



FoodCloud: Stimulating Kindness Towards Making the World a Fairer Place – One Step at a Time¹

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Abstract. The case follows the journey of Irish social enterprise FoodCloud as it rises to the extensive task of reducing global food waste by providing an environmentally-sensitive, socially-responsible, and economically-viable alternative. From its humble beginnings as a socially oriented technology start-up pioneered by Aoibheann O’Brien and Iseult Ward, FoodCloud has utilised both its innovative technology platform and an innate ability to form successful partnerships as the strategy to pave its international expansion. The case illustrates the sizable challenges in leading on social enterprise initiatives. The organization’s development path is described to provide a good sense of the growth trajectory that emerged for FoodCloud during its young history to date. Notably, FoodCloud have developed strategic capabilities that are arguably, critical to the survival and success of any social enterprise entity.

Keywords: entrepreneurial strategy, innovation, internationalisation, leadership, partnership, purpose, social enterprise, strategic alliance, sustainability, technology platform.

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1. Introduction

FoodCloud began as a newly established social enterprise that was launched in 2013 by Aoibheann O’Brien and Iseult Ward. The connection was facilitated by a social entrepreneurship event in 2012, when they both discovered a shared interest in the elimination of food waste and food poverty.³ The connection resulted in a University of Dublin project executed by both founders to ‘test and

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1. This case was prepared by Liam Brady ’19, Sean Flynn ’19, Jane Higgins ’19, Ellen McKenna ’19, Julie Newman ’19 and Paul Nolan ’19, under the supervision of Dr. Eamonn Caffrey. Cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.
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 3. See Reference: ThinkBusiness.IE (2020).

pilot' their concept. The outcome of the project led to the creation of a social enterprise underpinned by technology to connect businesses with surplus food to charities that needed food.⁴ Notwithstanding the enterprises' fine success to date (See Exhibit 1: Sample of FoodCloud Awards), Chief Executive Officer (CEO) Isult Ward acknowledged that some obstacles had to first be overcome given that, "When we launched FoodCloud it didn't work at all. We had to go back to the drawing board,"⁵ which served to highlight the prevalent nature of challenges inherent in start-up initiatives.

The idea for the business was born out of recognition of a glaring societal need. It was reported that, on average, 25,000 tonnes of food are disposed of annually by both Irish businesses and households⁶, all the while one in eleven people in Ireland experience some level of food hunger and malnutrition. Furthermore, it is estimated that one in seven people worldwide experience food poverty.⁷ The aim behind FoodCloud is simple – the creation of an easy-to-use technology platform that makes the recovery and redistribution of surplus food as efficient as possible between food providers, FoodCloud hubs, charities and partners.⁸ This allows any kind of entity with too much food to be matched with charities within their community that have too little. Though this might well be oversimplifying it ever so slightly.

FoodCloud provides a unique opportunity for creating shared value as it allows businesses to make a meaningful contribution to their communities whilst at the same time reducing the cost of food waste by way of innovatively eliminating disposal transaction costs.⁹ In the six years since its inception, FoodCloud is "proud that together, we have created a solution for surplus food redistribution that supports more than 9,500 charities and community groups across Ireland and the UK."¹⁰ It is estimated that 33% of global food production goes to waste.¹¹ It is FoodCloud's ambition to significantly mitigate this level of resource extravagance which can be summed up by the organization's vision whereby the aim is that we all live in "a world where no food goes to waste."¹² Technological developments are critical to realising this vision. FoodCloud technology solutions are now adopted by more than 3,500 retail stores in eight countries.¹³

4. See Reference: Cleary (2017).

5. See Reference: Woods (2017).

6. See Reference: O'Connor, Pyne & Co. Limited (2019).

7. See Reference: FoodCloud (2020a).

8. See Reference: McGrath (2018).

9. See Reference: Porter and Kramer (2011).

10. See Reference: FoodCloud (2019).

11. Ibid.

12. Ibid.

13. In terms of countries, the United Kingdom (UK) consists of four: England, Scotland, Wales and Northern Ireland.

2. Leading with Purpose

Co-founders Aoibheann O'Brien and Iseult Ward immediately bonded over their mutual interest in reducing food poverty and resource extravagance by generating greater awareness, demonstrating concern, and acting entrepreneurially to develop innovative solutions that would address the issues at hand. Initially, O'Brien pitched the idea of a surplus food café and this captured Ward's attention.¹⁴ They explored the international arena to identify similar voluntary entities and established contacts in London and Chicago. This led to the exchange of knowledge about challenges, obstacles, and practices to help launch a legal entity in the voluntary sector. Soon after, they made contact with local farmers and charities in an effort to further their understanding of how accepting and redistributing surplus food produce could work. With the help of this information, the pair collected their first food donation from the 'Honest 2 Goodness' Farmers Market in Dublin. The trial proved a success albeit, not without highlighting some barriers to overcome and in 2013, FoodCloud was established.¹⁵

2.1. Growing Purpose with Food

Today, FoodCloud is a highly purpose-driven social enterprise and this can be gleaned from the organization's mission, vision, and values. But at the heart of all this, the co-founding leaders and team members think on a global scale that positions kindness and people first. Reducing food waste and mitigating food poverty go together, hand-in-hand, and this rests at the heart of what FoodCloud is about, its *raison d'être*. FoodCloud's values epitomise kindness, people and global thinking by way of enshrining entrepreneurialism, trust, respect, loyalty, diversity, collaboration, sustainability and above all, team unity, among the founders, employees, volunteers, directors, suppliers, charities, agencies, donors, sponsors, and partners.

2.2. Directing for Impact

As FoodCloud evolves and grows in terms of organizational size, impact, complexity and reach, an important step in the process was to design and recruit a highly knowledgeable and expert Board of Directors. The co-founders both recognise and warmly commend the Board's advocacy, direction, insight, and often unrecognised work that they perform. So it can be taken to believe in no small measure that the Board members work hard behind the scenes in terms of adding their support and providing guidance to the co-founders and their teams

14. See Reference: Cleary (2017).

15. See Reference: Daly (2019).

on the organization's future long-term direction in terms of its potential to enhance impact and reach. It is noted by the enterprise that, "We could not and would not have achieved our impact without their [Board] expertise and support."¹⁶ In terms of expertise, the depth of knowledge, skill and experience possessed by the Board comprises (in no particular order): Global Supply Chains, Technology Innovation, Clean Technology, European Food Banks, Community Action Networks, Telecommunications, Business Solution Design, Strategy, Finance, Executive Leadership, Energy, Partnering Networks, Management and Advisory, Business Analytics, Human Resources and more. While FoodCloud is also in the business of gleaning farm crops, it might well be posited that the Board and its members are in the business of harvesting the organization and its people towards powerful meaning and impact.

2.3. Leading Sustainable Change

Minimising the impact that wasted food has on the planet is an issue that FoodCloud treats seriously. With 33% of food produce around the planet going to waste, this contributes to the significant environmental challenge. Since 1950, the worldwide population has nearly tripled as has agricultural production. Today, 38% of the planet's land area is under cultivation¹⁷ and with so much of the food produced going to waste, the extent of related CO² emissions associated with such waste contributes strongly to the degradation of natural ecosystems and adding to the climate challenge. FoodCloud, through its 'Origin Green' initiative, support farms, manufacturers, and distributors to meet challenging waste reduction targets, reduce CO² emissions, and to recognise and support the attainment of social sustainable targets.¹⁸ The single-minded vision of 'no food going to waste' not only tackles the global issue of food poverty but also embeds strong awareness of the need to act sustainably on multiple fronts both in the private and public sector. Minimising the impact that wasted food has on the planet is central to the FoodCloud philosophy and way of doing things. In this respect, the organization is dedicated to supporting the United Nations Sustainable Development Goals (UN SDG) and FoodCloud is strongly aligned to support the global achievement of UN SDG Target 12.3 and to reduce food waste by 50% and achieve Zero Hunger by 2030.¹⁹

16. See Reference: FoodCloud (2020e).

17. See Reference: Henderson et al. (2016).

18. See Reference: FoodCloud (2020b).

19. See Reference: FoodCloud (2019).

3. Pioneering Technology

The unique solution that enables FoodCloud to connect businesses with surplus food to charities in local communities is facilitated through a technology platform. The platform is used by donating partners wherever FoodCloud has a presence. The donating partners, such as supermarkets, use the application to connect with partner food banks and charities. The platform enables high levels of donation and engagement between retail stores and charities. Presently, there are over 9,000 charity and community group recipients using the application. The platform features a backend web-based system to provide supporting administrative information to donors and charities. Visibility into the availability of donations, collections, food categories, impact and more, is accessible to ecosystem participants.²⁰

The application is rigorous to the extent that line-level product traceability is available when required. The platform can be integrated with external sources such as retail stock control systems. As is evident in the organization's name, the platform is a cloud-based application that can be accessed and used anywhere in the world.

Administration and reporting systems enable FoodCloud to coordinate the management of food redistribution on national and international levels. Technology plays an essential role in the coordination and integration of surplus food exchange between donors and beneficiaries. Continually, FoodCloud seeks to improve existing technical capabilities and develop new platform features in order "to support the great work that the donors, recipients and food banks do on a daily basis."²¹ Technology enables FoodCloud to provide a fast and efficient solution that brings all ecosystem partners together towards reducing food waste and redistributing it to the people who need it most.

FoodCloud's technology, with a level of development support from Tesco UK, enabled FareShare to establish the award winning 'FareShare Go' product. This provides the charity network with access to direct surplus food donations in their local community (i.e. 35% of FareShare surplus food redistribution or 6,000 tonnes of food).²²

4. Hub Network

Today, the FoodCloud organization has its Headquarters in Dublin with a network of three hubs situated in strategic locations around Ireland to facilitate the speedy collection and redistribution of food. The hub network continuously

20. See Reference: FoodCloud (2020c).

21. See Reference: FoodCloud (2020c).

22. FoodCloud Communications (2020): [Internal company document kindly shared by FoodCloud].

grows in terms of size and capability; scaling operations to a national level is key to realise FoodCloud's vision for Ireland. This was facilitated by a partnership formed between FoodCloud and the Bia Food Initiative (BiaFi). BiaFi was formed as a charity in June 2012 with the aim to provide an environmentally and business friendly alternative to discarding good food.²³ In October 2016, BiaFi became FoodCloud Hubs. The partnership represented the first "farm to fork solution" of surplus food within the Irish food industry.²⁴ The hubs work with producers, manufacturers, and wholesalers nationwide. Businesses can deliver their food to a hub on either a regular or ad-hoc basis. In July 2019, FoodCloud Hubs and FoodCloud combined to form a single entity – FoodCloud.²⁵ The combined effects from merging the two entities are focused on enhancing impact in terms of food recovery and redistribution, supporting communities and widening respect for related environmental concerns.

5. Funding

As a social enterprise, it is critically important for FoodCloud to identify and secure a range of funding and income streams to ensure its long-term sustainability (See Exhibit 2: Sample of Financial Supporters in 2017). FoodCloud is funded in different ways including: technology service fee, supplier fee per pallet of food donated (only some suppliers – not all), grant funding (e.g. Enterprise Ireland), philanthropic funding (e.g. Ireland funds, Arthur Guinness fund), corporate funding (e.g. AIB) and Pobal funding (i.e. Government funding for employment). Some of the key moments for FoodCloud in respect of funding follow next.

5.1. Early Days

Following O'Brien's brief time working in investment banking in London and then returning to Dublin to undertake a Master's Degree in Environmental Science, and while Ward was working on an Undergraduate Degree in Dublin, the pair came together to advance their shared interests around the love of food along with keen sentiment to address the issue of food waste. This led to an application for social funding which was well received and helped to facilitate the launch of the FoodCloud entity.²⁶ In 2013, the co-founders pitched the FoodCloud concept to the first Minnovation fund which was part of the Social Entrepreneurs Ireland initiative. Subsequently, FoodCloud gained access to the Trinity College Dublin

23. See Reference: Fuzion Communications (2014).

24. See Reference: FoodCloud Hubs (2019a).

25. See Reference: FoodCloud Hubs (2019b).

26. See Reference: her.IE (2015).

Launchbox accelerator programme, and later gaining entry to the National Digital Research Centre accelerator initiative. These were the early days and the co-founders' ambitions were beginning to take shape. The next boost of support came in 2014 when they secured €100,000 from the Social Entrepreneur's Ireland Impact Award and when the panel deemed that the pair were "perfectly positioned to become leaders in the fight against food waste not just in Ireland, but around the world."²⁷ Later in the same year, FoodCloud was selected by KBC Bank as one of several organizations to share €80,000 in funding, as part of the KBC Bright Ideas initiative.²⁸ FoodCloud were celebrating in 2016 after gaining a finalist spot in the Virgin Media VOOM 2016 competition. The success came with a €24,000 prize, business broadband support, mentoring and brand support. Virgin Media VP commended the success by stating that, "It's a great achievement by FoodCloud to reach the final six, and wonderful that an Irish business made it through to the finals of this major entrepreneurial competition."²⁹

5.2. Making Serious Connections

In 2018, FoodCloud secured corporate financial support from AIB³⁰ and the Social Innovation Fund Ireland (SIFI) Growth Fund.³¹ AIB committed €500,000 per annum for three years to FoodCloud. This was supported with a further €100,000 direct investment in FoodCloud Hubs. Moreover, AIB established an employee volunteering programme for FoodCloud Hubs with AIB staff across Irish communities making a significant impact on FoodCloud activities.³²

In the same year, SIFI Growth Fund committed €330,000 in financial and non-financial support to the enterprise.³³ The funding was used to further develop FoodCloud's technology platform, expand and develop the hub network along with the identification and development of new services (e.g. community kitchens, gleaning, collaborative retailer campaigns) that align with the ambition to enable the sourcing and redistribution of surplus food.

27. See Reference: Daly (2019).

28. See Reference: FoodCloud (2014).

29. See Reference: Business World (2016).

30. AIB is a private, business, and corporate banking institution.

31. See Reference: European Food Banks Federation (2018).

32. See Reference: FoodCloud (2019).

33. See Reference: Rethink Ireland (2020).

5.3. Corporate Support

In addition to some of the funders noted above, many organizations support FoodCloud in a range of ways in different areas. One such example of this support was provided by Aldi in March 2020 when the retailer announced that Aldi Ireland will add further support for its charity partner FoodCloud, including a €50,000 donation to assist with additional staff support as well as increasing food donations.³⁴ Some organizations provide pro-bono services, discounted products, and time in support of the enterprises' mission (See Exhibit 3: Sample of Pro-Bono Suppliers in 2017).

5.4. Financial Performance

The organization's financial income in 2017 was ca. €1.3 million. In 2018, this had increased to just over €2.14 million. This can be broken down as follows: Operational Income from Delegated Distribution at €1,387,819; Income from Shared Resources provided to FoodCloud Hubs at €108,686; and Income from Grants and Donations at €645,412 which represented 30% of total income. The main expense for FoodCloud relates to payroll costs which accounted for 79% of total costs in both 2017 and 2018.³⁵ For the financial year 2018, FoodCloud reported a surplus of almost €500,000,³⁶ compared to ca. €16,600 in 2017. In 2018, the enterprise had assets of ca. €1.44 million compared to ca. €875,000 in 2017. Surplus income is reserved to contribute towards covering future expenses.

In just six years, FoodCloud has grown from a team of two to over seventy employees distributed across its operational network. This explains why personnel costs form the main component of operational expenses. Though not directly related to financial performance, it was strongly pointed out by COO Walsh that FoodCloud treats employee wellbeing very seriously. FoodCloud employees, while working closely with charities and community groups, do at times, witness the harshest of individual and societal circumstances. Everything to safeguard employee wellbeing occupies the forefront of the executive mindset.

6. Partnering in Success

The undeniable need for FoodCloud, from both a retailer and charity perspective is reflected in the rapid growth since 2013. The enterprise has strategically partnered with multiple retailers as well as global brands in order to fully execute on their long-term goal of eradicating food waste. These alliances can be

34. See Reference: Checkout (2020).

35. See Reference: O'Connor, Pyne & Co. Limited (2019).

36. See Reference: The Times (2019).

categorised as retail, logistical, government, and positioning partnerships – allowing a clear illustration of the numerous benefits that have arisen as a result from each.

6.1. Retail Partnerships

Retail partnerships provide FoodCloud with a continuous supply of surplus food. Following the launch of a pilot programme in 18 Tesco stores around Ireland from October 2013 to February 2014, which resulted in almost 60,000 meals being redistributed to approximately 38 charities, Tesco Ireland and FoodCloud launched a ground-breaking partnership in July 2014.³⁷ FoodCloud now works with Tesco Ireland's 151 retail stores to redistribute surplus food to charities and community groups. The partnership not only provides food to those in need but enables the many charities to significantly reduce their food costs and invest the resources in additional support services and thereby create a strong and impactful circular effect. The surplus food redistributed by FoodCloud is perfectly fit for human consumption but cannot be sold to retail consumers for a variety of reasons (e.g. short dated products, damaged packaging, ordering errors). As of December 2019, Tesco Ireland had donated 10 million meals to charities in communities across Ireland. The charities cover a span of special needs including family resource centres, soup kitchens, youth services, homeless organizations, meals on wheels and more, with an estimated value of ca. €12.7 million.³⁸ Furthermore, by partnering and working with FoodCloud, Tesco Ireland's ambition is such that, "no food suitable for human consumption will go to waste from their retail operations by 2020".³⁹ Moreover, CEO Ward regards the initial partnership with Tesco as the enterprises' first big break.⁴⁰ Securing the backing of the retailing giant provided FoodCloud with the credibility it needed as a social enterprise to garner sufficient interest and support from other food supply sources.

A partnership with the retail supermarket Aldi was also formed in 2014. Aldi launched a pilot scheme in their Ballincollig County Cork store which proved successful, resulting in the announcement of a national partnership in 2016. By 2020, up to 122 Aldi stores were involved. Thus far, the partnership between Aldi and FoodCloud has contributed 1.9 million meals with an estimated value of €2.4 million to charities and people in need.⁴¹ County Kerry Women's Refuge Support Service, who offer refuge to women and children affected by domestic violence, is an example of one such charity. As a result of the Aldi donations, the

37. See Reference: Tesco (2019).

38. See Reference: FoodCloud (2018).

39. See Reference: Lindsay (2018).

40. See Reference: Tesco (2020).

41. See Reference: Aldi (2020).

organization has made considerable savings on their food budget which can then be invested towards improving other crucial elements of their service.⁴² Sally Burke, from the local charity Cuan Mhuire Farnanes stated that the Aldi “donations have given the charity the capacity to provide more meals to those who need help most and also allowed the charity to use its budget for other essentials and help more and more people.”⁴³

The year 2016 continued to be a pinnacle milestone for FoodCloud when another major partnership was reached with Musgrave MarketPlace. Musgrave MarketPlace is an Irish wholesale supplier to food service, retail, and SME business across Ireland. By 2019, it had donated over 550,000 meals to charities in Ireland through the FoodCloud partnership. These donations equated to some 250 tonnes of food which provided a cost saving to charities of €750,000.⁴⁴ Through its donations of surplus food, Musgrave MarketPlace diverted 800,000 kilos of CO² emissions by way of produce going to effective use that would have otherwise been diverted to landfill. “Through our partnership with FoodCloud, we have helped provide quality, fresh produce to some of the most vulnerable people in our communities,” said Catherine Lambe, Human Resources Director at Musgrave MarketPlace.⁴⁵

During 2016/17, the food retailer Lidl and FoodCloud formed a partnership to operate a national food redistribution programme. By working in partnership, Lidl Ireland aims to see all of their stores and warehouses connected with local charities to benefit from the donation of surplus food.⁴⁶ The programme’s original ambition was to donate one million meals to multiple Irish charities by 2020. The partnership supports Lidl’s own ‘Origin Green’ strategy whereby all 152 Lidl retail outlets and warehouses can more acutely harness a good focus towards sustainability. Furthermore, in response to the Covid-19 Pandemic, Lidl Ireland and FoodCloud teamed up together to launch a dedicated food donation appeal to mitigate the Coronavirus impact on communities. The campaign slogan was aptly titled: ‘Can You Give a Lidl Extra.’ Essentially, J.P. Scally, Managing Director of Lidl Ireland, considered the campaign whereby, “At Lidl, we want to ensure that we do everything in our power to look out for the more vulnerable members of our communities at this difficult time. With the generosity of our customers and by utilising our existing infrastructure with FoodCloud, we will be able to quickly get the essential supplies to those in need.”⁴⁷

Another major milestone was reached for FoodCloud in 2018 when the enterprise partnered with Nestlé. “Not only will Nestlé Ireland now direct all its surplus food to FoodCloud, it will also pay FoodCloud for every pallet of goods to cover the costs to manage, store and redistribute any unforeseen food surplus,”

42. See Reference: FoodCloud (2018).

43. See Reference: Donnelly (2017).

44. See Reference: Musgrave MarketPlace (2019).

45. See Reference: ShelfLife (2019).

46. See Reference: Lidl Ireland (2020a).

47. See Reference: Lidl Ireland (2020b).

according to a statement from Nestlé released via Forbes.⁴⁸ The redistributed food items will comprise coffee, confectionary and cereals. The partnership, a first for an Irish food supplier – creates a new sustainable income stream for FoodCloud – with the hope that it will pave the way for other food industry partners to follow suit.⁴⁹ The signing of this partnership represents a monumental step in FoodCloud’s expansion journey as it symbolises the creation of a “sustainable income stream to cover day-to-day administration and operation costs.”⁵⁰

A good range of additional food suppliers work in partnership with FoodCloud such as: Meade Potato Co.; Pallas Foods; Lucozade Ribena Suntory; Lakeland Dairies; Newbridge Foods Limited; and Dawn Farms, to list only some (See Exhibit 4: Sample of Food Providers in 2017). In common, they all see their partnership with FoodCloud as constantly striving towards reducing both food and energy waste.

In sum, FoodCloud redistributes surplus food from a range of suppliers to a network of over 650 charities in Ireland. This is managed through one of two solutions: (1) using its technology solution to connect retailers to local charities; or (2) redistribution of large volumes of food via the hub network to charities around Ireland.

6.2. Logistical Partnerships

An effective distribution network is critical to FoodCloud’s supply chain capability. These partnerships support FoodCloud in building its distribution infrastructure that would otherwise have been unattainable for the social enterprise. An alliance with Opel in August 2016 provided the enterprise with seven custom vans which have since played a pivotal role in facilitating the growth in demand throughout Ireland by better enabling FoodCloud to link up with partnering charities – “These vans will deliver surplus food the equivalent to 2.3 million meals to over 250 charities in the next 12 months.”⁵¹ Additionally, the recent donation of €60,000 from the Applegreen Charitable Fund enabled the purchase of a further three refrigerated vans, further supporting the expansion of the network.⁵² The partnership between FoodCloud and Applegreen is ongoing and was renewed again in 2020 when O’Brien acknowledged that Applegreen’s support will, “. . . help us to cover our transport costs and continue to get good food to great charities. The funding from Applegreen will support FoodCloud to redistribute more than 1,000 tonnes of surplus food to approximately 250

48. See Reference: Rushe (2018).

49. See Reference: Nestlé (2018).

50. See Reference: Taylor (2018).

51. See Reference: FoodCloud (2016a).

52. See Reference: Cabecos (2018).

charities across Ireland, providing the equivalent of over two million meals to those who need it most in our communities.”⁵³

6.3. Government Partnerships

Origin Green is the world’s first food and drink sustainability programme operating on a national scale, bringing together government, Environment Protection Agency, the private sector, farmers, and food producers.⁵⁴ FoodCloud has partnered with Origin Green, a sustainability programme that works with businesses from across the food supply chain, to make both donating and distributing large volumes of surplus food as seamless as possible. As an Origin Green Partner, FoodCloud’s technology-based platform allows participating businesses (e.g. Tesco, Aldi, Lidl) to monitor their impact by quantifying the tonnage saved (i.e. avoid landfill) and meals provided to benefiting charities. In this respect, FoodCloud is committed to making surplus food recovery and redistribution affordable and scalable to the food industry.⁵⁵ In turn, this enables Origin Green members to measure and record key performance indicators relating to their sustainability goals.⁵⁶

FoodCloud announced a partnership in 2018 with the Irish Government Department of Employment Affairs and Social Protection to implement an EU Programme, FEAD (Fund for European Aid to the most Deprived), which would see €3 million worth of food distributed to 60,000 people marginalised in Irish society. FoodCloud is the partner organization for the nationwide availability of the food element of the FEAD Programme in Ireland. FoodCloud is responsible for the procurement, storage and charity collection of FEAD product for this programme.⁵⁷ Much of the food donated to FoodCloud tends to be perishable. However, through this EU funding, the FEAD programme will deliver non-perishables in conjunction with fresh food, in both a structured and sustainable way.⁵⁸

6.4. Positioning Partnerships

As FoodCloud seeks to build and generate greater awareness around the issue of food waste and food poverty both in Ireland and internationally, it was perhaps fitting for the enterprise to partner with the London-Irish Rugby Football Club for the 2016/17 season. CEO Ward felt, “. . . pleased to be able to partner with such

53. See Reference: Applegreen (2020).

54. See Reference: Origin Green (2020a).

55. See Reference: Origin Green (2020b).

56. See Reference: Origin Green (2018).

57. See Reference: FoodCloud (2020d).

58. See Reference: Duggan (2018).

a high-profile club as London Irish as we seek to build awareness of our growing activity in the UK.”⁵⁹ The CEO of London Irish, Bob Casey, expressed his delight to be able to support the multi-award winning start-up expand their reach in the UK by leveraging the club’s position in the heart of the community to create lasting benefits for the community.

On an institutional level, FoodCloud engage with important networks mandated to shape societal outcomes by way of improved social and environmental performance. In July 2020, FoodCloud was honoured to be recognised as Friends of Champions 12.3 which is a “coalition of executives from governments, businesses, international organizations, research institutions, farmer groups, and civil society dedicated to inspiring ambition, mobilising action, and accelerating progress toward achieving SDG Target 12.3 by 2030.”⁶⁰ The target is to halve global food loss and waste at the consumer and retail level and to reduce losses along the production supply chain. FoodCloud sits on and regularly present at EU level on the EU’s Food Loss and Waste Platform. FoodCloud is also an active member of the European Food Banks Federation which includes a long-lasting partnership with the Global Foodbanking Network.

7. Going Beyond Ireland

For the enterprise to drive impact, this requires extending its reach to new markets and regions. FoodCloud’s potential customers, clients and partners can literally involve individuals, charities, community groups, food producers and retailers, and institutions, situated anywhere in the world. Furthermore, when the potential impact of reducing CO² emissions is considered, this plays out on a planetary level.

7.1. Staying Close to Home

As FoodCloud continued to gain traction with the Irish operation by forming partnerships that aligned suitably well with its ambition, the co-founders were strongly aware that in order to enhance FoodCloud’s societal impact, then it was appropriate for the organization to internationalise the service. CEO Ward had set FoodCloud’s primary goal as changing people’s relationship with food and food wastage. So, to achieve this goal, FoodCloud simply had to scale, grow and internationalise – which is why they set their sights, initially, towards the UK.⁶¹

The UK was an obvious choice about where to go next for countless reasons. As is the case for many Irish businesses, the UK tends to seem like the most

59. See Reference: FoodCloud (2016b).

60. See Reference: Champions123 (2020).

61. See Reference: Lindsay (2018).

suitable country to venture entry towards given its position as one of Ireland's top trading partners,⁶² with many cultural similarities and relatively low barriers to entry.⁶³ The close proximity of the two countries allows for easy access and high-quality communications – key for the successful implementation of an internationalisation strategy.⁶⁴ Furthermore, Tesco was FoodCloud's main Irish partner following the launch of the social enterprise and had expressed strong interest to leverage FoodCloud's capabilities by way of strengthening the relationship to extend a foothold into the UK; this essentially acted as a major pull factor to expand overseas.⁶⁵ However, and perhaps more importantly, food waste is an enormous issue in the UK too, demonstrating a clear need for FoodCloud's expertise and to widen its impact.

7.2. FoodCloud-FareShare: Bringing Fruit to Bear

In terms of the UK market prior to FoodCloud's entry, the main social enterprise tackling food waste through the redistribution of surplus food was FareShare. It had been operating in the UK for 20 years and had vast knowledge and experience of the UK charity sector, essentially what FoodCloud was lacking in market knowledge. In Ireland, FoodCloud had its own hub network, however, they did not have access to a similar network in the UK. This represented an obstacle to overcome for FoodCloud's entry into the UK, adding a layer of complexity to their expansion strategy. Instead of having a direct relationship with retailers in the UK, they needed to bridge with a local partner capable of providing redistribution activities similar to those of FoodCloud Hubs in Ireland, whilst upholding the high levels of service that partners such as Tesco had become accustomed to in Ireland.⁶⁶ Charity recruitment and engagement also posed a major obstacle to FoodCloud when entering the UK. However, with such a dedicated passion to deliver impact at scale, FoodCloud overcame this obstacle and did what they do so well – formed a strategic partnership with FareShare in order to facilitate a seamless entry into the UK whereby working collectively, technological know-how and redistribution capabilities came together to serve a greater purpose.⁶⁷ Simply put, by combining FoodCloud's unique technology platform and expertise from working in Ireland with FareShare's network of connections and knowledge of the UK charity food redistribution arena, this resulted in a far more efficient and effective way of tackling food waste in the UK. "This is a really exciting collaboration between FoodCloud and their technology platform from Ireland, and FareShare across the United Kingdom, redistributing

62. See Reference: Central Statistics Office (2019).

63. Notes from an interview with Ciara O'Regan, FoodCloud Programme Manager.

64. See Reference: Johnson et al. (2017).

65. Notes from an interview with Ciara O'Regan, FoodCloud Programme Manager.

66. Notes from an interview with Ciara O'Regan, FoodCloud Programme Manager.

67. See Reference: McHugh (2017).

surplus food. It's going to allow us to work with Tesco stores, identify surpluses at the end of the day, connect that with the local charity and make sure no good food goes to waste."⁶⁸

7.3. Rolling Out in the UK

"This is potentially the biggest single step we've taken to cut food waste."⁶⁹ With Tesco serving as the link between FareShare and FoodCloud, a pilot food redistribution programme was launched in June 2015 in 10 of Tesco's UK stores.⁷⁰ From Tesco's perspective, this was an opportunity to build on the success of the FoodCloud-Tesco partnership in Ireland. "The scale of the challenge is totally different but working with such established organizations in the UK like Tesco and FareShare, makes us really excited to see the positive impact we've seen in Ireland, [materialise] across the UK."⁷¹ To the delight of the collaborative partners working together (FareShare, FoodCloud and Tesco), the pilot programme was successful and by the end of 2016, the number of Tesco stores participating in the redistribution programme had risen to 932 throughout the UK region. By 2017, over 1,000 Tesco retail stores were participating in the food redistribution programme⁷² and the partnership was celebrating the redistribution of over 5 million meals to local charities across the UK.⁷³ After Tesco's CEO, Dave Lewis, noticed the platform being used in a store, his ambition for Tesco was to see it rolled out in all of Tesco's 3,200 stores across the UK and Ireland.⁷⁴ By July 2020, the service was available in 2,654 Tesco stores.⁷⁵

7.4. Two Steps Forward

Building on the success of the FareShare-FoodCloud-Tesco partnership, the FoodCloud team got to work again, and through a combination of persistence, proof of concept, environmental pressures to reduce food wastage, along with being in the right place at the right time, partnering with Waitrose UK retail stores became the next milestone to focus on. A strategic partnership between

68. See Reference: Tesco (2015); video comments provided by CEO Lindsay Boswell of FareShare.

69. See Reference: Tesco (2015); video created together by FareShare, FoodCloud and Tesco Partners.

70. See Reference: Rothery (2015).

71. See Reference: Tesco (2015); video comments provided by FoodCloud CEO Iseult Ward.

72. See Reference: Environment & Energy Management (2017).

73. See Reference: FareShare (2017).

74. See Reference: Forecourt & Convenience Retailer (2020).

75. FoodCloud Communications (2020): [Internal company document kindly shared by FoodCloud].

FareShare, FoodCloud and Waitrose UK was formed in 2017. The partnership piloted a food redistribution programme in 25 Waitrose retail branches. Following a successful trial, Waitrose extended the number of participating branches in the FareShare-FoodCloud redistribution programme to include all full-size markets by the end of 2018.⁷⁶ Since March 2017, 2.44 million meals have been donated comprised of 1 million KGs of food with an estimated environment sustainability impact saving of 3.2 million KGs of CO² emissions.⁷⁷

7.5. Weighing It Up

Overall, FoodCloud has made tremendous progress in respect of making an impact in the UK. They have enabled FareShare to expand their reach from 300 UK towns in 2015 to 1,500 towns by 2019 – raising the UK penetration potential close to 80%.⁷⁸ Within two years of the FareShare-FoodCloud partnership, the impact had been sizeable. The shared achievements by end of 2017 resulted in 4.7 million KGs of redistributed food translating to 10.4 million meals. By virtue of FareShare and FoodCloud working together to tackle hunger and food waste across the UK, they have used technology to connect charities and retailers with ca. 2,900 retail stores making donations, resulting in the redistribution of food to community partners and thereby, making an impact every week on the lives of many thousands of people.⁷⁹

Additionally, FoodCloud’s technology has not only significantly enhanced efficiency, but also the safety and sustainability of operations for FareShare, charity and retail partners. Ultimately, the collaborative effort in pursuit of common ambition has strongly helped to enable the partner network to realise the vision of having an impact at scale that will ‘change the way people think about food’. According to Joshua Hardie,⁸⁰ “by working with FareShare-FoodCloud, and funding the infrastructure that they’re building in the UK, we think we can solve the challenge for our stores, but also for the whole industry too.”⁸¹

7.6. Time to Scale

While FoodCloud’s near-term strategy is centred on continually working to make the technology and engagement at charity and store level more efficient and effective by working collaboratively with the partner network, the long-term

76. See Reference: Waitrose (2018).

77. See Reference: Waitrose (2020).

78. Notes from an interview with Ciara O’Regan, FoodCloud Programme Manager.

79. See Reference: FoodCloud (2018).

80. Joshua Hardie was previously Head of Tesco UK Corporate Responsibility and is the current Deputy Director General for the Confederation of British Industry (CBI).

81. See Reference: Tesco (2015); video comments provided by Joshua Hardie.

strategy is focused on developing an international network by way of forming strategic alliances with established food providers to bring about a sustainable difference on a global scale.⁸² Since FoodCloud's proven success in the UK and Ireland, it now has plans to expand in Australia, the Czech Republic and Poland. Pilot programmes were launched in all three countries in 2018.⁸³ According to FoodCloud's Chief Operating Officer (COO) Emma Walsh, a growing emphasis on reducing food waste in Europe is driving European countries towards managing their 'waste footprint.' In Australia, the green-wave effect is a key motivation there.⁸⁴ FoodCloud's technology platform is the key enabler that connects major retailers with local charities. In Ireland, FoodCloud run the hub redistribution network; in the UK, the redistribution infrastructure is managed by FareShare. But essentially, FoodCloud has developed and continues to build the technical solution that brings together all ecosystem members and acts as the interface towards reducing food waste and food poverty in a variety of ways. COO Walsh explained that there is growing awareness on a global level "to support that [there is] increasing social inclusion in the charities sector... without needing all the physical infrastructure"⁸⁵ and this is becoming a recognisable trend. In this respect, it is FoodCloud's aim to provide the technology solution to positively enable greater collaboration vis-à-vis food redistribution on an international level. The concept of using technology for virtual foodbanking, or delegated distribution – the idea where you connect the source of food directly to the local charity that is going to use the food is quite recent and somewhat novel in approach.

8. On Impact

It is expected that by October 2020, the impact of FoodCloud's activities will have resulted in the redistribution of 44,000 tonnes of food that would otherwise have gone to landfill. This translates to the equivalent of 100 million meals redistributed to charities and community groups.⁸⁶ The result from avoiding mass landfill will save some 150,000 tonnes in CO² emissions. The redistribution of surplus food in the UK and Ireland to date represents an estimated value of €90 million. The efforts made by FoodCloud and its partners lead the way in developing end-to-end solutions for food waste across supply chains. Essentially, the enterprises' technology solution is having a notable impact on food waste with the potential to shape food security globally.

82. Notes from an interview with Ciara O'Regan, FoodCloud Programme Manager.

83. See Reference: Whelan (2019).

84. Ibid.

85. Ibid.

86. FoodCloud Communications (2020): [Internal company document kindly shared by FoodCloud].

8.1. The Way Ahead

FoodCloud's key priorities for future development can be described along five main prongs: (1) Redistribute 25% of Ireland's surplus food by 2030, an estimated 6,250 tonnes of food; (2) in partnership with FareShare, increase food redistributed in the UK by 10% each year; (3) redistribute 1,440 tonnes of food annually in the UK through its delegated distribution solution by 2021 (with 2 & 3 above combined, the aim is to redistribute 9,500 tonnes of surplus food annually in the UK); (4) expand technology licensing pilots that were established in Australia, the Czech Republic and Poland and establish one additional pilot; and (5) establish ten new licensing partnerships internationally by 2021. The major aim is for FoodCloud's technology platform to become the "go to" choice for food redistribution organizations internationally [by] 2030, supporting the overall global achievement of UN SDG 12.3."⁸⁷

Only by way of tenacity, serendipity and continuous learning have FoodCloud succeeded in having such an impact in the UK and Ireland, and more recently by venturing into three new geographical territories. *Tenacity* in terms of relentless determination among the co-founders and enterprise team members to persist and overcome the wide array of challenges and obstacles that beset endeavours when attempting to break new ground. *Serendipity*, by chance, as explained by COO Walsh, "we got to talk with Tesco's CEO, Dave Lewis – he listened . . . he supported our vision and mission in terms of what FoodCloud was attempting to achieve and helped us to make it happen . . . he could see the difference we were attempting to make . . . a ground-breaking moment for us!"⁸⁸ Essentially, Dave Lewis of Tesco championed FoodCloud's vision when he travelled to Ireland and "visited a selection of supermarkets and saw first-hand the FoodCloud process in action in the store. We have subsequently rolled out to 2,654 Tesco stores across the UK."⁸⁹ *Continuous learning* by way of acting creatively to develop technical solutions; problem solve major issues; create new value propositions; identify new funding and income opportunities; and listen to employees and partners, within the organization and across supply chains, institutions and corporations, when imparting suggestions and advice on tactical and strategic direction. COO Walsh explained, "We're on a constant learning curve . . . lots of things to consider like localisation of technology, translation of the technology and different legal structures around food safety."⁹⁰ It is anticipated the need for these qualities and more will long remain as the enterprise seeks to forge ahead.

87. See Reference: O'Connor, Pyne & Co. Limited (2019).

88. Notes from a meeting with Emma Walsh, FoodCloud Chief Operating Officer.

89. FoodCloud Communications (2020): [Internal company document kindly shared by FoodCloud].

90. See Reference: Whelan (2019).

FoodCloud have made great strides in making a difference by way of impact. But today, the challenges continue. While there can be no doubt about the proven accomplishments to date, nor doubt about the merit of the organization's high aspirations, it is a jagged mountain to climb. The business aspires to make a difference on a global level. This will entail a high degree of scaling internationally. But the evidence to date strongly shows that even though FoodCloud services result in a cost saving for charities and community groups, it is purely unrealistic to think that such groups have the resources to cover even the most modest fee to avail of the service. Therefore, to scale and grow, FoodCloud will require additional and ongoing funding and support to be able to deploy its people, technology, and value proposition in new territories. A key enabling factor in support of FoodCloud's mission will be to identify and secure new streams of funding and income sourced at the corporate and institutional level. Thus far, the services provided by FoodCloud have resulted in ca. 100 million meals supplied to dependent individuals. By assigning a very modest residual retail value of €0.9 per meal, this equates the value of FoodCloud's work to €90 million (highly conservative estimate). The enterprise can replicate its efforts on a much wider scale for a very small percentage of this value. Enlisting corporate and institutional support to help FoodCloud attain this ambition by extending its international reach will, arguably, be among the main deciding factors in determining whether it can continue growing its impressive ability to drive sustainable impact.

9. Seeding the Future

The social enterprise has set itself some ambitious development targets aiming for a sizable % increase in food rescued, leading to a corresponding reduction in related CO² emissions and an increase in beneficiaries for people across Ireland. In the UK, the company is also "aiming to grow its partnership base, concentrating on retailers for the time being."⁹¹ Furthermore, to harden its global impact, it is establishing an international presence in no less than three other countries. FoodCloud Programme manager Ciara O'Regan explained how FoodCloud will execute on international developments from their current position today whereby, "our current international strategy is to license/white label the technology to food banks and/or retailers outside of Ireland/UK. The challenge is moving away from the managed service approach of the past to a Platform-as-a-Service model,"⁹² albeit the financial implications are noted above.

FoodCloud hopes to leverage the unique food sharing technology and license it to external food banks working in collaboration with some major global

91. Notes from an interview with Ciara O'Regan, FoodCloud Programme Manager.

92. Ibid.

retailers and welcome a new wave of food redistribution to a global audience. They are currently trialling with a number of retailers and international food banks to determine suitably appropriate methods in support of going global and simultaneously enhancing reach and impact. As many of these partnerships are still in the infancy stage, it is too early to determine the outcome. Leveraging established partnerships is certainly proving successful as FoodCloud strives to further develop the relationship with major retailers. Recently, pilot trials were launched in five of Tesco's Polish stores in Krakow. If proven successful, the project will be expanded throughout the entirety of Poland. Tesco have stated that they are optimistic about the results of this trial.⁹³

Despite the success that FoodCloud have enjoyed, the business is not immune to economic and environmental challenges. At present, FoodCloud are the recipients of multiple grants and sources of philanthropic funding from both public and private entities that support its social mission. Without such funding, the business would be challenged to focus on its long-term strategic plans. However, concerns about the once-off nature of these payments have been neutralised for the time being thanks to the support and generosity of some corporate organizations and institutions such as AIB and SIFI. Such funding will enable further development of FoodCloud's bespoke technological platform as well as extension of the hub network, and enable the enterprise and its people to focus on making a meaningful difference in terms of societal and environmental impact. According to CEO Ward, "The multi-year partnership gives us security and certainty in relation to our fundraising income, allowing us to take a longer-term view, focusing on activating our plans for future growth."⁹⁴

In conclusion, FoodCloud have enjoyed immense success and growth in an impressively short time-frame – with a future set for continued expansion by way of making the world a kinder and fairer place. From starting out with just an idea, social entrepreneurs and co-founders O'Brien and Ward have tackled several of society's most prevalent issues. They have succeeded in doing so by diligently developing strategic alliances and partnerships as a key method to make a difference both socially and environmentally. At the heart of their creative thinking is a '*can do – will do*' attitude and style. Technology has been central to enabling a platform to facilitate engagement and exchange between all ecosystem members that results in lower emissions, less food wastage, and helping some of the most dependent people in society. Social entrepreneurialism is a highly demanding pursuit at the best of times, and even more so in challenging times. The Coronavirus pandemic has triggered a global economic meltdown and risks fuelling a dramatic rise in poverty levels worldwide.⁹⁵ Perhaps now, more than ever before, continued support for FoodCloud is essential. Importantly, with the clarity of a vision 'where no food goes to waste' and a mission 'to make the world

93. See Reference: Tesco Poland (2018).

94. See Reference: Tannam (2018).

95. See Reference: The World Bank (2020).

a kinder place,' FoodCloud has both the potential and opportunity to support individuals and community groups all over the world through the redistribution of perfectly good food. Furthermore, activity towards lessening the environmental challenge, however small or significant, arguably merits strong and robust support. Finally, given the leadership as demonstrated by co-founders O'Brien and Ward, along with FoodCloud executives and employees, it could well be acknowledged that their shared belief, tenaciousness, and conviction, to make a difference, will serve to illustrate that anything is possible if you believe in it strongly enough. As COO Walsh explained, "Social enterprise is in our DNA."⁹⁶

96. Notes from a meeting with Emma Walsh, FoodCloud Chief Operating Officer.

References:

- Aldi (2020), "FoodCloud", *Aldi*. Available at: <https://www.aldi.ie/love-ireland/food-cloud>. [Accessed on 12 July 2020].
- Applegreen (2020), "FoodCloud", *Applegreen*. Available at: <https://www.applegreenstores.com/charity/>. [Accessed on 12 July 2020].
- Business World (2016), "Irish Start-Up FoodCloud Wins €24,000 in VOOM 2016 Competition", *BusinessWorld.IE*. Available at: <https://www.businessworld.ie/news/Irish-start-up-FoodCloud-wins-24-000-in-VOOM-2016-Competition-564812.html>. [Accessed on 12 July 2020].
- Cabecos, M. (2018), "Applegreen Announces Charity Partnership With FoodCloud Hubs", *Checkout.IE*. Available at: <https://www.checkout.ie/a-brands/applegreen-announces-charity-partnership-with-foodcloud-hubs-65970>. [Accessed on 12 July 2020].
- Central Statistics Office (2019), "Ireland's Trade in Goods 2018", *Central Statistics Office*. Available at: <https://www.cso.ie/en/releasesandpublications/ep/p-ti/irelandstradingoods2018/toptradingpartners2018/>. [Accessed on 20 July 2020].
- Champions123 (2020), "About Champions123", *Champions123*. Available at: <https://champions123.org/about/>. [Accessed on 7 August 2020].
- Checkout (2020), "Aldi Donates €50,000 To FoodCloud To Assist With Support Staff", *Checkout*. Available at: <https://www.checkout.ie/retail/aldi-provides-additional-support-foodcloud-94143>. [Accessed on 12 July 2020].
- Cleary, C. (2017), "FoodCloud grows, keeping 18m meals from landfill", *The Irish Times*. Available at: <https://www.irishtimes.com/life-and-style/food-and-drink/foodcloud-grows-keeping-18m-meals-from-landfill-1.3118358>. [Accessed on 10 July 2020].
- Daly, J. (2019), "FoodCloud's local solution to a global problem", *Irish Examiner*. Available at: <https://www.irishexaminer.com/breakingnews/lifestyle/foodanddrink/foodclouds-local-solution-to-a-global-problem-932349.html>. [Accessed on 11 July 2020].
- Donnelly, E. (2017), "Aldi store donates 25,000 meals to charity through FoodCloud", *Independent.IE*. Available at: <https://www.independent.ie/business/in-the-workplace/aldi-store-donates-25000-meals-to-charity-through-foodcloud-35965693.html>. [Accessed on 12 July 2020].
- Duggan, K. (2018), "€3 Million EU Funding Provided to FoodCloud To Help Marginalised", *Checkout*. Available at: <https://www.checkout.ie/retail/e3-million-eu-funding-provided-foodcloud-help-marginalised-54130>. [Accessed on 12 July 2020].
- Environment & Energy Management (2017), "Irish Tech Start-Up FoodCloud Expanding in the UK with Leading Retailers", *Environment & Energy Management*. Available at: <http://eandemangement.com/2017/01/irish-tech-start-up-foodcloud-expanding-in-the-uk-with-leading-retailers/>. [Accessed on 26 August 2020].
- European Food Banks Federation (2018), "FoodCloud announces partnership with AIB and Social Innovation Fund Ireland", *European Food Banks Federation*. Available at: <https://www.eurofoodbank.org/en/newsletters/2018-12-12-foodcloud-announces-partnership-with-aib-and-social-innovation-fund-ireland>. [Accessed on 26 August 2020].
- FareShare (2017), "FareShare FoodCloud celebrate 5 million meals with Tesco", *FareShare*. Available at: <https://fareshare.org.uk/fareshare-foodcloud-celebrate-5-million-meals-with-tesco/>. [Accessed on 20 July 2020].
- FoodCloud (2014), "FoodCloud Awarded Bright Idea Funding from KBC", *FoodCloud*. Available at: <https://food.cloud/foodcloud-awards/foodcloud-awarded-bright-idea-funding-from-kbc/>. [Accessed on 26 August 2020].
- FoodCloud (2016a), "FoodCloud & Opel Driving Change in Ireland", *FoodCloud*. Available at: <https://food.cloud/foodcloud-news-events/foodcloud-opel-ireland/>. [Accessed on 26 August 2020].
- FoodCloud (2016b), "FoodCloud partners with London Irish Rugby Football Club", *FoodCloud*. Available at: <https://food.cloud/foodcloud-news-events/foodcloud-partners-with-london-irish-rugby-football-club/>. [Accessed on 26 August 2020].
- FoodCloud (2018), "2017 Annual Report", *FoodCloud*. Available at: <https://food.cloud/wp-content/uploads/2020/05/Annual-Report-Final-2017-download.pdf>. [Accessed on 26 August].

- FoodCloud (2019), “2018 Annual Report”, *FoodCloud*. Available at: https://food.cloud/wp-content/uploads/2020/05/FoodCloud-Report2018_FA.pdf. [Accessed on 26 August 2020].
- FoodCloud (2020a), “The Problem”, *FoodCloud*. Available at: <https://food.cloud/the-problem/>. [Accessed on 26 August 2020].
- FoodCloud (2020b), “FoodCloud Hubs and Origin Green Sustainability Partners”, *FoodCloud*. Available at: <https://food.cloud/oringreen/>. [Accessed on 26 August 2020].
- FoodCloud (2020c), “FoodCloud Technology Platform”, *FoodCloud*. Available at: <https://food.cloud/foodcloud-technology-platform/>. [Accessed on 26 August 2020].
- FoodCloud (2020d), “Fund for European Aid to the Most Deprived (FEAD)”, *FoodCloud*. Available at: <https://food.cloud/general-faq-foodcloud/#feadprogramme>. [Accessed on 26 August 2020].
- FoodCloud (2020e), “Our Board of Directors”, *FoodCloud*. Available at: <https://food.cloud/board-of-directors/>. [Accessed on 26 August 2020].
- FoodCloud Communications (2020), “FoodCloud Story - July 2020”, *FoodCloud*. [Internal company document kindly shared for consultation purposes].
- FoodCloud Hubs (2019a), “2018 Annual Report”, *FoodCloud Hubs*. Available at: https://food.cloud/wp-content/uploads/2020/05/FoodCloud-Hubs-Report2018_FA.pdf. [Accessed on 26 August 2020].
- FoodCloud Hubs (2019b), “2019 Closing Report”, *FoodCloud Hubs*. Available at: https://food.cloud/wp-content/uploads/2020/06/FoodCloud-Hubs-Closing-Report2019_v6-1.pdf. [Accessed on 10 July 2020].
- Forecourt & Convenience Retailer (2020), “Heads in the FoodCloud”, *Forecourt & Convenience Retailer*. Available at: <https://forecourtretailer.com/heads-in-the-foodcloud/>. [Accessed on 20 July 2020].
- Fuzion Communications (2014), “Bia Food Initiative Officially launched in Munster”, *Fuzion Communications*. Available at: <https://www.fuzion.ie/news/id/1140/>. [Accessed on 10 July 2020].
- Henderson, R., Gulati, R. and Tushman, M. (2016), “Leading Sustainable Change: An Introduction”, in: Rebecca Henderson, Ranjay Gulati and Michael Tushman (eds.), *Leading Sustainable Change*, Oxford: Oxford University Press.
- her.IE (2015), “Irish Women in Business: Iseult Ward and Aoiheann O’Brien of FoodCloud”, *her.IE*. Available at: <https://www.her.ie/life/irish-women-in-business-iseult-ward-and-aoiheann-obrien-of-foodcloud-159937>. [Accessed on 11 July 2020].
- Johnson, G., Whittington R., Scholes, K., Angwin, D., and Regnér, R. (2017), *Exploring Strategy: Text and Cases*, Eleventh Edition. Harlow, UK: Pearson.
- Lidl Ireland (2020a), “FoodCloud”, *Lidl Ireland*. Available at: <https://www.abettertomorrow-lidl.ie/collaboration/foodcloud/>. [Accessed on 12 July 2020].
- Lidl Ireland (2020b), “Lidl Ireland Launch Dedicated Food Donation Appeal to Mitigate Coronavirus Impact on Communities”, *Lidl Ireland*. Available at: <https://corporate.lidl.ie/press-room/pressreleases/2020/foodcloud-appeal>. [Accessed on 12 July 2020].
- Lindsay, E. (2018), “‘Seeing a real change in how people think about food and waste is the ultimate goal’: FoodCloud CEO Iseult Ward on Their Break”, *Image*. Available at: <https://www.image.ie/business/seeing-real-change-people-think-food-waste-ultimate-goal-foodcloud-ceo-co-founder-iseult-ward-break-123156>. [Accessed on 12 July 2020].
- McGrath, D. (2018), “‘It’s a bit like Ready Steady Cook’: How FoodCloud and charities are fighting food poverty in the west of Ireland”, *thejournal.ie*. Available at: <https://www.thejournal.ie/foodcloud-homelessness-galway-charities-christmas-4402179-Dec2018/>. [Accessed on 10 July 2020].
- McHugh, R. (2017), “Irish Tech Start-Up FoodCloud Expands In The UK”, *Business World*. Available at: <https://www.businessworld.ie/agricultural-news/Irish-tech-start-up-FoodCloud-expands-in-the-UK-567245.html>. [Accessed on 20 July 2020].
- Musgrave MarketPlace (2019), “Musgrave Marketplace surpasses half a million mark for meals donated through FoodCloud”, *Musgrave MarketPlace*. Available at: <https://www.musgravemarketplace.ie/musgrave-marketplace-press-releases/musgrave-marketplace-charity-donation-to-foodcloud/>. [Accessed on 12 July 2020].

- Nestlé (2018), “Nestlé Ireland becomes first food supplier to pay for FoodCloud Hubs service”, *Nestlé*. Available at: <https://www.nestle.co.uk/en-gb/media/pressreleases/nestle-ireland-first-food-supplier-partners-with-foodcloud-hubs>. [Accessed on 12 July 2020].
- O’Connor, Pyne & Co. Limited (2019), “FoodCloud: Annual Reports and Financial Statements for the Year ended 31 December 2018”, *O’Connor, Pyne & Co. Limited*. Available at: <https://food.cloud/wp-content/uploads/2020/05/Foodcloud-Director-Report-and-Financial-Statement-2018-1.pdf>. [Accessed on 27 July 2020].
- Origin Green (2018), “FoodCloud Represent A Local Solution To A Global Problem”, *Origin Green*. Available at: <https://www.origingreen.ie/news-and-reports/foodcloud-represents-a-local-solution-to-a-global-problem/>. [Accessed on 12 July 2020].
- Origin Green (2020a), “What is Origin Green?”, *Origin Green*. Available at: <https://www.origingreen.com/en/what-is-origin-green/>. [Accessed on 12 July 2020].
- Origin Green (2020b), “FoodCloud”, *Origin Green*. Available at: <https://www.origingreen.ie/who-is-involved/partners/food-cloud/>. [Accessed on 12 July 2020].
- Porter, M.E. and Kramer, M.R. (2011), “Creating Shared Value”, *Harvard Business Review*, 89(1): pp. 2-17.
- Rethink Ireland (2020), “Growth Fund 2019-2021”, *Rethink Ireland*. Available at: https://rethinkireland.ie/awarded_fund/growth-fund-2019-2021/. [Accessed on 11 July 2020].
- Rothery, G. (2015), “Tesco launches FoodCloud Pilot in the UK after success of Irish programme”, *Business & Leadership*. Available at: <https://www.businessandleadership.com/sustainability/item/50881-tesco-launches-foodcloud-pi/>. [Accessed on 20 July 2020].
- Rushe, E. (2018), “Social Enterprise FoodCloud Partners With Nestlé Ireland To Tackle Food Waste”, *Forbes*. Available at: <https://www.forbes.com/sites/elizabethrushe/2018/10/08/social-enterprise-foodcloud-partners-with-nestle-ireland/#54b6814f9248>. [Accessed on 12 July 2020].
- ShelfLife (2019), “Musgrave MarketPlace donates more than half a million meals to charities through FoodCloud”, *ShelfLife*. Available at: <https://www.shelflife.ie/musgrave-marketplace-surpasses-half-a-million-mark-for-meals-donated-to-irish-charities-through-foodcloud/>. [Accessed on 12 July 2020].
- Tannam, E. (2018), “FoodCloud aims to double impact over three years following funding injection”, *Silicon Republic*. Available at: <https://www.siliconrepublic.com/start-ups/foodcloud-aib-funding-investment>. [Accessed on 20 July 2020].
- Taylor, C. (2018), “Nestlé to pay FoodCloud to save surplus food from landfill”, *The Irish Times*. Available at: <https://www.irishtimes.com/business/agribusiness-and-food/nestle-to-pay-foodcloud-to-save-surplus-food-from-landfill-1.3650317>. [Accessed on 12 July 2020].
- Tesco (2019), “Tesco Ireland & FoodCloud reach monumental 10 million meals donated across Ireland”, *Tesco Ireland*. Available at: <https://www.tescoireland.ie/news/news/article/tesco-ireland-foodcloud-reach-monumental-10-million-meals-donated-across-ireland>. [Accessed on 12 July 2020].
- Tesco (2015), “FareShare FoodCloud”, *Tesco*. Available via YouTube at: https://www.youtube.com/watch?v=n_1mdxzZojI. [Accessed on 20 July 2020].
- Tesco (2020), “What is FoodCloud”, *Tesco Ireland*. Available at: <https://food-and-community.tesco.ie/home/supporting-local-communities/no-time-for-waste/what-is-foodcloud/>. [Accessed on 12 July 2020].
- Tesco Poland (2018), “Stores and charities together for no waste – Tesco launches FoodCloud”, *Tesco Poland*. Available at: <https://corporate.tesco.pl/en/news/2018/sklepy-i-organizacje-charytatywne-razem-dla-niemarnowania-tesco-uruchamia-foodcloud/?category=media-categories>. [Accessed on 20 July 2020].
- The Times (2019), “Surplus of €500,000 at FoodCloud”, *The Times*. Available at: <https://www.thetimes.co.uk/article/surplus-of-500-000-at-foodcloud-2z8qrrxn9>. [Accessed on 27 July 2020].
- The World Bank (2020), “Projected poverty impacts of COVID-19 (coronavirus)”, *The World Bank*. Available at: <https://www.worldbank.org/en/topic/poverty/brief/projected-poverty-impacts-of-COVID-19>. [Accessed on 21 July 2020].
- ThinkBusiness.IE (2020), “FoodCloud is set to scale”, *ThinkBusiness.IE*. Available at: <https://www.thinkbusiness.ie/articles/foodcloud-in-ireland-opel/>. [Accessed on 10 July 2020].

- Waitrose (2018), “Waitrose to roll out food redistribution IT platform to all its full-size supermarkets by end of 2018”, *Waitrose*. Available at: https://waitrose.pressarea.com/pressrelease/details/78/NEWS_13/9462. [Accessed on 20 July 2020]
- Waitrose (2020), “Reducing Food Waste”, *Waitrose*. Available at: https://www.waitrose.com/home/inspiration/about_waitrose/the_waitrose_way/food_waste.html. [Accessed on 20 July 2020].
- Whelan, Z. (2019), “FoodCloud is scaling operations overseas after running three pilots”, *FORA*. Available at: <https://fora.ie/foodcloud-expansion-europe-australia-4685579-Jun2019/>. [Accessed on 20 July 2020].
- Woods, K. (2017), “When we launched FoodCloud it didn’t work at all. We had to go back to the drawing board”, *FORA*. Available at: <https://fora.ie/iseult-ward-foodcloud-3559113-Aug2017/>. [Accessed on 10 July 2020].

Exhibit 1

Table 1: Sample of FoodCloud Awards⁹⁷

Year	Award	Awardee
2013	Trinity College Dublin, Business Student of the Year	Iseult Ward
2015	One of TIME Magazine’s Next Generation Leaders	Iseult Ward
2015	Google Adopt-A-Startup competition	FoodCloud
2015	Environmental Innovation Award	FoodCloud
2015	Ben & Jerry’s and Ashoka’s Join Our Core Award – Top Young Social Entrepreneurs	FoodCloud
2016	The Newstalk WMB Social Entrepreneur Award	Aoibheann O’Brien / Iseult Ward
2016	Seeds & Chips Visionary Award	FoodCloud
2016	RSVP Businesswoman of the Month	Iseult Ward
2016	Marie Claire UK Future Shapers Award	Iseult Ward
2016	Finalist of Virgin VOOM Entrepreneur Competition	FoodCloud
2017	One of Ireland’s top 25 Most Powerful Women by the Women’s Executive Network – Trailblazers Award	Iseult Ward
2017	Winner of Muhammad Ali Humanitarian Award	Iseult Ward
2017	Irish Tatler Woman of the Year Award	FoodCloud
2017	National Procurement Award – Procurement Excellence in the Public Sector Award	FoodCloud Hubs
2017	EY Entrepreneur of the Year Special Achievement Award	Aoibheann O’Brien / Iseult Ward
2017	IMAGE Business Woman of the Year	Aoibheann O’Brien / Iseult Ward
2017	Forbes 30 under 30 Social Entrepreneurs European list	Iseult Ward
2017	Winner of Net Visionary Award – Best Use of Technology for Social Good	FoodCloud
2017	Winner of Digital Agenda Impact Award	FoodCloud
2018	Winner of Pakman Award – Community Recycling Project of the Year	FoodCloud
2018	Winner of Irish Red Cross Humanitarian Award – Innovation for Change	FoodCloud
2019	Winner of Green Award – Green Technology Award	FoodCloud

Exhibit 2

Table 2: Sample of Financial Supporters in 2017⁹⁸

ALDI	Alkermes	The Ireland Funds
Applegreen Charitable Fund	Benevity	The Community Foundation for Ireland
Cork City Council	Department of Agriculture, Food and the Marine	Enterprise Ireland
Environmental Protection Agency	Fidelity International	HSBC
iDonate	Ingersoll Rand	Innovotec
Pobal	Social Entrepreneurs Ireland	Social Innovation Fund Ireland
Sodexo	Think Tech	The UK Online Giving Foundation
Virginia Tech		

Exhibit 3

Table 3: Sample of Pro-Bono Suppliers in 2017⁹⁹

A & L Goodbody	All Web Video	Aqua Fire Prevention
Atlassian	AWS	Barna Recycling
Better Impact	Blower.io	Blueface
Brakes	BWG Food	CBS Office Products
Cold Move	CMT Transport Ltd	DataKind
Doorfix / Ring-gard Ireland	Food Donation Connection	Galway Tour Company
Google	Green Generation	Harvey Norman
Heroku	The Hr Suite	Innovative Procurement Solutions
Integrated Risk Solutions	ITL Solutions	Jansses
Leadership Management Ireland	Master Lift	McCulla Ltd
Microsoft	MyTaxi	Obatics
Rehab	Tesco	Slack
Ricoh	Salesforce	Thorntons

97. Compiled using data made available by internal FoodCloud document and public domain sources.

98. Information adapted from FoodCloud Annual Report 2017; See Reference: FoodCloud (2018).

99. Ibid.

Exhibit 4

Table 4: Sample of Food Providers in 2017¹⁰⁰

Alkermes	Divillys	Kinsale Bay
Applegreen	East Coast Bakehouse	Kinsale Fare
Arrabawn	Elliotts	La Rouse Foods
Atlantia Food Clinical Trials	FareShare	Lakeland Dairies
AVEO	Flahavans	Largo Foods
BFree	The Foods of Athenry	Lidl
Ballymaloe	Fyffes	Lucozade Ribena Suntory
Because	Gala	Manhattan
Beechlawn Organic Farm	Galmere	Meade Potato Co.
Bord Iascaigh Mhara (BIM)	General Mills	Monaghan Mushrooms
Bowl A Granola	Glanbia	Mondelez International
Brakes	Glen Áine Foods	Musgrave Group
Brandbank	Glenisk	Nestlé
BWG Foods	Green Circle	Newbridge Foods Limited
Boutique Bake	Horgans	Nordzucker
C&C Group plc	Irish Yogurts	Nudest food
Carroll's	Keeling Juices	Old Hill Eggs
Country Kitchens Bakery	Kelly Hunter	Oakland International
Cross Care	KEPAK	Oliver Carty
Dawn Farms	Killowen Farm	Ornua
Pallas Foods	Pepsico	Pladis
Primeline Logistics	PRL	PRM Group
PRO U	Loughnane's Family Butchers	SHS Sales & Marketing
Stafford Lynch	Stonehouse	Tesco Ireland
Tesco	Total Produce	Valea Foods
Walsh's Bakery	Wholefoods	Wicked Wholefoods

100. Information adapted from FoodCloud Annual Report 2017; See Reference: FoodCloud (2018).

