



Healthy Fast Food

Evaluating a new approach to
improving the food environment

Product design for social change

Shift

Evaluation report supported by:



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Contents

CEO's Summary p04

01. Introduction p06

02. Aims of the intervention p08

03. Stakeholder motivations p09

04. Description of intervention p10

05. Evaluation aims and method p14

06. Evaluation findings p15

6.1 What change did the project
make to the food environment? p15

6.2 What did we learn? p16

6.2.1 The Value Proposition p16

6.2.2 Execution p21

6.2.3 Finances p26

6.2.4 Workforce Development p35

07. Conclusions p38

CEO's Summary

Introduction

If you walk down Forest Gate Road in the London Borough of Newham, one of the poorest areas in the UK, you pass almost 30 deep fried chicken shops. This street, like so many others across the capital and the UK, is dominated by unhealthy takeaway food. A poor diet represents an almost inevitable consequence of living in one these “obesogenic” environments, made up of cheap, high sugar, high fat and high calorie foods.

The health problems connected to poor diets are well understood, as is the scale (1 in 3 children are obese in the UK) and cost (£4 billion a year for the NHS alone) of obesity in the UK. Increasingly, there is also a consensus that our response to this problem must include the redesign of these damaging food environments, alongside ongoing commitments to improving public awareness of relevant risks and behaviours. Public Health England, for example, continue to champion efforts to reduce the density of unhealthy takeaway food in areas where diets are at their worst and where vulnerable groups, such as school pupils, are most exposed.

In 2013, Shift and its partners in public health, catering, education and nutrition set out to help contribute to the base of knowledge, ideas and evidence for the redesign of obesogenic environments. Specifically, we sought to explore whether takeaway outlets serving genuinely healthy food could compete against standard fast food businesses.

What types of food, service, branding, marketing and business model could establish healthy fast food outlets and help rebalance obesogenic environments? What is the best approach to sustaining and replicating these businesses across the UK? What stakeholders need to be involved to make this possible and in what ways?

This work began with a good appreciation of why takeaway food is so popular. Many decades of cumulative personal experience and several dedicated ethnography projects highlighted the essential ingredients of a successful fast food outlet: cheap, tasty, filling and convenient. Hardly rocket science, but within fiercely competitive, low margin local marketplaces, where most consumers cannot or will not pay a premium for healthy options, these characteristics represent significant challenges for businesses serving nutritious food and meeting higher standards of employment and sustainability.

What we did

Working with local government teams in Tower Hamlets, Newham, Hackney, Camden and Islington and a range of partners across catering, nutrition, education and marketing, we ran a series of trials between autumn 2013 and spring 2015, involving six mobile fast food outlets serving for between 4 and 12 weeks.

Meals served by these outlets all contained under 400 calories, less than 21g of fat, less than 6g of saturated fat, less than 15g of added sugars, and less than 2.4g of salt. Most meals also contained considerably higher levels of protein, fibre, micronutrients and vegetables than standard fast food offerings.

How it went

Over the course of the project, we served for 29 weeks, selling 2,711 meals, 30% of which were to students. Of the six offerings tested, two demonstrated genuine potential for sustainability:

Box Chicken

designed and managed by the Shift team in partnership with Stewed and Baked, this outlet served Peri Peri and Caribbean stew meals for four weeks at the top of Sebert Road in Newham. Each 300g box contained at least 1 ½ portions of vegetables, around 370 calories, 7g of sugar, 8g of fat, of which only 1.5g was saturated fat, and less than 1g of salt. Over one month, Box Chicken sold 1,362 portions, 28% of which went to students, generating £3,179 of revenue and enough daily operating profit by the end of the trial to support a caterer on the London Living Wage. Box Chicken attracted some local PR, while additional marketing activities were minimal.

Riojaes

selling tasty, healthy jerk chicken Riojaes quickly built up a good stream of customers. During its most successful four week period, the outlet sold 393 meals (240 adult meals, 153 student meals), generating £1,803 in revenue and a high enough operating profit, after direct costs, on some days to pay the vendor close to the London Living Wage. Several local promotional activities were tried, with student voucher schemes proving particularly effective.

These two outlets quickly established strong and growing sales of healthy meals in highly competitive environments, with a significant proportion reaching young people, illustrating that with further investment and refinement, they could have become sustainable businesses.

The remaining three outlets showed much less potential to sustain their service and impact, ranging from modest to poor sales and showing, as expected, that variables such as location, menu, brand and marketing played a significant role in success and potential sustainability. Our efforts to unpick and analyse these variables are the focus of much of this report.

Nick Stanhope,

CEO, Shift Foundation.

What we learnt

1. Healthy fast food businesses in less affluent areas need to be fit for purpose. The market for healthy takeaway and street food is thriving in the UK, with new types and styles appearing all the time in affluent areas, targeting well off customers with growing demand for healthier and more creative fast food. However, we believe that this trend will make only a modest contribution, if any, to solving the question of how to introduce healthier takeaway food in low income areas. Instead, the focus should be on working closely with target customer groups in these areas to create new brands, menus and business models that reflect their tastes, needs and priorities.
2. Local councils play a crucial role in success. All of our council partners were ambitious and committed, yet many of them had their hands tied by planning and operational challenges that significantly affected the potential of outlets to thrive. Businesses that deliver healthy, affordable fast food in deprived areas and provide better employment and training opportunities represent valuable assets for local government and, for these business to be sustainable, councils need to be given more powers to support them.
3. Local food environments need properly assessing and tracking. Food environments are complex and multifaceted, particularly in low income areas, and effective redesign of takeaway food services requires the ability to assess and track these landscapes. We share the ambitions of many of the public health teams we have worked with to undertake more research in this area. As a result of this pilot project, we have worked with the Tower Hamlets Public Health team to develop a new methodology for assessing, mapping and measuring changes to the nutritional impact of takeaway food. The results so far have challenged many long held assumptions. As we and others continue to explore ways to redesign damaging food environments, this approach will clearly play a vital role.

1. Introduction

Background and context

of the intervention

Obesity is a national problem: more than 1 in 3 children aged 10–11 years are overweight or obese and obesity costs the NHS as much as £4 billion annually.^{1,2} There is, however, no magic bullet for the problem, with the factors contributing to increasing obesity levels being complex, numerous, and interlinked.³

One contributing factor receiving increasing attention from government and researchers is the impact of the food environment⁴ with particular concern around the large numbers of fast food outlets which serve food high in saturated fat, salt and sugar. Whilst many outlets and shops were forced to close during the recession the number of these outlets in the UK remained stable⁵ and recent evidence suggests that more outlets are now opening in deprived areas compared to wealthier areas.⁶

Research has also started to examine the health impact of living in areas densely packed with fast food outlets, with evidence emerging that being surrounded by outlets that sell cheap, energy dense food, with no healthy alternatives available for the same price, is associated with higher consumption of takeaway food, greater body mass index, and greater odds of obesity.⁷ A direct link between the food environment and obesity in young people has also been found, with a US study showing that having a fast food outlet within 0.16 km of a school was associated with at least a 5.2% increase in obesity rates among 14 - 15 yr olds.⁸

The negative impact of this energy dense food environment on the population's health (and weight) has been recognised by the UK government who, in their Healthy people, healthy places briefing, state:

"One important action [to reduce obesity] is to modify the environment so that it does not promote sedentary behaviour or provide easy access to energy-dense food. The aim is to help make the healthy choice the easy choice via environmental change."⁹

¹ NHS (2012) National Child Measurement Programme: England, 2011/12 school year. London: The Health and Social Care Information Centre, Lifestyles Statistics
² NICE (2012) Obesity: working with local communities, Costing Report. London: National Institute for Health and Clinical Excellence
³ Government Office for Science (2007) *Tackling Obesity: Future Choices – Project Report*
⁴ Public Health England (2014) *Obesity and the environment: regulating the growth of fast food outlets*
⁵ Euromonitor International (2012) *Fast food in the United Kingdom*
⁶ Maguire, E. R, et al. (2015) *Area deprivation and the food environment over time: A repeated cross-sectional study on takeaway outlet density and supermarket presence in Norfolk, UK, 1990–2008* *Health & Place*. 33, 142–147
⁷ Burgoin, T. et al. (2014) *Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight in Cambridgeshire, UK: population based, cross sectional study*. *BMJ* 348
⁸ Currie, J et. al. (2010) *The Effect of Fast Food Restaurants on Obesity and Weight Gain*. *American Economic Journal: Economic Policy* 2: 34–68
⁹ Public Health England (2014) *Obesity and the environment: regulating the growth of fast food outlets*



Although there is clear evidence that the health impacts of fast food outlets are negative, their popularity shows that they are fulfilling a need – for cheap, tasty and quick food. Therefore, rather than work in opposition to fast food outlets, Shift wanted to work within the current fast food culture to provide a healthy, cheap and tasty alternative to current fast food offerings in low income areas with the long-term aim of reducing the levels of youth obesity.

The challenge

Is it possible for takeaway outlets to make a more positive contribution to the food environment? Healthier, more nutritious, fast food does exist. Chains like Leon, Crussh, Chipotle and Pod, along with their independent counterparts, offer more nutritious food (containing more fruit and vegetables, richer in micro-nutrients and fibre, and usually lower in fat and salt), often along with commitments to some level of responsible sourcing (considering animal welfare and environmental impact), and/or good employment practices.

These chains operate at the mid to upper end of the takeaway market, and use their perceived “healthiness” and “wholesomeness” to differentiate themselves against the competition, and justify charging a premium price to their customers.

The major challenge to changing the food environment in less affluent areas (which are often the areas with particular difficulties relating to poor diet and lack of healthy food) is that price represents a much sharper constraint, severely limiting the premium that can be charged for more nutritious food. Additionally, the attribute of ‘healthiness’ may not be equally appealing to customers in different market segments (there is growing evidence that this is the case¹⁰). Instead, familiarity and tastiness, along with a friendly, safe space to hang out, speed of service, and convenience of location may be more compelling factors in customers’ purchasing decisions in many areas.

In this context, providing nutritious food may in fact disadvantage an outlet. Firstly, the profitability of a healthy outlet would likely be lower as a result of the higher associated input costs and the necessity to continue to compete on price with the less healthy competition. Secondly, overtly healthy food may be a less appealing proposition, irrespective of price, for some segments of the target audience.

¹⁰ Sue Bagwell (2013) *Fast food takeaways: a review of the wider evidence base*. Greater London Authority

2.

Aims of the intervention

In the face of this challenge, Shift's primary aim was to explore the potential to launch and sustain healthy fast food outlets that could compete effectively with the incumbent unhealthy alternatives and provide a compelling value proposition for customers in less affluent areas.

What is a compelling value proposition?

A compelling value proposition is a product offer, and encompassing brand, that can convince potential consumers that one particular product or service will add more value, or better solve a problem, than other similar offerings. For our target audience, this meant that our outlets needed to be equal to, or better than, the existing competitor set across three core dimensions:

- 1. Menu:** Food which is as tasty, familiar and therefore appealing
- 2. Price:** Unit prices and meal deals which are competitive
- 3. Location:** Primarily outlet locations which are convenient but also an overall environment, and brand, which meet the more indirect reasons customers purchase (e.g. service levels, fun and safe places to meet friends etc.)

We also wanted to test the financial viability of this type of offer. It was clear from the outset that this was a big challenge, given the higher costs of inputs (amongst other things) alongside the budget constraints of the customers, but our aim was to explore this, looking at turnover, fixed costs and variable costs, to identify

opportunities to drive volumes, achieve cost saving and therefore maximise profit so as to deliver a financially sustainable offer.

In order to do this, Shift supported a network of mobile food vendors to provide cheap, tasty and nutritious food in a number of areas, exploring different menus, price points, brands and locations, and investigating what would be popular, what would be practically feasible, and what would be financially viable. What we learned over the course of the project will be used to refine the value proposition, enabling all of the stakeholders to learn how healthier, yet appealing and affordable food could be made a permanent part of the food environment in low income areas, thereby improving young people's diets.

Defining "healthy food"

There is ongoing debate about what constitutes healthy food and a healthy diet. There is consensus that most nutrients can be healthy when consumed in moderation as part of a balanced diet. Therefore, in this report we've defined healthy food as food that is high in micronutrients (vitamins and minerals) and fibre and low in sugar, salt and saturated fat, meaning the food could be eaten regularly as part of a healthy diet.

The thresholds used when designing menus in this project were based on guidance for Change4Life recipes which suggests meals should be under 400 Kcal per serving, have less than 21g fat per portion, have less than 6g saturated fat per portion, less than 15g of added sugars per portion, and less than 2.4g salt per portion.

3.

Stakeholder motivations

The project involved two main stakeholder groups. Although united in a desire to improve the health of young people, they approached the project with additional unique motivations.

Councils and Community

Champion Co-ordinators

Five London councils were involved in the project: Camden and Islington¹¹, Hackney, Newham and Tower Hamlets. Our primary contacts were members of the council's public health teams, where improving poor diet and reducing youth obesity are a high priority. In Tower Hamlets half of the funding for the project was from Community Champion Co-ordinators in the borough, who awarded some of a designated council fund to the project as well as to other local organisations to bring improvements to local wards. Tower Hamlets council then match funded the project.

Like most London councils, the councils involved were already running interventions and providing support for healthier eating but they wanted to try something innovative to tackle this issue. In particular, councils were keen to complement their education-based healthy eating interventions with an approach which was aimed at providing an attractive alternative to fast food for young people, and which affected the food environment. This project offered a relatively low risk and small scale way to test the effectiveness of this new idea.

Vendors

Six vendors were recruited to the project and traded on council pitches. All of the vendors had a strong social drive, and a belief in the importance of making healthier food more widely available for young people, to promote healthier diets. This project appealed to them as it allowed them to make a difference with the food they were providing.

In addition, vendors in the second phase of the project were relatively new to the street food scene and were attracted by the offer of a pitch to trade on, which are in high demand in London. Many existing markets, for example, have long waiting lists pitches and street food organisations such as Kerb are at capacity. The administration usually required to set-up a pitch, such as getting a licence for trading and sorting out parking, were completed by Shift and council partners, which was seen by vendors as helpful, and the project also paid for licences, promotions, nutritional testing, parking and waste management.

The final motivation of some of the vendors was that it could raise awareness of their brand, and drum up further business opportunities.

¹¹ Camden and Islington council have a joint Public Health team.

4.

Description of intervention

The pilot was divided into two main phases.

Phase 1

August 2013 - October 2013

Shift worked with an experienced vendor to pilot a sole mobile outlet "Box Chicken" in Newham in Autumn 2013.

As this was the first time the initiative had been run, the trader was paid a stipend for the weeks that he traded, and also kept the profits from trading.

Shift created a new, youth-focused brand for the vendor, as well as taking care of all the permissions and costs associated with trading at the selected location.

At the start of the project, Shift worked with a registered nutritionist to develop guidelines for each portion of food sold, in line with Public Health England's guide for Change4Life recipes (See the *Defining "Healthy food" box*). The vendor then worked up his own menu within these guidelines, selling jerk chicken stews with at least one portion of vegetables per serving.

The van was located close to three secondary schools. Box Chicken traded for four weeks (Monday to Friday) during the students' lunch hour and after school. Access to the van was unrestricted and students and adults were served with equal priority. Students were charged a lower price for a standard portion (£2.50 compared to £3.50 for an adult) with a smaller snack pot available at £1.50.

The first phase of the project provided work experience to two young people through Create Jobs. Both achieved their City and Guilds Level 2 in Food Safety and hygiene. For more detail on the Box Chicken project please see the [Box Chicken Evaluation Report](#) on the Shift website.¹²



The results from this first stage demonstrated that the food sold from the van was appealing to young people and suggested that using mobile vendors could be a financially viable model for provision of healthy fast food in the area. It also showed that the idea of a healthy fast food outlet had buy-in from community stakeholders, such as schools, public health departments and businesses, from community members and the young people themselves. Based on these conclusions we progressed to Phase 2 of the pilot.

¹² Shift (2013) [Box Chicken: Providing some healthy competition to fast food outlets](#).



Phase 2

May 2014 - July 2015

Having established that it was possible to make food that was both healthy and appealing to young people in our target audience, and that this was a potentially financially feasible undertaking for a vendor, our goal in Phase 2 was to test the concept in a larger number of locations, with a variety of different menus.

We leveraged the desire of new vendors to secure pitches and ran a second trial, taking a network approach and giving vendors more freedom around product and brand to learn about what creates an attractive value proposition. This time, vendors were given the opportunity to trade for longer (6 months) to build up custom, but were not initially offered a stipend.

Vendor recruitment and set-up

Shift advertised the project, and filtered and interviewed potential vendors using criteria based on experience, engagement with the project's social aims, branding, menu, setup and willingness to work in the chosen boroughs. Initially six vendors were recruited, with three going on to trade. As the project progressed there was another round of vendor recruitment from which two more vendors were selected and went on to trade as part of the project. (See table below for vendors and location.)

Shift then worked closely with council partners to identify a number of potential pitches within each borough based on the pitches' proximity to schools, how many other fast food outlets were near the school, the amount of footfall they had during the day and the likelihood of securing permission to trade from the council. Once a pitch had been signed off by the council, vendors were matched with pitches based on vendor preference, the type of pitch (suitable for a van or gazebo), menu and logistics.

Vendors then had to produce a healthy menu which had cheaper student options available. Each vendor had a two tier nutritional assessment of their menu, first submitting their recipes to the nutritionist so that any ingredients or cooking methods that represented an immediate red flag could be changed, and then submitting their meals for nutritional testing at a laboratory. Alongside nutritional testing the project also provided vendors with a framework for recording sales data including formatted sheets to capture sales data, data collection visits, and later in the project, point of sale (POS) software and equipment to capture sales data electronically.

In the lead up to each vendor starting to trade, the project organised communications across food networks such as the National Caterers Association (NCASS) and Sustain, in local press, with articles in the Hackney Citizen and Camden magazine, and on street food blogs including British Street Food and Street Food News. The vendors were also promoted through the Shift and Council social media channels.

When trading, vendors paid for their input costs e.g. ingredients and transport, whilst the project covered the

cost of pitch fees, parking, promotion and additional extras such as wifi to use the Point of Sale technology. Part way through the project Shift implemented a vendor subsidy where volumes were too low to financially sustain the vendor.

All vendors sold food at two prices, meals targeted at adult customers ranging between £3-£6.50, and student meals which in all but one case were £2.50 or less. Promotions were also introduced, meaning that at some pitches, student meals could be purchased for £1.

Phase 1				
Pitch Location	Council borough	Name of mobile outlet	Type of food sold	No. of weeks traded
Woodgrange Road / Sebert Road junction Marketplace	Newham	Box Chicken	Jerk chicken stew	4
Phase 2				
Estate Road	Tower Hamlets	Vendor 1	Caribbean chicken	11
		Vendor 4	A Ghanaian take on burritos, wraps and burgers	7
Chalton Street	Camden	Vendor 2	South Indian food: Idli, masala dosa	6
Scawfell Street	Hackney	Vendor 3	Jerk Chicken	9
		Vendor 5	Grilled Wraps	2



Image: Map of locations

- A** Box Chicken
- B** Vendor 3&5
- C** Vendor 1&4
- D** Vendor 2

Workforce recruitment and training

At the same time as co-ordinating and setting up the vendors, the project also went through a recruitment process to recruit young people for an eight week internship, gaining skills in catering and achieving a City and Guilds Level 2 in Food Safety and Hygiene for Catering qualification.

Recruitment was initially done through Create Jobs. Due to difficulty in recruitment (see the Workforce Development section for more information) the project then worked with employment social enterprise HireHand to provide two assistants to one of the vendors trading in Tower Hamlets.

5.

Evaluation aims and method

Aims

An internal evaluation of the project was conducted, with the following aims. The evaluation aimed to review the effectiveness of the project in altering the food environment. Alongside this it aimed to identify the factors that contribute to creating a compelling value proposition for customers in low income areas and highlight factors that contribute to executing the value proposition effectively, including management experience, customer service, and marketing. We also wanted to explore the financial viability of different offers tested and finally wanted to investigate the potential to use this type of initiative as an opportunity for workforce development.

All of these learnings will feed into any future design of interventions, improving their impact and ease of delivery.



Method

This evaluation uses data from a number of different sources:

- We collected sales and financial data from all the vendors to track popularity and financial sustainability.
- We reviewed the records of processes developed and gone through as part of the project, for example nutritional testing of vendors' meals, or designing and distributing flyers.
- We conducted interviews with representatives from all the councils involved in Phase 2, and also with a Community Champion Co-ordinator from Tower Hamlets.
- We asked all vendors from Phase 2 for feedback on their experience of the project, and interviewed three vendors from two different pitches.
- We interviewed the CEO of HireHand, an employment social enterprise who provided assistants for the vendors in Tower Hamlets.

The data was analysed and the insights drawn from it are detailed in the following section.

6.

Evaluation of findings

6.1 What change did the project make to the food environment?

The project succeeded in making healthy food available in areas where there was a lack of healthy options, and a preponderance of unhealthy options. The healthy outlets were all within 500m from at least two regular fast food outlets, with some being within 100m of up to five regular outlets. The five areas in which the vendors traded were all also located within 350m from a secondary school, meaning the provision of a healthy alternative was relatively easily accessible by young people.

In its four weeks of trading, Box Chicken sold 1362 portions of Box Chicken of which 383 (28%) were sold to young people. In Phase 2, vendors traded for a total of 35 weeks across the entire project, serving a total of 1349 meals. Thirty-one percent of these meals (421 meals) were sold to students with 928 meals sold to adults.

The food bought by the customers during the project was significantly healthier than the typical fast food meal meeting public health guidelines for Change4Life recipes. Compared to a typical meal at a chicken shop each serving had at least 66% fewer calories, 53% less sugar, 40% less saturated fat, and 23% less salt.¹³ Assuming that some customers bought food from vendors as a replacement for a traditional fast food meal they would be reducing their calorie, sugar, fat and salt intake substantially for that day.

There was positive feedback from the communities on some of the vendors and their food. These vendors gained regular customers for the time they traded, and a number of vendors reported being contacted after finishing the project to ask when they would be coming back. This demonstrates the value placed on the presence of the mobile outlets by some communities, and the additional choice it provided in the area.

In total Box Chicken made £3,179 in revenue across the 4 weeks trading, with £1,935 gross profit. Within Phase 2 revenues and profit varied among vendors (see Finance Section 6.2.3 for more detail). Looking at the most successful vendor in their most successful four weeks of trading they made £1629 in revenue and £1292 in gross profit. Other vendors had lower gross profit but identified benefits of participation in the project including refining their menu, learning about trading in different communities and gaining a better understanding of the health impact of their food through the nutritional testing which prompted thinking and experimentation with ways to make it more healthy.

The project also provided two internships with Box Chicken and a number of shifts to two catering assistants. These experiences provided the individuals with a range of new skills as well as building on established skills in catering, customer interaction, planning and teamwork.

¹³ These figures were calculated by comparing the nutritional values of a KFC meal (main, side & drink) accessed through the KFC website, with the recommended nutritional values for a healthy meal from Public Health England, the figures for which were taken from PHE guidance for healthier Change4Life recipes, sent directly to Shift by PHE.



6.2 What did we learn?

Of the six vendors some were more successful in sales than others allowing us to identify which elements of the project were important to create an attractive and feasible value proposition and why.

6.2.1 The Value Proposition

A compelling value proposition relied on three main elements - the location of the outlet, the food itself and the price of the food. This section explores how these three factors varied among vendors and what we learned as a result.

Location

We aimed to locate pitches on council land, close to schools, in an area with high footfall and with a high concentration of other fast food outlets.

The pitch needed to be on council rather than private land because the council was providing the pitch at a discounted rate as part of the project.

As the primary target audience for the mobile outlets were young people, we also aimed to establish pitches near schools in order to get the best flow of young people past the outlets at lunchtime and after school, and enable the project team to work with the school to help promote the mobile outlets to pupils.

A pitch with high footfall was an important component in our model, as footfall translates to increased likelihood of sales, contributing to the businesses being financially sustainable, and allowing the vendors to continue providing cheap, healthy, quick food to the area. As the window for trading to students was restricted to lunch and after school, we also wanted the pitches to have high adult footfall. We anticipated that having adults buying from the van may also make the van look popular, encouraging young people to buy from there.

We wanted pitches to be in areas with a high concentration of other fast food outlets, as the project aimed to replace a meal that would have been bought at a regular outlet with a healthier alternative.

Pitches varied in how closely they matched the initial aims for location

The Box Chicken pitch was located near two overground stations, resulting in high adult footfall. The van was less than 100m away from its nearest secondary school and approximately 1.5 km from another two secondary schools. The location was also chosen as it was in an area dense with fast food outlets. Tables and chairs were put out near the van and were used almost everyday by customers (apart from when raining) showing that outdoor seating could go part, but not all, the way, to recreating a social space.

Out of the pitches in Phase 2, the Hackney pitch got closest to our original aim. It was near a main road, meaning it had some adult footfall, although it was set back from the road, reducing the visibility of the pitch and its ability to pull in passing trade. It was located within 800m of eight schools, with the closest only 330m away (approximately a 3 minute walk) and some of the school students walked past the mobile outlets on their way home from school.

The Tower Hamlets pitch was located on an island in between a row of local shops, a minute walk away from two schools, however the pitch was set back from the road reducing both visibility and passing footfall, which limited vendor's ability to pull in potential customers.

The pitch in Camden was in Chalton Street Market, an existing market that the council were aiming to regenerate. However this regeneration was limited and led to the majority of other (non-project) street food traders leaving the market due to poor footfall. It was relatively close to two secondary schools, with the closest located 330 meters away, however the pitch was not on a route regularly used by students and so wasn't able to capitalise on this proximity. The ability of the vendor to trade was also compromised as the road closure/ pedestrianisation of the market area was only enforced sporadically resulting in traffic often passing very close to the pitch discouraging potential customers from visiting the stall.

All vendors, and some council representatives, in Phase 2 felt that the final pitch locations were not in good positions to encourage trade due to low footfall, and that the pitches had actually hindered their ability to trade effectively.

Multiple stakeholders input into the decision on pitch location

These pitch locations were decided on, despite concerns around their suitability, due to the decision making process which involved multiple stakeholders. The pitches were on council land, meaning that council procedures had to be followed to secure the pitch with permissions for different elements of the pitch coming from different departments. For example, the pitch itself would be provided by the Markets team, but this sometimes also needed to be signed off by the Parking team if, for example, the mobile outlet would be taking up a parking space or be on a yellow line. The Parking team had to consider the commercial value of the parking spot, local parking regulations and access issues if the pitch is on a narrow road. Within this project some locations were rejected by the parking team, even when seen by the Public Health team and project team as the most suitable pitch.

As well as resulting in pitches in less-than-ideal locations, the multi-stakeholder decision making process led, in some cases, to a delay in a pitch location being decided and signed off which, in turn, led to a delay in the vendors being able to trade. However, in other cases the Public Health team felt they had a good relationship with the Markets Team from working on previous projects together, meaning that they were able to communicate effectively and avoid delays.

A number of vendors in Phase 2 also commented that they would have liked to put up tables and chairs next to their vans or gazebos to encourage people to spend time in the area. This was also mentioned as desirable by some council stakeholders. Research has shown that alongside the food they provide, regular fast food outlets such as chicken shops, also offer a safe "third space" to hang out in.¹⁴ For some communities, such as the Bangladeshi community, this third space can also act as an alternative to the pub, becoming a social hub.¹⁵ Therefore, in the project it was felt that having an additional seating area could make the outlet more attractive to potential customers, whilst also recognising that in the UK climate outdoor mobile vendors would always suffer in comparison with brick and mortar outlets on this dimension.

Two of the pitches were given permission by the relevant department to put out tables and chairs. One vendor set them up each time they traded. The other trader had been granted permission but only to put out tables and chairs in an area that was 4 - 5 meters away from the mobile outlet itself. Although this is only a small distance, it was large enough that customers might not have seen the tables and chairs as connected to the outlet.

There were also benefits of multi-stakeholder working

Although the need in the project for joined-up working across council departments had some negative impacts, there were also some benefits gained from the process. It was reported in some cases to have led to greater connection between the public health teams and other departments, and in Tower Hamlets this also led to greater connection between the council and community champions.

The joined-up working also resulted in a better mutual understanding of different departments' priorities, and the skills available in each team. This was seen as particularly important for the Public Health teams, some of whom are new to the council having moved from sitting under Public Health England in April 2013.

Additionally, the project also prompted teams outside of Public Health to reflect on the potential health impacts of their work. As a result some councils have begun giving more thought to how healthier options could be embedded into the permanent infrastructure of the high street.

¹⁴ Bagwell, S. (2011) The role of independent fast-food outlets in obesogenic environments: a case study of East London in the UK. *Environment and Planning* 43:2217-2236. ¹⁵ Ibid



Key findings: location

- The location of the pitch is crucial to the success of trading and the success of the project overall as high footfall is a critical driver of transaction volumes and therefore revenue for each outlet.
- Councils are, for the most part, not used to giving permission for individual pitches in locations outside of markets and don't have the processes in place for this to be delivered as quickly and efficiently as it could be.
- Were the project going to run again with independent vendors on individual pitches, a number of practical suggestions were provided by project stakeholders to make the process run more smoothly:
 - Within the council there should be senior level sponsorship for the project to cut through inter-departmental issues and remove the barriers to establishing pitches in locations which have not previously be used for street vendors.
 - A kick-off meeting should be held for each location with representatives from all the organisations/ departments involved. In the case of this project it would include: Shift, the council's Public Health team, Parking team, Markets, Rubbish and recycling team, community champion representatives and representatives from local schools.

- Representatives at the kick-off meeting could form a steering group for the project, helping to resolve internal difficulties quickly when they arise. To make a steering group like this as effective as possible there should be clarity over roles and responsibilities of each member from the outset of the project. It was also suggested that explicitly identifying how the success of the project could benefit each of the organisations/ departments could secure buy-in to the steering group, and the project overall.
- A toolkit could be produced for all partners (vendors, schools and councils) which would contain information on things to consider and best practice. It could include:
 - Actions to complete
 - Specific issues to watch out for, including regulations that might be associated with having a vendor selling at a particular site
 - Checklist of what a good site would look like
 - Examples of how issues have been overcome
 - Checklist for council readiness

Menu and Price

We aimed for menus that offered quick, cheap, tasty and healthy meals that appealed to young people

The background research we conducted before the launch of Box Chicken showed that young people went to regular fast food outlets, particularly chicken shops because they provided tasty, quick food at very low prices.¹⁶

- **Quick:** Young people often buy food during their lunch hour or on their way home. This time restriction means the service needs to be speedy or they won't have time to order and eat before they need to get going.
- **Cheap:** Young people don't have large amounts of money to spend daily on food. They want to maximise what they can get for their money and look for the best value offer.
- **Tasty:** The high fat and salt content in lots of takeaway food makes it particularly tasty.

We wanted to take these factors into account, as well as ensuring the food was within nutritional guidelines on sugar, fat, and salt. The total offering had to appeal to young people so that they would take a chance on the new outlet, and part with their money to taste the food.

All food sold met nutritional guidelines

All vendors had their menus nutritionally tested and were within the Change4Life recipe guidelines. Although nutritional testing restricted the changes that could be made to the menu it was also welcomed by some vendors who appreciated the discussion with the nutritionist and nutritional testing as it informed them about the healthiness of their original menu, and how to make it healthier.

The more familiar to young people the food was, the better it sold

In the Phase 1, Box Chicken sold stew recipes: Caribbean chicken, Spanish chicken, Peri Peri chicken and a Veg box. The food received positive feedback with 68% of 121 students surveyed saying that if a local outlet sold food similar to Box Chicken they would visit it at least once or twice a week. Qualitative feedback also showed the popularity of the food, with unsolicited comments such as "delicious", "so good" and "best chicken I ever tasted" coming from young customers.

In Phase 2, the extent to which the food from the different outlets appealed to young people varied greatly and was related both to how familiar the food was to the young people, and to how similar it was to regular fast food. There were very familiar items such as chicken burgers, beef burgers and chicken wraps which are already sold in fast food outlets. These items sold best.

In contrast there were unfamiliar items e.g. plantain chips and Indian food such as dosas which most young people in the areas had not come across before. These did not sell well. The food from Box Chicken sat in the middle of these two poles, being familiar to the young people, but not yet seen as fast food. For this kind of food, good branding was key to moving the food from being perceived as "home" food to being accepted as fast food.

Due to the popularity of the most familiar items, such as burgers, some of the vendors ended up narrowing down their menu so they mainly focused on these options, with a few additional options kept for adult customers. Vendors that didn't have any familiar items on their menu failed to get a lot of traction with student customers.

In the recruitment stage Shift also interviewed vendors that were selling food that could be viewed as polar opposite to the standard offering of a fast food outlet, such as salad boxes. Although undoubtedly healthy, it was felt that it would be too difficult to convince young people to replace one for the other, for example, replacing fried chicken with a salad, as for this target audience of young people salad has negative connotations of being "healthy" and tasteless. This highlights the difference in tastes and preferences of these young people to the audiences many street food traders are used to serving e.g. at street food festivals and food markets, who tend to be more trendy, wealthy, older audience who are more willing to try new things and are also attracted by healthy wholefoods.

The brand of the vendor also influenced its popularity

The brand for Box Chicken, which had positive feedback from students, the community and stakeholders, was designed to fit in culturally with existing tastes and habits, positioning Box Chicken as a normal, mainstream product. The brand was also in line with popular chicken shop brands giving it a familiar feel, but with a slightly cleaner, more refined, aspirational slant.



¹⁶ Shift (2013) *Chicken Shops and Poor Diets: Summary of research findings*.

While the appeal of the brand to young people was considered during recruitment of vendors to Phase 2, the same level of intensive branding work done for Box Chicken was not applied to these vendors. This was partly to enable vendors to build their own brand which they traded under at other markets and events. In retrospect, however, the distance between some of the vendors' brands and more familiar fast food brands could be seen as contributing to young people's apprehension to buy food from them. This is particularly the case when the vendor was selling food that was unfamiliar to the young person. In these cases having branding similar to regular fast food outlets could have gone some way to reassuring the customer that the taste of the food would be similar to (or at least not hugely different to) regular fast food, encouraging purchase.

Good pricing is fundamental to a compelling value proposition

Regular fast food outlets, particularly chicken shops, can provide food at incredibly low prices due to using poor quality ingredients, simple preparation techniques which don't require skilled staff, and cooking from frozen which reduces wastage. This results in prices for a full meal at a chicken shop typically averaging £3, with junior deals from £1.40.¹⁷

Within the project, vendors were using fresher ingredients than traditional outlets, had to fit within nutritional guidelines, and were new to the environment, making it difficult to compete with the prices of a regular outlet and still make a profit. The challenge of keeping the menu affordable was mentioned by all vendors, irrespective of how popular their food had been. All but one vendor tried to keep their food under the £2.50 price point for young people (one vendor had a £3 student meal) which they felt to be as low as they could go and still cover their costs. They acknowledged, however, that £2.50 was still seen by young people as quite a large amount to spend on a meal. As discussed in the finance section below, keeping prices around £2.50 may have had a negative impact on the volume of sales given the strong competition from cheaper outlets.

To tackle the issue of price, different student deals were offered. In Box Chicken, for example, students felt £2.50 was too much to pay for a meal so a smaller "snack pot" for £1.50 was introduced after the first week. In Phase 2 student offers were introduced, with deals such as a £1 burger, or a half price meal for students which increased sales among students for some of our vendors.

Key findings: menu and price

The menu of the outlet is crucial to the success of achieving a financially sustainable healthy fast food outlet. The menu needs to be familiar, quick, tasty, healthy and fit within nutritional guidelines, whilst the branding needs to be attractive and familiar. The menu has to appeal to a target audience of young people, which is very different to the target audience many of the vendors usually aimed at (more affluent, older customers).

Because of the importance of the menu to the value proposition, a substantial amount of time and effort needs to be put into engineering it. This could be done in two ways:

- 1) The first option is engineering the menu of each individual vendor. This would allow them to tailor their current menu to the target audience, whilst also ensuring it is within the nutritional guidelines and remains affordable. This would, however, involve substantial investment and resource in the initial set up stages, including each vendor having a discussion with a nutritionist, initial nutritional testing of their menu, organising taste tests of the proposed menu with each community they serve, and further nutritional testing of any changes made to the menu before and throughout the project. There are also some vendors who have offerings that are too unfamiliar to appeal to young people en masse, and they would need substantial redesign of their menu if they wanted to participate in the project.
- 2) The second option for engineering a menu is creating a standardised menu that fits all the criteria described above, and has been tested with a range of audiences. By creating one standard menu, that has been extensively tested, it would reduce the testing costs for every vendor in the project, and reduce the risk of selling a product that is not popular. The familiarity and popularity of items such as chicken burgers and wraps across all areas they were sold in indicates that these would be the type of food offering most likely to sell well. The implications of using this model of menu creation is discussed further in the conclusion.

¹⁷ Shift (2013) Box Chicken: Providing some healthy competition to fast food outlets.

6.2.2 Execution

Along with the location of the pitch and the menu, the way in which the vendor executes their plans is fundamental to their success. We explore three elements of execution: management, customer engagement and marketing.

Management

We aimed to have vendors trading five days a week for six months, tracking their financial progress over this period

Interviews with street food network members (Food Hawkers, Kitchenette, The National Caterers Association) carried out before the start of the project indicated that it took at least two months for a vendor to settle into a pitch, build a customer base and get repeat custom. Consequently, six months was decided to be an appropriate trading time.

To ensure trading continued in the face of unexpected events, such as illness or equipment problems, the vendor also needed to be reliable and have backup plans for dealing with emergencies. Consistency is particularly important with younger customers, who tend to make quicker judgements about products and experiences, and would be less willing to return to a pitch if the outlet wasn't there when they expected it to be.

In order to review if the project was delivering its aims, vendors would also need to monitor their input costs and sales throughout the trading period to provide information on how many healthy meals were sold to young people, and to allow us to assess the financial sustainability of the mobile outlet.

The response to the continuous trading (five days a week) varied among vendors

In Box Chicken, the outlet traded every day for four weeks. The vendor had many years of experience trading at high volume festival events, and consequently was used to both the challenges of food preparation for continuous trading, and dealing with high volumes of sales. The vendor also had the equipment to prepare all of his food on site, which he did, arriving early in the morning to begin the food preparation. This removed any uncertainty that the start of trading may be delayed by traffic.

In Phase 2 the number of days traded and the consistency of trading varied across the vendors, with most vendors trading three days a week, and only one vendor moving to five days a week part way through the project.

Vendors in Phase 2 were relatively new to the street food business

One reason for the variation among vendors in the days traded was that, in comparison to Box Chicken, the vendors were all relatively new to street food (although not to catering). This newness to the scene was a large

part of why they were willing to take a risk on being involved in this project as it provided them a way to get trading, and begin to establish themselves in the street food world. The lack of experience, however, meant they had little knowledge to draw upon when considering how to prepare for a continuous run of trading and estimating the time this would take.

Initially, a consistent number of days trading was seen as a positive thing by vendors as it could potentially provide a regular income. However, in practice doing 3 - 5 days back-to-back was challenging: the time pressures of needing to pack, transport and set-up all their equipment each day, followed by a full day of trading, followed by preparation of the food to be sold the next day meant many vendors didn't want to trade for the full week. The newness to the scene also meant, in some cases, vendors were less prepared to deal with unexpected events and emergencies which led to trading having to stop for days.

Continuous back-to-back trading is also not typical in the street food trading culture, where vendors tend to do different days at different pitches, or weekend stalls. This made it tricky for vendors to fit continuous trading around other street food events they were attending. For example, if they had a weekend market they would need to take a day in the week to prepare the food for it, and so couldn't commit to five days a week on the project. Financially, the majority of the vendors felt they also needed to sell at markets outside of the project as the sales at their project pitches were not sufficient to provide them with a living wage.



Although there were challenges with consistent trading, and it was different to the traditional street food vendor working pattern, it is worth noting, that for the vendor who was trading five days a week, the period in which they traded for 19 days across 4 weeks was also the period in which they had their highest and most consistent sales, indicating consistency is important to the target audience.

Vendors in Phase 2 needed considerable support

As the project developed, it became apparent that less experienced traders needed considerable additional support, which was provided by Shift. A member of the Shift team was with the traders for set-up and most of the time they spent trading. This enabled Shift to help solve problems as they developed, encourage the vendor, and help with practical and marketing tasks. The on-the-ground support was mentioned frequently by all the vendors interviewed who felt it was incredibly useful. It allowed them to pop out to restock if they ran out of ingredients, meant they could focus on cooking when there lots of customers with the Shift team member dealing with customer queries, and also meant that issues like parking tickets were dealt with quickly and didn't delay trading.

Financial monitoring was also an area vendors needed support. Initially Shift provided them with paper templates for recording sales, and Shift staff would collect sales data daily via phone. Even with this support, some vendors still struggled to keep track of their sales and input data. Later in the project Shift provided each vendor with an ipad that had Point Of Sale (POS) set up on it. Vendors could use this as a form of till, allowing them to track their sales as each transaction was made. It was mentioned by vendors as a useful element of the support provided by Shift.

Although the software and support led to vendors collecting sales data, none of the vendors recorded input costs or the amount of waste left at the end of the day, making it difficult for them to calculate their daily profit.

Key findings: management

- The model of continuous trading initially sought in the project differed from standard trading in the street food scene. However, it was the most consistent traders that had the highest volume of sales.
- All vendors mentioned that they appreciated the clear briefing from the project team at the start of the project, outlining the challenges of the project, the expectations around trading days and how it would differ to pitches using the standard street food business model. They felt the briefing ensured they were entering the project aware of some of the potential challenges they were taking on.
- Nevertheless, it was difficult for the vendors to meet these challenges, given the fact that they were targeting a different customer segment to usual, a new way of trading, and that, in some cases, the vendors had limited experience of working in the street food scene.
- In order to address these challenges in any future project, there is a need for:
 - More intensive training and support, especially around financial planning and monitoring, particularly as a project like this will, by its nature, attract less experienced vendors (who need pitches to trade on).
 - Tried and tested standardised processes e.g. for set up, preparation, stock control.
 - Recipes that can be prepared in reasonable working hours / other ways of preparing food.

Customer Service

We aimed to select vendors who would engage with their customers, build relationships and establish the stall as a fixture in the community

Research on outlets, particularly chicken shops, indicates that customers value the relationship they build up with the staff, for example, the staff may know the customer's name and what they usually order.¹⁸ This familiarity encourages loyalty to the outlet, and repeat custom, whilst also helping the outlet to become a permanent part of the food landscape.

In this project the vendor was the face of the outlet, and consequently it was vital they had good customer engagement skills to build a rapport with customers both to encourage repeat custom, but also to encourage publicity through word of mouth.

Vendors varied greatly in the ease and confidence with which they interacted with their customers

Some vendors were praised by stakeholders for being open and friendly, and actively engaging with customers and the community, chatting with school students and building up regulars in the community. For example, one vendor built up such a good relationship with regulars they were asked to cater for private parties and work events. Other vendors were less confident, and occasionally overwhelmed by the challenge of trading alone. Stakeholders noted the large difference that good customer interaction made to the reaction of young people and other community members to the mobile outlet.

There are multiple factors that could account for the difference in customer engagement among vendors. The first is a difference in core soft skills, with some vendors feeling far more comfortable interacting with the public than others. As mentioned earlier, the vendors in Phase 2 were also relatively new to running their businesses, so it may be that more experience would have built up the soft skills of those vendors who were

less adept at customer engagement. Being familiar with the local area may also have helped vendors be more at ease, with one vendor commenting how useful it was that the kitchen assistant helping them knew the area and local residents as it helped them to understand the community better.

Key findings: customer service

- Customer engagement is crucial to developing a customer base, however, some vendors were far more adept at this than others.
- In future projects:
 - The vendor's customer engagement skills should be given considerable weight in the recruitment process. This could be assessed through interview tasks or even visiting the vendor whilst they trade.
 - Customer engagement training could be provided to support all vendors with this element of the project, whether this was official communications training or a workshop from a more experienced vendor.
 - Consideration could be given to where the vendor comes from, and which areas he or she is familiar with when allocating pitches.

¹⁸ Mile End Community Project video, *Hoodforts - Chicken* found at: <https://vimeo.com/126395665>



Marketing

We aimed to raise awareness of the mobile outlet using a combination of vendor-led publicity and using community partnerships

The mobile outlets were new to the areas they traded in, and weren't in areas of sufficiently high footfall, making it very important to raise awareness of them amongst students and locals.

The project team had envisaged that marketing would happen in two main ways. The first was through vendor-led publicity in the community in which vendors used advertising, social media and on-the-ground engagement. Shift would also help promote the vendors through our own social media channels and website. The second route was raising awareness through community partnerships, particularly through schools in the area who would have a direct channel of communication to our target audience.

We invested considerable effort to promote Box Chicken among the local community

The team visited all the local shops in the community, giving out leaflets about the project, as well as more general flyering in the area, and giving out samples of the food for passersby to taste. The project also received national coverage, with its launch being featured on the BBC One Show, and it receiving a review by [Jay Rayner](#) in the [Guardian](#).

Community partnerships were leveraged by the project team. Local councillors were told about the project and the team attended the Forest Gate Local Service meeting to inform the community about Box Chicken. The project team also worked closely with two local secondary schools. The schools were supportive of the project and permitted the team to flyer outside the school gates. Loyalty cards were produced and given to students to encourage repeat custom.

In Phase 2 the promotion methods varied

There was, in each location, a marketing push, using a range of channels.

Word of mouth

Some vendors were very effective in building up awareness of their outlet through word of mouth, engaging with adult customers, who would then tell their friends and colleagues to visit, resulting in increased sales.

Social media

Some vendors already had well developed marketing approaches with good websites, active twitter feeds and numerous followers. This marketing, however, was targeted at the more traditional street food audience of older "trendy" individuals, and didn't reach the project's target audience of school-aged young people. Shift also tweeted about vendors and promoted them through the Shift website, but again, these weren't channels that reached many young people.

Text marketing

In certain pitches students were offered a free meal if they supplied their mobile number, these students then received texts informing them of any upcoming offers and offering discounts. This approach however was limited by students supplying incorrect numbers, a reluctance from schools to advertise a text based offer and a low conversion rate for text offers.

Flyering

As the project progressed, and the barriers to text marketing became apparent, the marketing strategies employed became more local, including producing flyers which were handed out to school children in the area. The flyers raised awareness of the outlets and also gave student deals, such as a £1 burger. The flyers also provided the opportunity to learn about effective framing of offers to our target audience.

School engagement

Alongside the vendor-led publicity, Shift worked hard to identify and contact local schools in the area to tell them about the project. Schools were initially seen as an ideal partner as they had direct communication channels with their pupils, and see their students' physical health as a high priority.

In some of the areas, schools were keen to get involved and supported the project, for example, letting the project team flyer outside of the school to promote the mobile outlet, which proved to be an effective way of boosting sales. Other schools, however, were less amenable to being involved in the project, for a variety of reasons:

- Some schools had contracts in place with in-house caterers which meant they were not able to promote alternative food provision.
- Many schools were already running their own schemes within the school to improve the diets of young people, and felt the project may work against some of the efforts they were making internally. For example, in some schools they were discouraging students from eating outside of school by not letting them out at lunch, which is when the vendors had initially hoped to do some trading.
- In other cases the project marketing was going against school rules and practices. For example:
 - Some schools had a policy of dispersing pupils from the school grounds quickly, to prevent disruption/noise for local residents and felt a vendor directly outside the school gates may encourage young people to hang around.
 - Most schools had a "no mobile phone" policy, preventing the project from promoting outlets using text message offers during the school day.
- Some schools also objected to putting up posters in the school to publicise the text offers as this was felt to be encouraging mobile phone use in school.
- Some schools didn't want the project team to hand out flyers as they were worried about the litter it would create in the local area.
- Finally, staff at schools are incredibly busy, with many more immediate priorities than supporting an independent project. This could explain the lack of any response from some schools, even when council stakeholders contacted them on our behalf.

Key findings: marketing

- Marketing, whether on the ground or through community partnerships, takes considerable time and resource, whether it's talking to local residents, posting on social media, handing out flyers or identifying and liaising with schools and other community institutions. This should be factored into resource planning at the start of the project, with clarity over where responsibility lies for which part of the publicity.
- Thought should be given to the match between the audience and the marketing channels used. The limited success of twitter channels suggests if social media is to be used in the future, other digital platforms should be used, for example Facebook.
- Non-digital publicity should also be considered. Council stakeholders and vendors both suggested running taste tests, where school pupils and the community could taste the different food that is going to be sold. It must be noted, however, that every taste test session requires considerable resource to set-up and run.
- Substantial effort is needed to engage schools. Potential actions to increase school involvement include:
 - Providing schools with a toolkit that outlines the project and suggesting practical ways in which they could support it, with examples of how other schools have resolved conflicts of interest between the project and internal school policies.
 - Encouraging representatives of the school to sit on steering boards set up at the start of the project as a means of keeping schools engagement. This is, however, still heavily dependent on schools deciding that they see involvement in the project as a priority issue.

6.2.3 Finances

Achieving financial viability is a necessary underpinning of sustainably serving healthy fast food meals to students in obesogenic environments, without which vendors would be unable to operate beyond the short term. Our test for financial viability in this pilot was whether each vendor could generate sufficient revenue to cover all of the standard expected operating costs leaving enough operating profit to effectively pay themselves the London Living Wage (£9.15/hour or £72.50 for an eight hour day). Using this test, none of the vendors in Phase 2 achieved financial viability and this section examines in detail the profit and loss (P&L) position of each vendor to understand why, and then draw conclusions as to what would be required in order to do so.

Project costs for each pitch were split between Shift and the vendor, with the vendor covering the costs directly related to the day-to-day running of the pitch (food costs, travel, gas and any equipment required). Shift paid the remaining costs of the project, which covered the council costs for each pitch as well as costs specific to the aims of the project such as having each meal nutritionally tested to ensure it met health guidelines.

Vendors' profit and loss if trading independently

For the purposes of the financial assessment below we

have reconstructed P&L for each vendor which includes all the costs that a vendor would expect to pay in order to trade independently at each pitch and have then calculated a daily average to allow comparison between vendors. The costs excluded are those peculiar to the project (e.g. food nutritional testing) which the vendor would not expect to bear in the normal course of business.

Towards the end of the project Shift also began to provide subsidies to vendors in the form of daily and promotional subsidies, which helped vendors drive sales and cover costs in the locations where they couldn't generate enough revenue to continue operating. These costs are excluded from the vendor P&L.

The table below shows figures for the average daily P&L for all of the vendors, calculated by taking the total sales and costs for each vendor across their entire operating tenure and dividing by the number of days they operated. As well as excluding from the calculations any financial support provided by Shift, we have also excluded vendor wages, with each pitch expected to generate enough operating profit to pay the vendor the London Living Wage in order to be deemed financially viable.

	Phase 2					Phase 1	
Average Daily P&L	V1	V2	V3	V4	V5	Phase 2 average	BC Box Chicken
Number Meals Sold	14	11	23	9	6	15	65
Revenue	£60	£37	£80	£31	£9	£54	£151
Food Costs	-£11	-£12	-£21	-£10	-£6	-£14	-£59
Gross Profit	£49	£25	£60	£21	£3	£40	£92
Gross Margin	80%	66%	74%	67%	35%	74%	61%
Operating Costs	-£30	-£28	-£64	-£42	-£145	-£45	-£51
Operating Profit	£19	-£3	-£4	-£21	-£142	-£9	£42

Gross Profit = Revenue - Food Costs

Gross Margin = Gross Profit / Revenue

Operating Profit = Gross Profit - Operating Costs

Overall Profitability

The majority of the vendors in Phase 2 of the project came close to, or just exceeded, cash break even, however none were able to generate enough profit to pay themselves the London Living Wage. Vendor 5 (V5) was the only one who made a significant operating loss, however they only traded for a limited time at the end of the project, which meant fixed setup costs that would have been spread over a longer trading period being consolidated into a short period, and discounted pitch fees were no longer available, both of which resulted in higher daily average operating costs. None of the vendors from Phase 2 were able to achieve a similar operating profit to Box Chicken in Phase 1 the reasons for which will be examined later in the section.

On average the vendors made a loss of -£9, although it should be noted that this average is skewed by V5's distorted costs. If V5 is excluded from the analysis then

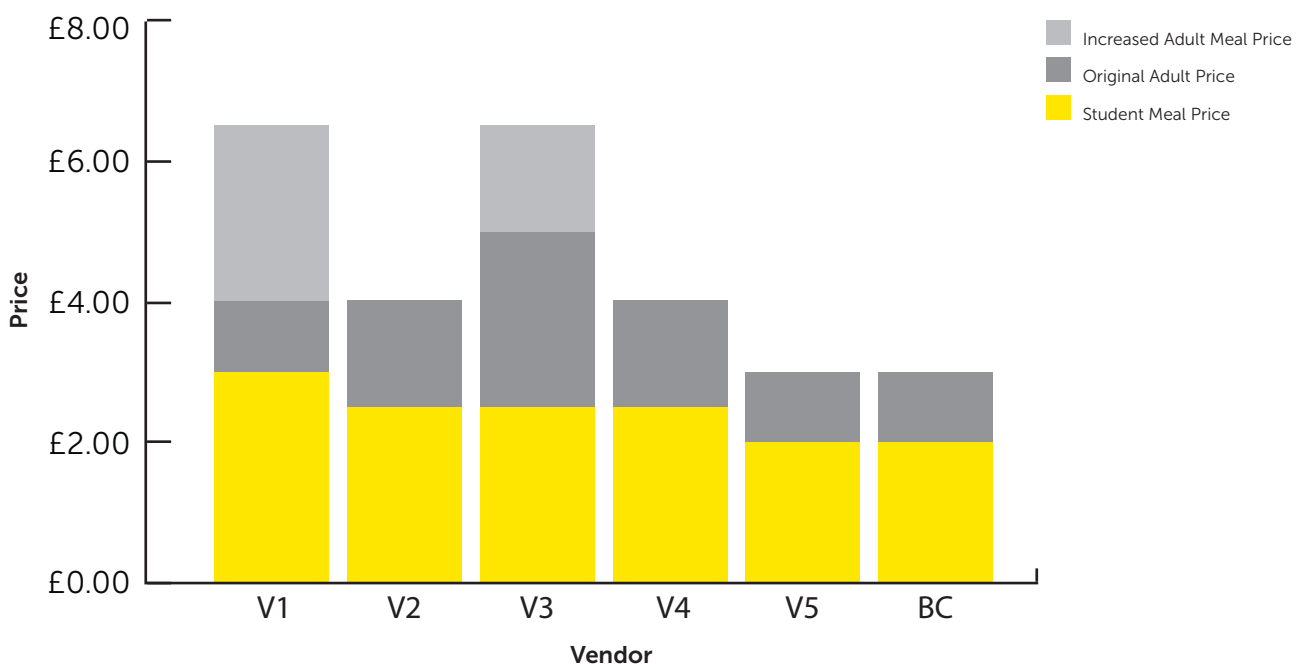
the average is -£1. The best performing vendor achieved £19 of daily profit. V3 had a one week period where a total operating profit of £208 was made, equating to an average of £46 per day (see below for further analysis).

Price, Volumes and Revenue

Price

Across the project vendors were given the freedom to price adult meals as they chose based on their assessment of what would be competitive, whilst still providing what they judged to be a high enough growth margin on each meal sold. Shift was more prescriptive on the price of student meals, which were set to ensure they were competitive with the existing available fast food meals, and therefore ensure that price would not represent a significant barrier to a student customer. This overall approach to pricing was intended to give vendors the flexibility to maximise their profits whilst maintaining a consistently low price for students.

Graph 1: Adult Meal Price and Student Meal Price



The chart above shows how student prices remained relatively consistent across the project at an average of £2.50, whilst there was a larger variance for adult prices, which were generally not judged competitive by the local audience when other cheaper options were readily

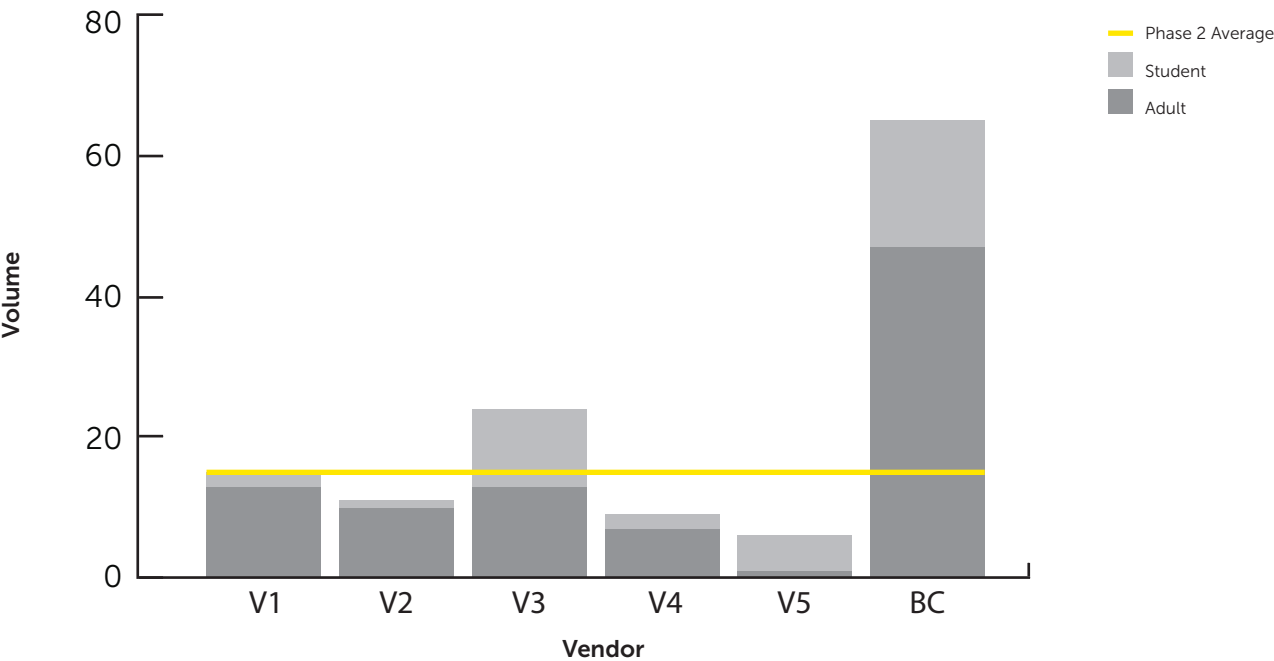
available from existing fast food outlets. This created a barrier to local adult customers either trying the food or becoming regular customers. Vendors were unwilling to re-price their offer to compete effectively as they did not believe they would generate enough profit as a result.

Volumes and Revenue

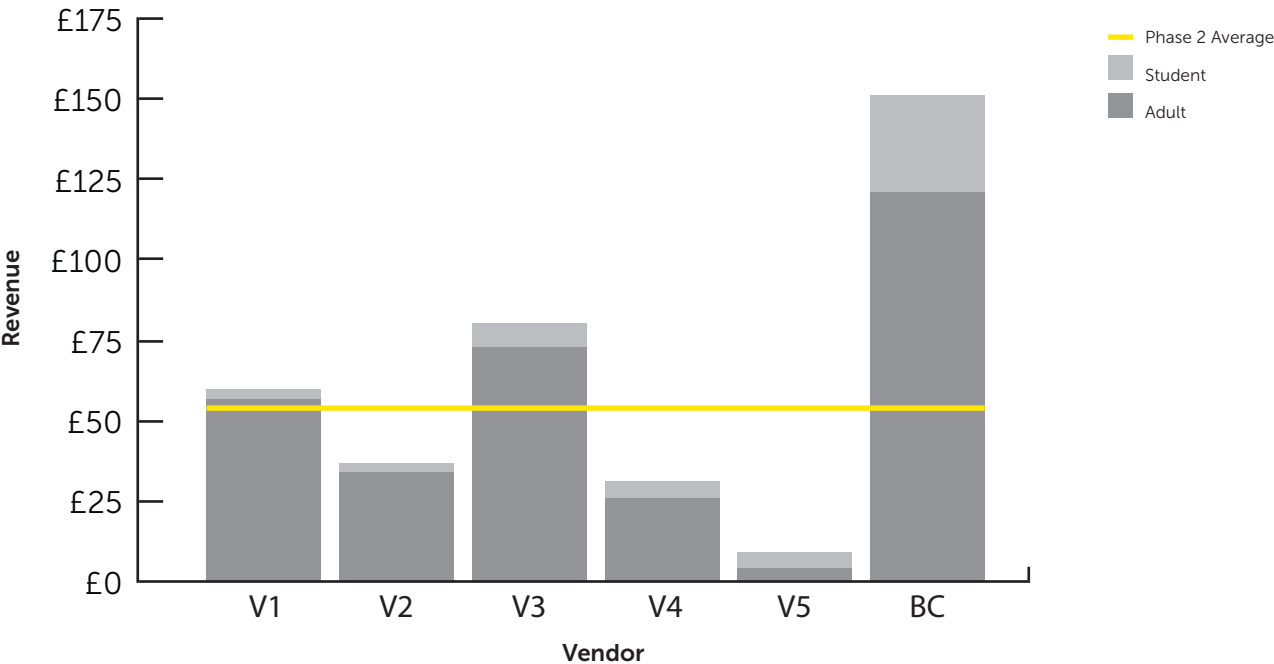
Throughout the project the biggest challenge for vendors was achieving high enough sales volumes to generate sufficient revenue, and gross profit, to cover fixed operating costs, and generate reasonable operating

profits. There are a number of factors that negatively impacted vendors ability to attract more customer footfall to each pitch and convert those customers into sales.

Graph 2: Average Daily Volume



Graph 3: Average Daily Revenue



The graphs above shows that average daily volumes, and revenues, were considerably lower for Phase 2 as compared to Box Chicken in Phase 1 and there was also significant variance between the vendors in Phase 2. The main contributing factors to poor achieved volumes and revenues were as follows:

1. Poor pitch location was, in our assessment, the factor that had the greatest negative impact on the ability of Phase 2 vendors to generate sufficient volumes. In Phase 2 of the project none of the pitches were in a location with high enough footfall to support a vendor. This lack of footfall was often down to a combination of factors including a lack of passing adult footfall during the day and the pitch not being on a route used by students (see Value Proposition section above). The result of the low footfall was that none of the vendors were confident enough in their ability to sell at high volumes to drop their adult prices to a more competitive level - a vicious circle which further restricted sales. In contrast, the prominent high street location of Box Chicken, combined with proximity to schools actively supporting the project, led to the vendor selling a significant number of meals.
2. High adult meal prices across Phase 2 vendors as compared to Box Chicken (see above).
3. Inconsistent trading also contributed to a lack of sales. None of our vendors could consistently work five days a week over several weeks (see Execution section above) with the majority of our vendors able to trade for three days each week. This led to confusion among some customers regarding when vendors would be trading and harmed vendors prospects of building up repeat customers. Box Chicken did trade consistently 5 days a week and also benefited from considerable marketing and PR exposure when it launched.
4. Unfamiliar meals were, for some vendors, a barrier to increasing sales. The vendors whose offer was furthest away from the incumbent competition also had the lowest sales. Conversely, V3 who was selling a chicken burger had the highest daily average sales across Phase 2 despite high adult meal pricing.

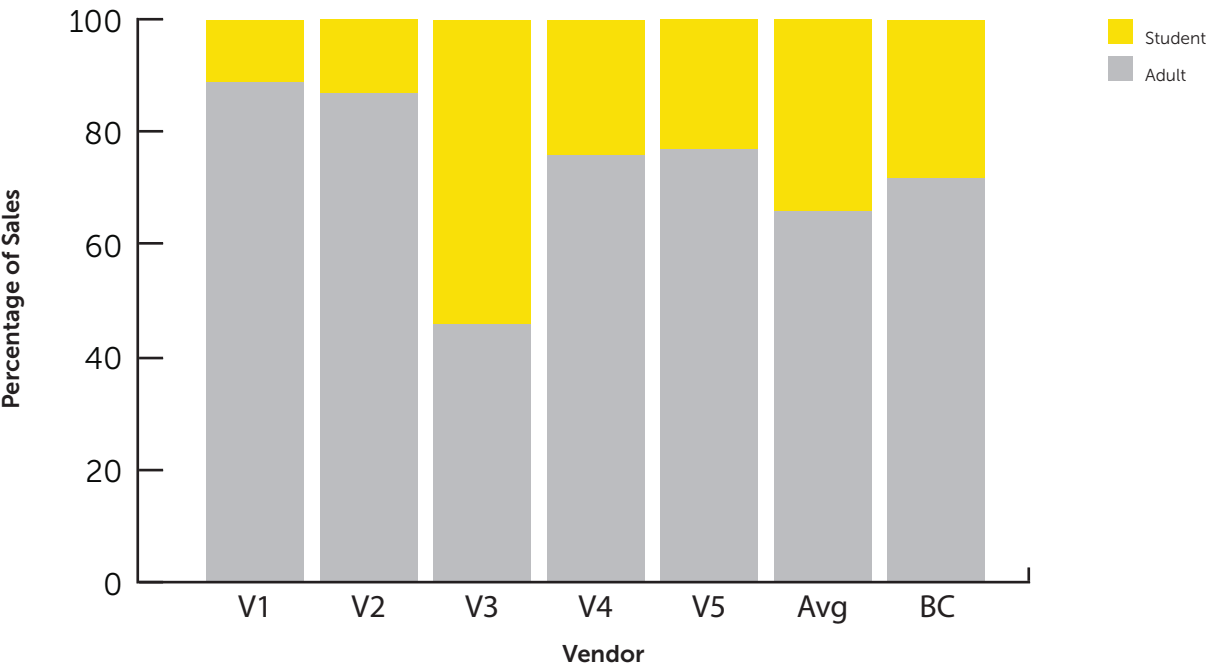


Revenue from adult vs. student sales

Revenue for each vendor was further impacted by how their sales volumes split between adults and students. Whilst serving high numbers of students is crucial in providing social value, the lower prices these meals are sold at, particularly during a promotion, need to be balanced with strong adult sales at a higher price in order to generate the operating profit required to be

financially viable. This approach to customers and prices is consistent with the incumbent competition in the area who all have lower pricing for student meals and rely on a mix of sales from adults and students to maximise their revenues and gross profit. The following graph compares the mix of student meals to adult meals for each of the vendors in this project:

Graph 4: Volume Split



Each adult to students ratio had implications for vendor revenues. For example, Box Chicken sold a high proportion of student meals and had lower meal prices than the average meal price in Phase 2. Consequently, although Box Chicken recorded much higher sales volumes than vendors in Phase 2, the difference between revenues, whilst still higher, represented a less significant difference. The effect on revenues of

selling more student meals can also be seen between vendors in Phase 2. For example V3 had significantly higher sales volumes than any other vendor but only had a slightly higher revenue than V1. This is because a high proportion of the meals V3 sold were to students at discounted student price whilst V1 sold a high proportion of their meals to adults, at a higher adult price.

Higher sales and revenues could be achieved when key barriers were addressed

Despite poor overall volumes and revenue there were periods of trade during Phase 2 of the project which demonstrated that when some of barriers discussed above were addressed vendors were able to generate higher volumes and revenues. An example of this was during a four week period for V3:

- The vendor traded consistently: They traded five days a week for the first three weeks and four consecutive days during the fourth week. This consistent level

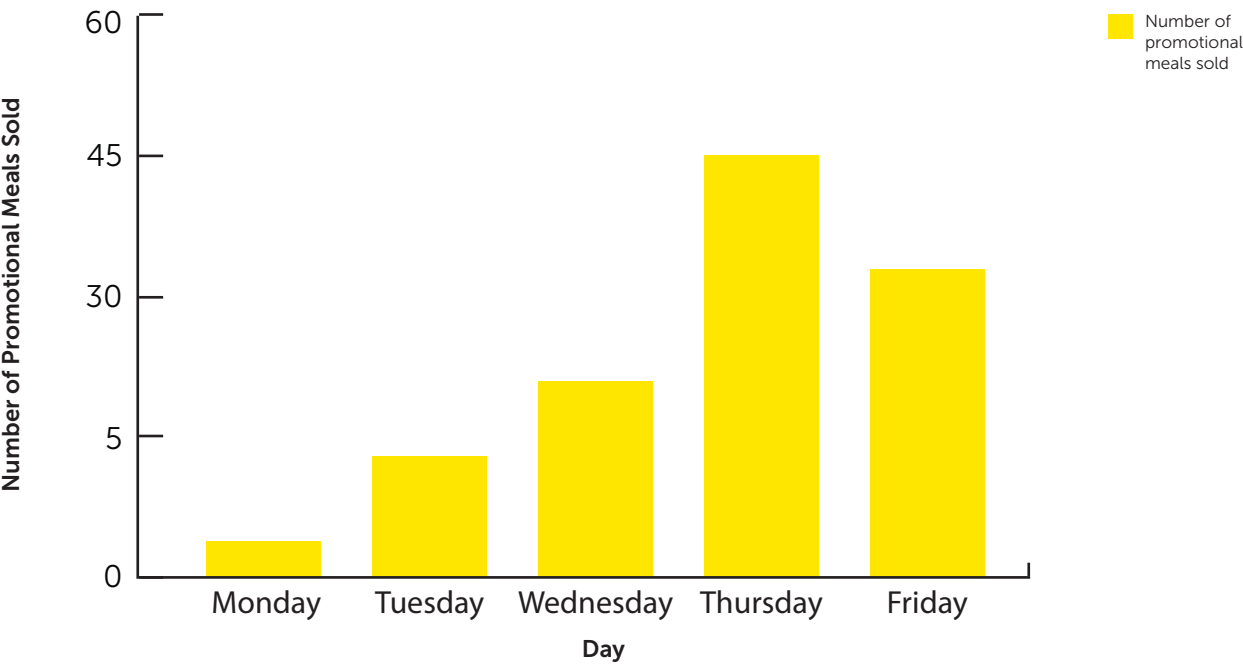
of trading allowed them to build up familiarity with local customers over the week and gave people more opportunities to try the food and become regular customers, resulting in a significantly increased operating profit when compared to V3's average across the project. As the table below shows, within a four week period of consistent trading V3 was able to generate both their highest number of adult sales and promotional sales to students and also the highest number of sales for Phase 2.

Daily Average Sales	V3 Best Week for Revenue (Week 6)	V3 Best Week for Sales (Week 8)	V3 Average	Phase 2 Average	Box Chicken Average
Adult Sales	18	13	13	10	47
Student Sales	2	24	11	5	18
Total Sales	20	37	23	15	65
Promotional Sales	0%	65%	40%	28%	Not captured
Operating Profit	£46	£1	-£4	-£9	£42

- Consistent trading enabled effective promotion: Not only did consistent trading improve engagement with local audiences it also provided the platform from which we were able to run an effective promotion that encouraged a much greater number of students to purchase meals. As the

chart below illustrates, the takeup of the promotion run during this period grew steadily in popularity over the week, underlining the importance of consistency and familiarity in attracting student custom with effective promotions.

Graph 5: Vendor 3 Week 8 Promotional Sales

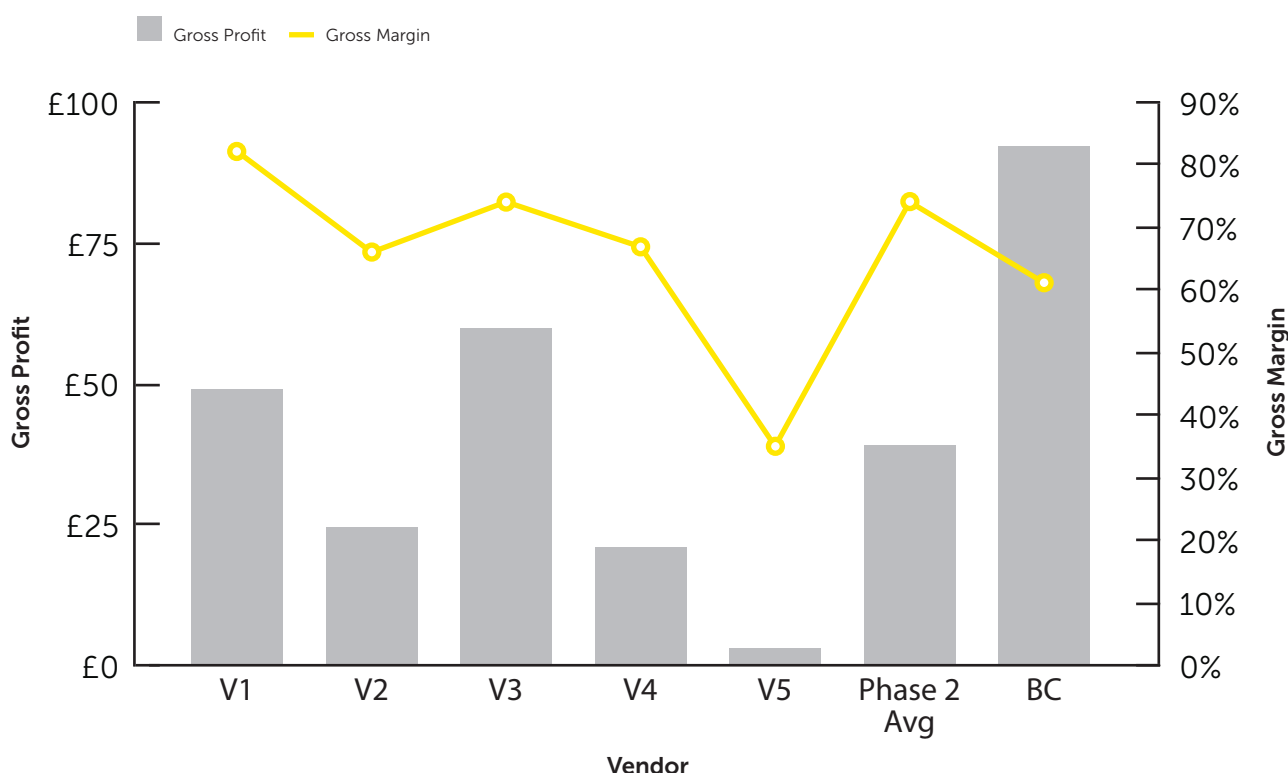


- The promotional prices were low: The meal promoted to students by the vendor was a burger costing £1, representing an offering and price similar to that served by regular fast food vendors.
- The vendor sold familiar food: As discussed in the Value Proposition section, familiarity of the meals being offered was another factor that increased likelihood of sales. The vendor in this case sold chicken burgers, which are both familiar to the young people and sold in regular outlets.
- A good pitch location: All of the factors outlined above were underpinned by a better than average

pitch location. Although not perfect, V3's pitch met important aspects of the pitch criteria that we set out at the beginning of the project, particularly regarding proximity to schools and students. The pitch was close to a more engaged school and students only needed to make small diversion from their usual route to pass the van, making driving student footfall to the pitch much more viable.

This four week period shows that when a vendor had the elements of an attractive value proposition (had a familiar, affordable menu and good pitch) combined with smooth execution then it was possible to record stronger sales amongst both students and adults.

Graph 6: Gross Margin vs. Gross Profit



Gross Profit

The graph above shows the average daily gross profit and gross margin for each of our vendors. While gross margins were generally high across the project (with the exception of V5 all Phase 2 vendors were above 65%), this did not translate into strong gross profit as not enough meals were being sold.

The high gross margins, yet low gross profits, are the result of meals being priced above local competing fast food outlets who would typically expect a lower gross margin given their lower pricing. This reinforces how

important price is to the target market and therefore the need to generate higher volumes of trade to compensate for the lower gross margins achieved. The Phase 2 vendors in part suffered because they were unable to sufficiently adapt their high margin, high price, adult offer to compete in the new environment. The figures recorded for vendors from Phase 2 of the project contrast with those seen for Box Chicken where meals were priced more competitively, resulting in a lower margin on each meal sold, but a larger volume of meals sold in total and a higher gross profit.

The lower sales volumes also negatively impacted costs per unit food because it was harder to:

1. buy ingredients in sufficient volumes so as to take advantages of the purchasing economies of scale.
2. accurately predict the amount of food required for each day with the result that food waste was higher on very low volume days and conversely, on high volume days, not enough food was prepared, leading to vendors selling out early and missing potential trade.

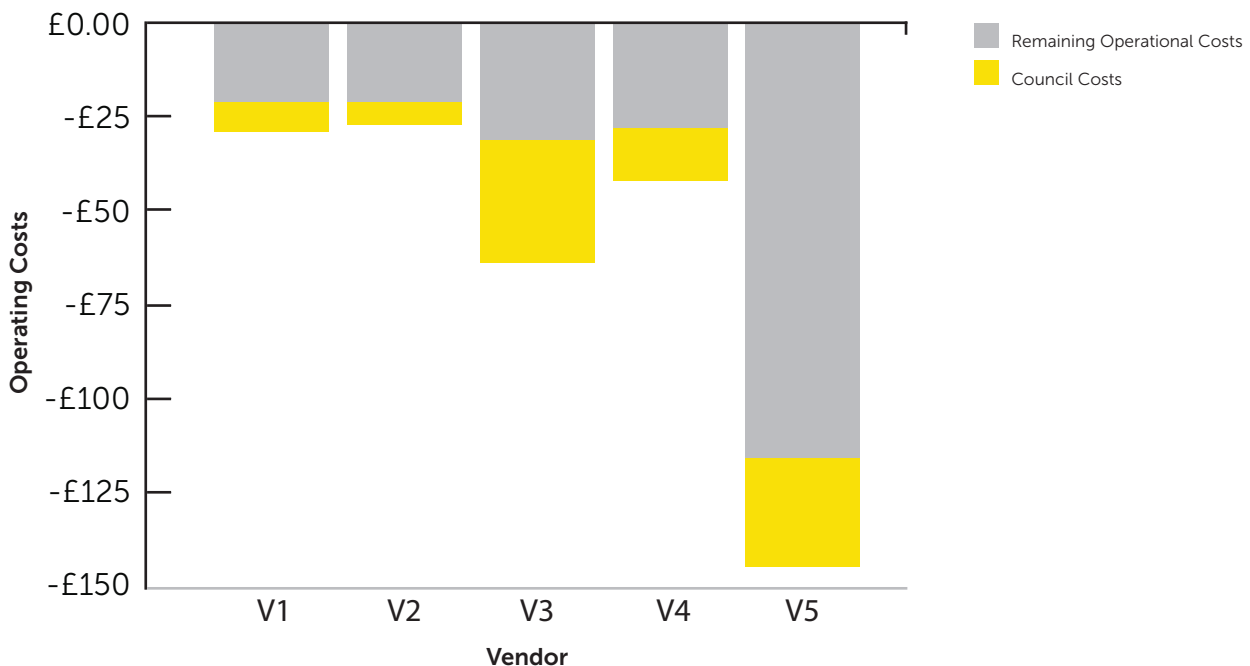
Overall food waste costs have been estimated at 20% of the total food costs due to significant incidence of food waste within the project. This compares to a typical restaurant in the UK producing 23% of food waste, while a fast food chain would only waste an average of 8%.¹⁹ Food waste was considerably higher for vendors with the lowest volumes, particularly at the beginning of their trading periods when they had predicted higher sales.

Operating Costs

Average daily operating costs for each of the vendors were split between those paid to the council in the form of fees for pitches, parking and waste management and the remaining operational costs for each vendor. The graph below illustrates the average daily operating costs for each of the vendors.

Operational costs are significantly higher for V5, and this can be put down to increased council costs towards the end of the project when discounts on pitch and parking fees were no longer applied and the short period of trading, with fixed costs spread over a relatively few number of trading days. The importance of council support in making a pitch financially viable can be seen in the difference between V3 and V5's operational costs. Both vendors traded in the same pitch. However, V3 had dispensation on both parking and pitch fees. The dispensation was for a set time period and due to vendor delays at the start of the project by the time V5 traded later in the project the dispensations had elapsed resulting in unviable costs for the pitch.

Graph 7: Average Daily Operating Costs



The lowest operational costs can be seen with V1, V2, and V4, all of which had discounted council fees for the entirety of their trading and traded from gazebos which have lower operational costs than trucks and trailers.

The largest operational costs were those paid to the council, which make up the majority of operational costs for each of the vendors in Phase 2 of the project. With the exception of V5, the largest of these cost (as shown

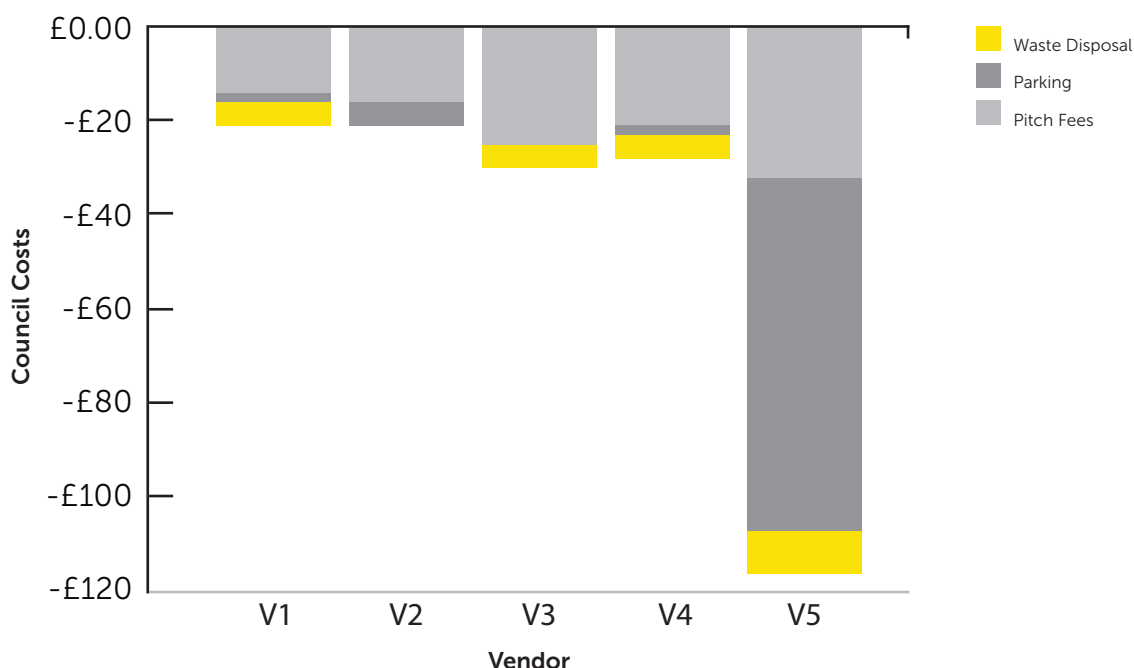
in the graph below) were pitch fees. The fees required by council market teams varied depending on the rate normally charged by markets and the amount that they were willing to discount these normal rates for the project. Pitch fees were also paid based on the projected number of days a vendor would trade each month so if they missed days trading then the pitch fee still needed to be paid.

¹⁹ The low food waste in a fast food outlet is mainly due to the use of frozen food which can be defrosted and cooked portion by portion on demand.

Parking and waste disposal were smaller costs and fluctuated slightly depending on the number of days that vendors traded. The large fluctuation in parking fees for

V5 was the result of a council waiving of parking fees having elapsed by the end of the project.

Graph 7: Average Daily Council Costs



Achieving financial viability

Operating profits were not high enough across the project with the result that none of the vendors were able to achieve financial viability by generating enough revenues to both cover their costs and leave enough surplus/profit to pay themselves the London Living Wage. There are three main financial levers that could be flexed by the vendors to try to improve profitability, namely:

- increase the volume of meals sold
- modify gross margin (a function of meal price and cost of food sold) to increase gross profit achieved
- reduce fixed operating costs

Our assessment points towards low volumes as the primary reason for low profitability. We have modelled the volume increase that would be required to achieve financial viability if you assume each vendor sells adult meals at £4 and student meals at £2 which are the prices we believe would be competitive in the local marketplace and therefore underpin the assumed increase in volumes. We also assume the vendors all sell the same split of meals to adults and students as the average (66:34). The following table details the results:

	Phase 2					
	V1	V2	V3	V4	V5	Avg
Daily meals sold - achieved	14	11	23	9	16	15
Daily meals sold - required	40	46	56	52	92	51
Implied sales per hour	8	9	11	10	18	10

On average a threefold increase in volumes would be needed, with a vendor selling 51 meals a day, to achieve financial viability. This equates to 10 sales per hour, assuming a five hour trading window for each vendor. Despite being significantly higher than the averages for Phase 2, we believe this daily volume is achievable if the contributory factors which led to poor volumes can be addressed with a focus on suitable pitch locations and meal pricing. We have assumed no reduction in food input costs for this exercise, which means gross margins are lower for the vendors selling at the reduced adult price of £4. In practice the vendors would also look to find ways to reduce input food prices if they lowered selling prices with the result that fewer meals than modelled above would be required to generate the same daily profit.

Key findings: finances

None of the vendors in Phase 2 achieved financial viability over the length of the project with the inability to generate high enough sales volumes the primary reason for this. Sales were negatively impacted by a number of factors the most important of which was the low customer footfall that resulted from poor pitch locations and the inability of the vendors to establish a consistent trading pattern, selling meals at competitive prices, to convince customers to switch their purchasing habits away from the strong existing fast food competition in the area. We believe that the volume increase required to deliver a financially viable business is achievable, if these factors are addressed, and that therefore there is not a fundamental flaw in the business model or proposition of selling healthier fast food to students and adults in the areas chosen for the project.

There are a number of important lessons learnt from the financial assessment of the project which will be taken through to the next phases:

- A good pitch location with high footfall is fundamental to the success of a new entrant to the fast food market.
- Customers are very price sensitive, particularly for new types of food offer, so pricing must be competitive.
- A strong relationship with council partners is important in order to improve the economics of the business model by reducing some input costs.
- Consistent trading over a long period of time will improve profitability as customers become familiar with the food offer and form purchasing habits. Consistent trading also provides a platform for effective promotions.

6.2.4. Workforce development

At the outset of the project we had planned to incorporate the training of young people into the project, providing internships working as assistants to the vendors. As part of their internship the interns would be supported in getting their Level 2 Certificate in Food Safety and Hygiene for Retail.

In Box Chicken, Shift worked with Create Jobs to provide two young people with work experience

Of the two interns, one was between GCSEs and A levels and gained research experience on the project, assisting with surveys and data entry during the pilot. The second was an unemployed graduate, who worked in the van three days a week for the month of the project, assisting the caterer in the van. Through their training they received a City & Guilds Level 2 in Food Safety and Hygiene for Catering. Both of the assistants gave very positive feedback on their experiences feeling it had given them confidence, a knowledge of working practices and practical skills.

Phase 2 internship opportunities were less appealing to young people than those with Box Chicken

Based on the success of the internships in Box Chicken we intended to run a similar programme for assistants in Phase 2. The opportunities differed to those offered by Box Chicken, running for eight rather than four weeks. We worked with Create Jobs who publicised the eight week internships through their networks, social media and visiting local job centres.

Despite the publicity there was little interest from young people in the positions. Out of the small number of young people who said they were interested in the position, only three showed up for their interview. All three were interviewed, given a project induction and completed an online course on food hygiene, however, none of them were able to start work at the mobile outlet, having been offered paid opportunities in the interim.

Reflecting on the process we have identified a number of reasons why the internships offered may not have had the anticipated response:

- Difficulty with widely publicising the opportunity: Although we publicised the position through our own networks, and those of Create Jobs, we were unable to advertise the position with the Job Centre as eight weeks is too long a period for them to advertise unpaid work on their site.
- The benefits of the internship were not sufficiently appealing to compensate for the position being unpaid: Instead of payment, the position offered work experience in catering and a Level 2 Certificate in Food Safety and Hygiene. The low levels of response, however, show that the qualifications and

the chance for work experience were not as highly valued or sought after as initially thought. Young people may also have been put off by the fact that, unlike other apprenticeship schemes running, there was not the chance of getting a job with the vendor at the end of the project.

A different approach: working with social enterprise HireHand

As the recruitment of younger people was not successful, we approached workforce development from a different angle, working with the employment social enterprise HireHand to provide paid catering assistance for some of the vendors in the project.

HireHand is a social enterprise that provides a flexible workforce to pop-up caterers. It draws 40% - 60% of its workforce from disadvantaged backgrounds, such as being in long-term unemployment, and who, because of this, may need a little additional support with kitchen skills, personal skills or both. Candidates all have basic catering experience with HireHand providing additional training before they start their first job.

Within this project, HireHand provided two members of staff to the vendor at Tower Hamlets, with the assistants working different shifts. The assistants were paid the London living wage of £9.15 per hour. The use of HireHand in this project proved beneficial to both the vendor, and to developing the employment skills of the assistants working with them.

Benefits for the vendor:

- The vendor felt it was very helpful to have assistance from someone who already had basic catering skills. They felt confident leaving the assistants in charge of the mobile outlet if they needed to pop out to get more ingredients or were dealing with a different task.
- The assistants were both from the local community which the vendor thought was beneficial as they already had an understanding of the community and could engage with customers better because of this. Being local also meant they had local connections, with one of the assistants encouraging his friends who lived in the area to come and visit the stand.

Benefits for the assistants:

- Both assistants had previously been working shift work and being paid a wage that was below the London Living Wage. Although the project offered fewer hours work than the assistants' previous jobs, they were paid more per hour on the project, and it provided more sociable working hours (between 10am - 5pm).



- For one assistant the project gave her the opportunity to improve both her catering skills, learning more complex cooking techniques like working the grill, as well as softer skills like confidence to interact with customers. The vendor actively encouraged her to chat with customers and build these communication skills, and the experience paid off - she has received consistent five star ratings from jobs she worked on since the project, compared to 3-4 stars that she received before working on the project. Her work has been so well received she has even been offered a full time catering position, which the CEO of HireHand felt was due largely to the experience of working with the vendor at Tower Hamlets.
- The other assistant already had a number of years experience working in the catering business. Throughout the project he improved his core work skills such as time keeping.



Key findings: workforce development

Despite the low levels of interest in the work experience from younger people, the project indicated that opportunities for developing a workforce did exist in the project, just with a different workforce. Suggestions for future similar projects:

- To attract people to work over a number of weeks, the assistant position should be paid. If payment is not available then the internship needs to be for a shorter period of time. An unpaid position would also alter the skill level of the people applying for the position, which in turn would impact how helpful the assistant could be to the vendor from the start of the project (see below).
- Recruitment should target individuals with basic levels of catering skills but that still have the desire to improve on them, and put them to use. This basic level of catering skills means the vendor can begin to use the assistant straight away, and that

they are an asset to the project rather than taking time and effort to teach the basics of food preparation and customer service. An individual who wants to improve their skills will be motivated to apply for, and work hard at, the project.

- Assistants should be matched with vendors based on the vendor's mentoring skills and experience. One reason given for the success of the HireHand assistants was the ability of the vendor to mentor and support the assistants. More experienced assistants could be placed with vendors who have less experience in managing people, whilst newer assistants, who need greater support could be placed with more experienced vendors.
- The peak and flow of trading varies greatly in street food, and is often difficult to predict until a couple of months into trading. Therefore the workforce needs to retain some element of flexibility, which is partly offset by paying better wages than those offered in other jobs.

7.

Conclusions

The influence and impact of the food environment on people's health is becoming increasingly clear. In this project, Shift explored the potential to improve the food environment in low income areas by launching independent healthy fast food outlets that aimed to compete effectively with the incumbent unhealthy alternatives.

As well as temporarily altering the food environment of four locations, selling over 2700 healthy meals, the pilot provided important insights into what is needed to make such an intervention sustainable in the long run. Crucially, the pilot highlighted the elements needed to create a compelling value proposition for an audience in more deprived areas (menu, price point and location) and demonstrated that the value proposition for this audience differs greatly to the value proposition for more traditional street food audiences in more affluent areas.

The vital importance of a good location was a clear takeaway from the pilot. There is little room to manoeuvre on the price point of meals, due to rock-bottom prices of competing regular outlets, meaning high sales at lower prices are key to profitability. High sales require the outlet to be in area of high footfall, both adult and young people, with sales being strongly affected if the outlet is even a little set back from major routes.

The pilot also demonstrated the complexity and challenge of engineering a menu that is attractive to young people, easy to assemble, yet also in line with nutritional guidelines. We learned that familiarity is key, with chicken burgers and wraps finding the "sweet spot" in this round of testing. The importance of branding was also clear: branding needs to anchor the food in the fast food category, again reassuring the buyer of the food's similarity to standard offerings.

The vendors themselves unsurprisingly play a large role in the success of an outlet, requiring the right skills, both technical and social, as well as appropriate support from a support team that can advise on nutrition, council relationships, and other operational challenges.

While we initially thought that it might be possible to sustainably change the food landscape through a network of independent vendors, the findings above indicate that a network approach might not be best suited to ensuring outlets can consistently deliver an attractive value proposition for our target audience, which is at the same time is financially viable to deliver. Working with multiple individual vendors to adjust their working models to meet the challenging standards required for success would be prohibitively time and resource intensive. Instead, a standardised, franchise-type model might be more suited to addressing the significant challenges of changing the food environment in very difficult areas.

Even with a franchise-type model, the role and support of councils would continue to underpin the success of the venture. Both the financial and practical support from councils were vital to the project running. However, the pilot also highlighted the need for councils to work across departments, seeing issues like parking and marketing as public health issues. While this caused initial delays, it ultimately stimulated the kind of interdepartmental co-operation that is always going to be necessary to target poor diets through an environmental approach. We look forward to working closely with councils to think more broadly about how to use the levers they have to make healthy fast food provision to young people a sustainable venture, including exploring ideas such as reduced business rates, and pitches in more prominent locations.

Food environments are complex and multifaceted, and our pilot shows a promising method of changing them for the better. Whilst we continue to refine and improve the model, we are also working with on a methodology for assessing, mapping and measuring changes to the

nutritional impact of takeaway food. In combination we hope to implement our model and then demonstrate the positive changes that it, and other interventions, have on improving the nutrition of takeaway food, and on the health of the people eating it.



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Or, please visit our website:
<http://www.shiftdesign.org.uk/products/healthy-fast-food>

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