would take a chance on FoodCloud in late July 2014.

"It felt like something we could trial really quickly. Either we proved the concept, or it failed quickly," Heffernan said. "The other thing I'd say is, that timing is everything. There was a big discussion of food waste in our business. Our colleagues in stores were saying that morally it felt wrong that we had all this food in our stores at the end of the day, but we had no systematic way of redistributing it."

Some Tesco stores were giving out food, but it was on an ad hoc basis without uniform governance. "FoodCloud solved a problem that we wanted to solve ourselves," she said. Tesco agreed to trial working with FoodCloud and were so impressed they decided to roll-it-out nationwide.

"The primary focus at the start was that we had food that was perfectly good to eat and we wanted to give it to people who would need it and might otherwise not get fed," Heffernan said.

"The sustainability point is something that's publicly come to the fore an awful lot more since. More recently there is a big focus on what a huge contributor food waste is to climate change and greenhouse gas emissions etc."

Tesco was impressed by FoodCloud. It decided to sign up to a contract for €250,000 allowing it to grow. Soon FoodCloud was working with Aldi, Musgraves and Lidl in Ireland as well as directly with food producers. It was growing quickly in Ireland when suddenly Tesco asked it to go into Britain in 2014.

It was a big ask for a young organisation, but FoodCloud was determined to do it. "We decided to partner with FareShare because one of the hardest things is getting the network of charities built up. It would have been next to impossible for us to do that quickly in the UK," Ward said.

"FareShare took on the responsibility of building the network of charities and we took the responsibility of making our solution scale and work."



Panel: The impact on the local community

Community worker Brendan Dowling first met FoodCloud when it was less than a year old. Dowling, a longtime street trader on Grafton Street, is also chief instructor of the Irish Aikido Association. He has spent decades giving back to his area which crisscrossed the inner city between Dublin 2 and Dublin 8 with an organisation called the Whitefriar Aungier Community Council.

"We hit it off with FoodCloud very early on," Dowling recalled. "They'd spotted a gap between food being wasted in shops nearby and a community of people where food was needed."

Dowling could see the opportunity offered by FoodCloud to feed hungry or cash-strapped families and vulnerable people. "We started with 10 or 20 families but now we have over 500 families a day." he said. "We put out

about 500 texts every day seeing if anyone wants food, and about 50 to 100 people will come to our office and collect it."

"Unfortunately the pressure on families to look right and have all the right things in the house is so intense it does put pressure on people's food budgets."

"The other great thing about FoodCloud is the huge variety of food. People end up tasting food and getting to like food they might not have come across before," he said.

Dowling said bringing good quality food into a community had knock on impacts like reducing obesity and building up people's health and resilience. Dowling said he was pleased to see FoodCloud continuing to flourish. "Its founders know how important it is to stay close to the people they serve."



Thinking, technology and THINKTECH

Rethink Ireland was founded in 2013, and Deirdre Mortell is its founding CEO. It is a non-profit growth capital fund backed by the Irish state that invests in up-and-running social innovations that tackle Ireland's critical social issues.

Rethink Ireland stimulates philanthropy from private investors by providing matching funding for charities and social enterprises from the Department of Rural and Community Development via the Dormant Accounts Fund.

To date it has developed 24 different funds, and its second fund was called THINKTECH. This fund launched in June 2016 with €1 million from Google and the Department of Environment, Community, and Local Government.

FoodCloud was one of the successful winners of backing from THINKTECH receiving €170,000 in cash investment, and €50,000 in non-financial support over a six month period. THINKTECH helped FoodCloud develop a robust three year strategy to strengthen its organisational core.

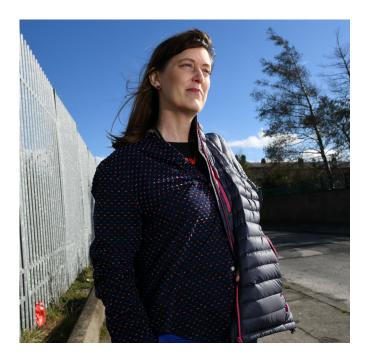
"THINKTECH ticked a lot of boxes for us. It was about scaling, technology, partnering with Google, and starting to work with Rethink Ireland," Aoibheann O'Brien said. FoodCloud also learned from working with the Rethink Ireland team.

O'Brien said that THINKTECH's support was both financial and non-financial, adding that being funded to produce a three-year strategic plan from 2017 to 2020 was a game-changer for it as an enterprise. "Obviously we'd planned before, but it was more annually as we were still at such an early stage," she said.

"Deirdre (Mortell) has scaled and been involved in many social enterprises, so we learned from her. Deirdre and Eoghan Ryan, (Head of Social Enterprise at Rethink Ireland) worked closely with us. They asked challenging questions and probed us on the direction we were taking."

FoodCloud completed a six month accelerator programme with THINKTECH which helped them improve the technology behind their enterprise and deliver an improved service to both charity and food industry partners and develop new services to support the redistribution of surplus food.

FoodCloud started targeting potential corporate supporters and perfecting its pitch and narrative. In 2018, AIB came on board with a €1.8 million multi-year investment as it could see what FoodCloud wanted to achieve and how that aligned with its own corporate social responsibility goals. This was a big win for FoodCloud.



Deirdre Mortell, Rethink Ireland CEO

The importance of mission

Even in its early days FoodCloud had a strong sense of mission. But there were actually two problems it wanted to solve by reducing food waste: food poverty and carbon emissions.

As part of the THINKTECH funding, Rethink Ireland put FoodCloud in touch with Ahmad Abu-el-ata, the founder of a London-based strategy consultancy called Simpacta, to help it develop a three-year strategic plan.

"We match consultants with organisations around their strengths and challenges. The other thing we rely on the consultants to do is to really push the awardees to face the tough questions facing them, not avoid them," Mortell explained.

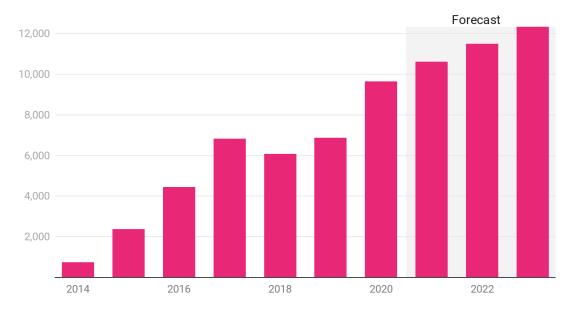
One of the big tasks for Abu-el-ata was to help FoodCloud decide which part of its mission it wanted to focus on more. "It had to decide what mattered more, food poverty or food waste?" Mortell explained.

"If you have a tension in your mission, when it comes to resource allocation, you need to be clear what's the winner," Mortell said. "We didn't mind which they chose but we wanted them to be clear."

Deciding on its priorities, Mortell said, would allow FoodCloud to decide how to measure its impact. It considered measuring tonnes of carbon dioxide reduced, tonnes of food moved, or millions of meals served.

O'Brien said Rethink Ireland's funding helped it hone its priorities and decide how it measured success. "Primarily, we decided we are an environmental organization that wants to tackle and raise awareness around food waste," she said. "Equitable access to food and building resilience in local communities is also an important part of what we do."

Tonnes of Co2 emissions avoided



"The thing I love about FoodCloud is that you're bringing businesses and charities together within communities to work together to fix a part of the food system that's broken. We're working with amazing charities that have not just used the food to give to people but they've used being part of FoodCloud to become part of that conversation about food waste, sustainability, resilience, and education," O'Brien said.

"The reality is, the food system is so complex that we actually touch off lots of different things," she said. "So, I suppose what we landed on was primarily food waste but we also play our part in creating more resilient communities."

FoodCloud decided to measure both. "Millions of meals is what the public understands," Mortell explained. "But what matters to them is not just the millions of meals but actually the CO2 moved and the tons of food moved."



Aoibheann O'Brien: Co-founder of FoodCloud.

Teaming up

When Rethink Ireland opened its first growth fund, Deirdre Mortell felt FoodCloud was a good candidate for further funding after the positive experience of THINKTECH.

One of the criteria it had was that organisations needed to raise matching funds from the private sector to go along with its backing. FoodCloud had signed up AIB in 2017 as a major supporter so it was clear that combining with Rethink Ireland too would give it access to even greater resources to make an impact.

In 2018, the three-way partnership between Rethink Ireland, AIB and FoodCloud was made public. AIB committed €600,000 per year for three years to FoodCloud.

Of this €500,000 went to Rethink Ireland first, who matched it with their funding of €360,000 per annum in financial and non-financial funds into the social enterprise, supported by the Department of Rural and Community Development via the Dormant Accounts Fund. AIB then put another €100,000 a year into FoodCloud directly to support a volunteer programme for its staff.

For AIB, the prospect of having matching funding was attractive. "Our initial €1.8 million investment meant that FoodCloud received a total of €2.88 million over a three year period," Mary Whitelaw, Director of Corporate Affairs, Strategy and Sustainability said, adding that AIB wanted to support FoodCloud from its chief executive

Panel: How the Growth Fundand FoodCloud impacted AIB

The Rethink Ireland Growth Fund matched with AIB to support FoodCloud. The benefits of this investment helped AIB motivate its staff and achieve its own corporate social responsibility goals.

"AIB worked together with Rethink Ireland on the best ways to support FoodCloud, in addition to the financial investment," Mary Whitelaw, Director of Corporate Affairs, Strategy and Sustainability with AIB said: "Rethink Ireland was able to support with resources, experience and expertise in sustainable solutions, alongside channelling the funding. It helped FoodCloud to fuel its innovation with knowledge and advice to succeed on a nationally impactful scale, especially in the early days. Rethink Ireland's input really complemented the AIB FoodCloud partnership."

FoodCloud's nationwide footprint, she said, was an "obvious geographical alignment with our branch network, and also the alignment with charities that we work with."

"The volunteering element and working together with community groups and charitable organisations, with whom the AIB branch network already has a long established local connection, demonstrated the meaningful cultural fit," she said. "The nationwide geographical spread inspires and enables communities to take local action, the ripple effect of which will result in global change."

"Over 1,100 of our people have donated 7,300 volunteering hours working in the Dublin, Cork and Galway FoodCloud Hubs," Whitelaw said. "We have also worked together in a cross-functional skilled volunteering capacity across areas such as financial modelling, web design and development, SEO workshops, content development and social media strategy."

"The volunteer programme offers local, practical and impactful opportunities for the AIB team to take action and engage with FoodCloud across a number of different areas."

AIB features FoodCloud in its annual reports and sustainability reports as well as through its social media campaigns and internal communications with staff.

"It has been helpful for our stakeholders to clearly see the impact of the partnership, and for us to have such tangible measurements to report on," she said. "For example, AIB's investment to date has meant that over 15 million meals were redistributed, and 20,000 tonnes of carbon emissions avoided. It's been encouraging to see local and national press coverage and recognition of the partnership too."

On March 5 2021 AIB announced plans to invest €1.5 million more in FoodCloud to support its growth from 2021 until 2023. "Working hand in hand with FoodCloud, we have a 2030 vision for a less wasteful, more sustainable and equitable food system, and resilient and food secure communities," Whitelaw said. "Our shared focus can drive a future which puts our environment, our agriculture and food systems, our community resilience and spirit at the core of the next recovery phase."

"Our partnership and the impact to date has demonstrated how business can be at the forefront of leading social change, whilst protecting our environment. We have a longstanding commitment to the communities in which we operate and serve, and look forward to continuing to work together with FoodCloud on this ambitious journey and in creating a long lasting and meaningful positive societal and environmental impact."

Investment Goals and Merger

FoodCloud and Rethink Ireland agreed three investment goals it wanted to achieve for the investment period. First, FoodCloud wanted to merge its technology business with its warehouse distribution arm to allow it scale. Second, it wanted to double its impact between 2018 and 2020 in terms of food delivered. Finally, it wanted to ensure it had a financially sustainable business model at the end of the investment period. These were ambitious goals and one of the things they needed to do to get there was a merger.

Merging two private companies is hard, but there is an added level of complexity in the non-profit sector. One of the big goals that Rethink Ireland helped with was combining FoodCloud with its food warehousing division FoodCloud Hubs.

FoodCloud Hubs (formerly called BiaFood Initiative) traced its origins back to 2011 when Jack Dunphy, a 40-year veteran of the non-profit sector, wanted to set up a national food surplus collecting system along with other activists including Eoin MacCuirc, a civil servant, Chair of Cork Simon, and others in the sector.

While FoodCloud and FoodHubs had a shared board, then chaired by Dunphy, legally and structurally they were different entities. "We were running on parallel tracks but still not officially connected," Dunphy said.

FoodCloud and FoodHubs had wanted to merge for some time but the two organisations found it hard to devote the time and resources needed.

"The Rethink funding gave us the headspace, the money, and the time to get it done," O'Brien said. "It was really crucial to be one organisation, in order to be set up to scale."

According to Mortell, "Mergers are complex and expensive. We were willing to put money down both in cash and in non-financial support to ensure it was a successful merger."

"It was very challenging to deliver internally. It costs money to produce change management plans and pay legal fees. There were also significant negotiations with the Revenue and the Charities Regulator."

"One of the challenges of mergers in the non-profit sector is that there's no real beneficiary. If you merge two businesses, there's extra value added to the company or you save on costs or whatever.

"But with non-profits the benefit is in terms of mission. When there's no individual stakeholder that's benefiting there's no natural payer. And that, in my opinion, is why more charities don't merge because nobody wants to pay for it."

"The way we were structured didn't lend itself to adapting quickly," O'Brien said. "Before the merger we had two teams, who didn't always talk to each other."

"There was a consultative period with everybody in the organisation and we spoke to all our key stakeholders," Ward recalled.

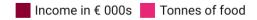
"We were lucky that our team really got the vision. Probably the most challenging thing was pulling away from driving growth to actually having a fully internal focus. It was a different mindset for me."

"But the merger has been transformative in preparing us to scale into the future. Especially with climate change, the next ten years need to be big in terms of taking action. We feel like we're more organisationally set up now to play our part."

The unforeseen impact of the merger was that initial income and tonnage numbers were relatively flat across 2018 and 2019, with project investment targets often not being met.

Once the structures of the amalgamated organization were embedded, however, FoodCloud now had the capacity to really grow.

Investment enabled greater impact



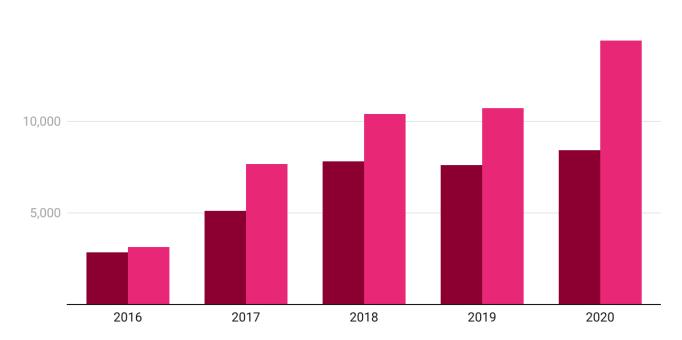


Chart: The Currency · Source: FoodCloud · Created with Datawrapper

Early on in the investment period, FoodCloud's understanding of the international market for their products developed and more prudent financial projections were developed to support their scaling strategy. An income mix, supported by fundraising, was devised to strengthen FoodCloud's entry into the international market. Maintaining investment in their

cost base ensured FoodCloud were best positioned to drive sales of their new technology platform, Foodiverse, to international customers. The strategy was agreed between FoodCloud and Rethink Ireland and the definition of the financial sustainability investment goal was redefined.

Panel: Merging for growth/efficiency

Integrating two companies is never easy. But the benefit for FoodCloud was that it dramatically increased the company's size and impact.

FoodCloud matches retailers' and food industry's unwanted food with community groups and charities at a massive scale. You might say it's a logistics business but it is more complex when you get behind the scenes. And logistics is an inherently complex industry. Doing it well requires manpower, coordination, and investment.

FoodCloud realised early on that in order to fulfil its mission, it would need to scale. So it gradually integrated its teams of staff, fleets of vans, and its sophisticated software system.

FoodCloud's software platform is its most important investment. It allows retailers and local charities to come together to distribute spare food efficiently at scale. Over 9,000 charity and community groups use it. The software lets users trace individual products, and it integrates seamlessly with retailer's own backend systems. The application, of course, lives in the cloud, which makes it highly scalable and accessible anywhere at any time.

On one side, FoodCloud works with a large number of small community groups and charities. On the other side, it works with a small number of huge retailers. For the partnerships with the retailers to work, it needed to have a scalable and professional product. FoodCloud's investment in its software and other infrastructure is what has unlocked partnerships with the likes of Tesco in the UK, which operates thousands of stores. And of course, FoodCloud charges the retailers for use of its product. So it has to be good.

FoodCloud is financed by a mixture of commercial and philanthropic partners. It charges a technology service fee, it charges a fee per pallet of food donated, it gets philanthropic funding and corporate funding. As we'll see, by growing its sources of funding over time, FoodCloud has been able to amplify its impact per euro spent.



Measuring what matters

Social enterprises are unusual organisations. Like any company, they bring employees together in order to achieve a goal. Where they differ from ordinary companies is that they don't have a clear bottom line. Where a normal company gets judged solely by earnings, social enterprises are judged by their impact – and impact varies depending on the social enterprise.

How does FoodCloud define impact? Its system benefits society in multiple ways: it provides food to those in need; it reduces carbon dioxide emissions; it brings communities closer together. The number that best captures all these benefits is tonnage – the amount of food, in metric tonnes, that FoodCloud moves from retailers to community groups and charities. The more people receive food that would otherwise be wasted, the less methane will be emitted from landfills, the less CO2 will be expended on producing additional food, the closer communities will be. For FoodCloud, tonnage is the best approximation of its bottom line.

Because social enterprises have idiosyncratic bottom lines, people sometimes assess them unfairly. There's been a big push in recent years with the likes of givewell. org to rate charities and social enterprises and hold them to account. And of course, there's nothing wrong with measuring charities. Donors want to maximise their impact per euro spent.

Measured by overheads, every penny spent by a charity reduces impact, and is in itself a bad thing. The result is that charities are measured by how little they spend, rather than the impact they have.

Clearly, there's a problem with this line of thinking. Charities are like any other business, in that the reason they incur costs is to derive a benefit greater than those costs.

Judging charities only by their overheads is like



There is a lack of investment in the charity sector. I don't mean as in money, but I mean in the concept of investment.

Iseult Ward

assessing companies only by their profit margin. Companies don't try to maximise their margin – they try to maximise their profit. A company will happily reduce its margin if it thinks it will lead to higher profit.

Similarly a smart social enterprise will invest in its products, or its people, if it thinks those investments will result in greater overall impact.

If overhead is the wrong way to think about assessing a charity, what's right? In FoodCloud's case, tonnage is the metric that best describes its impact.

Judged by tonnage, FoodCloud has been able to generate an extraordinary return on its investments. Each incremental employee contributes 221 additional tonnes of product per year. That works out as 526,000 meals per employee per year, or 2,100 meals per employee per day. The average salary is €36,000 excluding pension and payroll taxes. So every euro spent on a salary generates 14.6 meals per year.

Increasing returns to scale

Return on investment (which is defined here as tonnage per euro, or per staff member) is one thing. But what's exciting about FoodCloud is that it's showing increasing returns to scale: as it gets bigger, its impact is growing faster than its costs.

The following chart shows the amount of tonnage per employee since 2017. As you can see, the average employee in 2020 generates almost a third more tonnage than in 2017. To be sure, Covid-19 has accelerated this trend. But it was well established in the three previous years.

Increasing economies of scale, part 1

Tonnes of food per employee

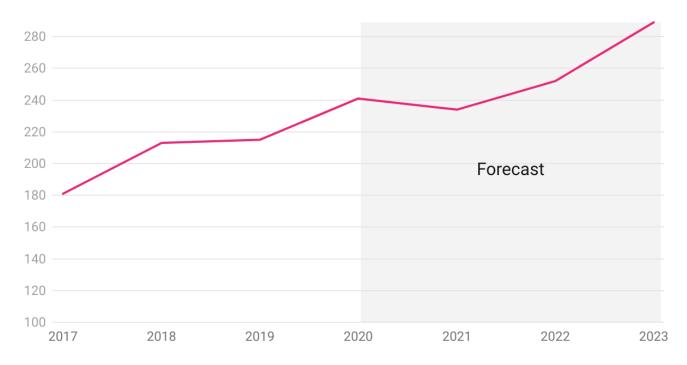


Chart: The Currency • Source: FoodCloud • Created with Datawrapper

The trend can also be seen in FoodCloud's tonnage per million of expenditure, where tonnage per euro spent has been rising year on year.

Increasing economies of scale, part 2

Kg of food matched by FoodCloud per euro spent

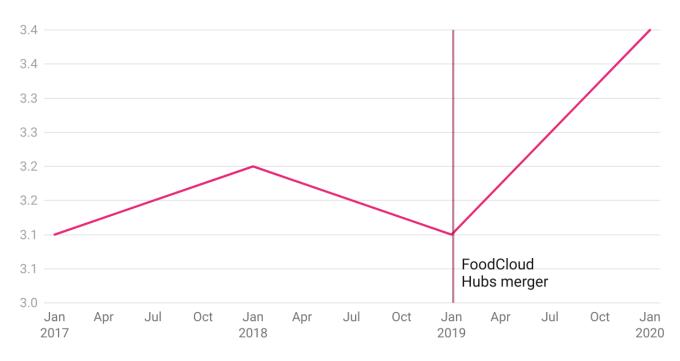


Chart: The Currency • Source: FoodCloud • Created with Datawrapper

Though the scales are totally different, FoodCloud is a bit like Amazon. Both are first and foremost logistics companies. By investing heavily in software and physical infrastructure they've both established themselves in the centre of their markets.

Investing in people, brand and tech

The non-financial support provided by Rethink Ireland serves to build operational capacity across systems, people and processes. These investments in growth fund awardees, which are commonplace in most forprofit organisations but are often lacking in the charity sector. They allowed FoodCloud to invest not only in improving their technology but also in CRM, customer service training, cybersecurity, tax support during the merger, strategy development and funded a brands strategy and communications campaign to highlight their positioning in the marketplace

Over three years, €240,000 of non-financial support was provided for specific capacity-building activities. Proposed projects and training were scoped and agreed collaboratively by Rethink Ireland and FoodCloud's senior teams and directly linked to FoodCloud's strategy and milestone plans.



Technology investment for the next stage of growth

Since it started, FoodCloud has rebuilt its technology four times. Each time it improves, and it has just completed its latest iteration. It started on a shoestring budget, then moved to a bespoke model, before investing with Rethink Ireland's backing to build a technology infrastructure capable of serving Ireland and going global.

"What we looked to do was to make sure that they were surrounded by top of the game tech experts so that they had the right advice and the right information to make good decisions," Mortell said. Joe Hogan, the founder of Opennet, came onto FoodCloud's board and filled this role. IseuIt Ward said that they made the decision at the end of 2018 that we were going to have to rebuild its technology platform to increase functionality and make it easier to use.

"At the moment if we give our technology to a foodbank to set up, it's not designed in a way that anyone can go in and start using it," Ward said. "It's not very intuitive, it's not very user friendly. But we're working on that."

By virtue of being big, FoodCloud is now in a position to seize the next opportunity in food exchange. FoodCloud calls it the Foodiverse. And it believes the idea has the potential to dramatically increase its impact in the coming years.

With the existing FoodCloud app, FoodCloud inserted itself in between donors and community food banks. It created a system that any donor and any charity could easily plug into and facilitated food exchange.

Foodiverse is the next step for the FoodCloud app. It leverages its position at the centre of the food donation market to connect more stakeholders, and enable more food to be exchanged.

There are three layers of organisations involved in food donation. There are donors, which are primarily large food retailers. There are food banks, which are local hubs for distributing food. And there are charities, which sometimes work with food banks to deliver food the "last mile" to those who need it.

The existing FoodCloud app only connects donors to food banks. But there's potential for a much more ambitious platform that connects everybody who operates in this space, from big to small donors, food banks, and charities delivering the last mile.

Foodiverse allows different food banks to connect to each other, and exchange food as needed to minimise waste. It will allow charities to bypass food banks if needed, and exchange directly with donors. And it helps last mile charities connect to food banks.



On Foodiverse, donations can be big or small, regular or irregular. It has the flexibility to accept donations from every step of the food supply chain, from farms to factories, distributors, supermarkets and food service restaurants.

The existing FoodCloud app took the existing relationship — between large donors and food banks — and digitised it, making it more efficient. Foodiverse enables a completely new way to exchange food. It enables exchange at scale between big donors and small recipients, and between recipients.

FoodCloud already works with the biggest retailers in Ireland and the UK – over 3,500 stores. And it has

launched with a retail chain in Australia. The next step is to expand into Europe. Foodiverse is an essential part of that plan. Developers have built into Foodiverse the flexibility to serve customers in new markets.

By scaling, FoodCloud was able to afford investments in software and infrastructure.

Now it has a dramatically greater impact per employee than it did as a small organisation. Similarly, Foodiverse lets FoodCloud leverage its position at the centre of this market to connect many more stakeholders, donors, and charities, and has the potential to amplify its impact further in the coming years.

Panel: Working with food producers

The Meade Potato Company has partnered with FoodCloud since 2016 donating quality vegetables to community groups.

Jeni Meade, marketing and communications manager, said: "When FoodCloud issued an emergency appeal at the start of Covid-19 in March 2020 we were happy to help," she said. "We are a zero-food waste facility and FoodCloud is important to us achieving that goal." Based in Co Meath, the family owned business is just one of a number of major food producers working with FoodCloud. By the end of 2020 it had donated the equivalent of over 316,000 meals to FoodCloud. It is one of a number of major food producers now working directly with FoodCloud. At the end of the Rethink Ireland / AIB investment FoodCloud had more capacity to work with these producers allowing it to scale more.



Jeni Meade of the Meade Potato Company, a food supplier to FoodCloud.

Growing internationally

Rethink Ireland's remit was to build FoodCloud's capacity in Ireland only, but it realised it could do this better if it helped it achieve its international ambitions.

Rethink Ireland was conscious it was being funded by the state's dormant accounts money which was ringfenced to tackle disadvantage in Ireland.

"We needed to make sure that our investment pointed at an Irish impact. There were two investment goals," Deirdre Mortell said. "One, was to double the impact in Ireland over three years and in the end, we decided to measure that in tonnes of food moved. We only measured the Irish food moved within Ireland. So, that became our key investment goal. The second was to help FoodCloud become a proper sustainable social enterprise by the end of the period. The second one would enable them to go wherever they wanted to go with their mission."



One of the things that's a challenge for social enterprises is there's no definition around financial sustainability.

Aoibheann O'Brien

Rethink Ireland, she said, understood FoodCloud's need to grow outside Ireland. "They're a classic tech company where if you invest in the core of the organisation it benefits everything," she said. "You can't really say well this tech is for Ireland and this tech is for the UK... it's

all integrated.

"In the end, it wasn't really difficult to track where the money went and to make sure it benefitted Ireland. Our view was, well if it also helps them to scale globally that's great. It's not our core business, but it helps it."

FoodCloud is part of a global movement tackling food waste. It represents Ireland as a member of the European Food Bank Federation, which has 24 national member organisations supporting 45,000 charities. It is also part of the Global FoodBanking Network which operates in 34 countries, and works with 55,000 charities.

Being part of this network has increased its impact, and allowed it to share its ideas and technology overseas.

Ward believes FoodCloud would have struggled to realise its potential to expand overseas without Rethink Ireland's funding and advice.

"Rethink has an investment mindset. It understands risk is inherent in it," Ward said.

"If you are an early stage charity with a big vision you need high risk investment to get where you want to go. By getting better at what we did in Ireland, we were also becoming able to scale overseas.

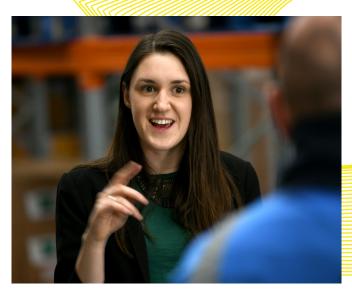
"Charities often end up chasing very project-based funding. You get funding for delivering a low-risk proven project so that's the cycle you're stuck in. There's no money to innovate and take a risk.

"Our platform needed to be much more accessible to other food banks internationally and needed to work across the supply chain and that fundamentally meant a restructure in how the platform works. These were big decisions that the three-year funding allowed us to do.

"We've launched our new platform which we've been building for about a year and a half now. It's been that you've got a network of businesses, network of charities, foodbanks, support and can set up private groups. This means it's inherently a lot more scalable and that we're not going to deal with an exponential increase in costs and complexity when we grow."

"The new platform has been designed with scale from the beginning," she said. "It means that if Tesco are using it in five different countries they can log in to their global account and see everything."

"That wasn't possible before but now we have the ability to do so, so much more."



Iseult Ward: Chief executive and co-founder of FoodCloud

Solutions, supply chains and a ten year vision

Having built its base in Ireland with the support of Rethink Ireland, FoodCloud now wants to grow both here and overseas.

"We're working with the Global Food Banking Network to identify food banks internationally that could benefit most from using the technology," Ward said.

"There are many food banks that aren't going to want to take the risk of investing in and developing their own technology," she explained. Another way it plans to grow is by licencing its technology.

"We want our technology to play a part in global food redistribution into the future." Ward said.

She said working with Rethink Ireland had enabled this international expansion - as well as giving it the resilience to survive the pandemic in its Irish home market.

"The pandemic is like nothing we had ever experienced before in Ireland. But we rose to it and responded. We could not have done that before Rethink Ireland." Ward said. "They say the planning process is more valuable than the plan...the things we learned were so fresh in our memories. It was invaluable when we were responding to a crisis."

"We invested in FoodCloud's capacity in order to help it achieve its goals around sustainability and doubling its impact in Ireland," Mortell added.

"The merger released energy and built operational efficiencies. We invested in key hires, so they were able to put in a management team around Iseult and

Aoibheann. We put lots of money into tech. And we enabled Iseult and Aoibheann to lead rather than just manage."

FoodCloud she said was now able to stand on its own financially. "Part of making it a sustainable social enterprise was that the international business could support the Irish business because Ireland is such a small market," Mortell said.

From a partners perspective Christine Heffernan from Tesco said she could see the difference Rethink Ireland and AIB had made to FoodCloud and it was now ready to bring it into new Central European markets.

"FoodCloud is a very young Irish social enterprise that to all intents and purposes has created what potentially could be a global platform for redistributing surplus food in a retail context." she said.

"We want to be part of the solution and conversation around food," Ward said. "We want to scale internationally through partnerships and working with organisations that are already working in this space. We want to be part of a globally connected solution to the issue of food waste."

"One of the things we worked on with Rethink Ireland was on achieving a healthy funding mix from both the state, private sector and international partners. We didn't want to be dependent on one source," O'Brien explained. "We didn't want to be over-reliant on fundraising."

"We wanted to have good traded income from retailers as well. This decade is really important in terms of climate change. Covid-19 has been a big shock to the food system but there's going to be a lot more shocks to the food system."

"Our big focus now is on creating innovative solutions across the supply chain in an Irish context and making sure, you know, that we can support Ireland in achieving Ireland's goals around reduction in food waste by 2030."

"We are now part of a global community sharing best practice and technology and want to make a global impact. That's the vision."

Looking to the future

Covid-19 brought significant challenges for Food Banking operations globally. From extreme peaks and troughs in the supply of food, Covid-19 has also shone a spotlight on the fragility of the global food system and supply chains.

The societal, environmental and economic challenges caused by the pandemic are yet to fully come to bear across our communities. The uncertainty of what lies ahead will mean a further increase in the demand for both FoodCloud's services and those of the community organisations who play an essential role in supporting those who are vulnerable and at risk of social isolation and food insecurity.

FoodCloud are determined to tackle these challenges

head-on as they simultaneously work towards their 2030 vision for a more sustainable, less wasteful food system where a global food sharing network supports the security and resilience of local communities.

They are actively developing their technology platform to increase impact at every step of the supply chain, and they are working to gain a better understanding of food insecurity within communities working with their partners across business, civil society and government to drive an understanding and awareness of the link between the environmental problem of food waste and Ireland's climate targets. Rethink Ireland's investment and non-financial support came at a crucial time in FoodCloud's development to help them achieve these big goals.









