



**CATÓLICA
LISBON**
BUSINESS & ECONOMICS

Food waste reduction in the retail sector

A feasibility study in social entrepreneurship

Candidate: Eirik Thorsen

Advisor: Susana Frazão Pinheiro

Dissertation submitted in partial fulfilment of the requirements for the degree of International
Master of Science in Business Administration

January 2014

Follow the grain in your own wood. – Howard Thurman

Abstract

This study explores the feasibility of utilising food waste from retailers and selling it with the aim of creating a sustainable business. Its focus is Norway and the Norwegians' attitudes towards "precycling" food and buying meals prepared from food normally destined for the rubbish bin. It addresses the need for new thinking and developing ideas that can solve issues currently facing society and the planet, and is a mix of a theoretical and practical dissertation style.

As stated by Porter and Kramer (2011), capitalism is an unequalled way of meeting human needs, improving efficiency, creating jobs whilst building wealth, but a narrow idea of capitalism has prevented business from exploiting its full potential to meet society's broader challenges. By reviewing literature concerning social entrepreneurship and corporate social responsibility, the study focuses on current trends and reports from continental Europe and Norway before presenting a possible solution to food waste and the results from a survey intended to map the attitude and inclination to accept solution.

The result indicates that consumers are indeed open to the idea of buying food prepared from "less than perfect" food items, and it appears that a sustainable business can be created based on this idea. The proposed solution should be considered by the potential adopter as a valuable source of marketing and good will, but additionally the suggested business should be able to sustain itself creating only benefits to the adopter.

Table of contents

- Abstract2**
- Preface2**
- List of acronyms3**
- List of exhibits and annexes4**
- Introduction.....5**
- Literature review7**
 - Entrepreneurship7
 - Social entrepreneurship.....7
 - CSR.....10
 - Shared value creation11
 - Definition12
 - History, development of term.....12
 - Why are social innovations important?13
 - Business opportunities14
 - PESTLE14
- Methodology16**
- Backdrop: trends and context.....16**
 - The ForMat report 2010.....18
- Industry analysis20**
 - Political.....20
 - Economic21
 - Social22
 - Technological.....24
 - Legal.....24
 - Environmental.....25
- Purpose25**
- Scope27**
- Solution27**
 - The product.....27**
 - Description27
 - Distribution.....27
 - Suppliers28
 - Processes.....28
 - Complementary products29
 - Product packaging.....29
 - Target market.....29**
 - Details.....29
 - Size.....29

Reputation.....	30
Area of operation	30
Target customer	30
Why students?.....	30
Why food truck?.....	31
B2b or b2c	32
On what factors are buying decisions made.....	32
Unique selling point	33
Benefits and costs to potential adopter/partner.....	33
Improved public image	33
Increased revenue.....	33
Sales forecast	33
Costs.....	34
Alternative solutions.....	35
Survey results	35
Limitations.....	37
Conclusion	38
Future research	39
Bibliography	40
Appendices.....	45
Survey food waste	49
Cash flow forecast	58

Preface

Choosing a dissertation topic proved quite difficult, and twice I needed to change topic. I did not want to follow a traditional and solely theoretical dissertation, and so a more applied approach was very attractive. Having grown up with a pronounced interest for food and cooking and a natural exploratory mindset, the dissertation seminar supervised by Susana Frazão Pinheiro seemed the obvious choice.

I have worked in both retail and hospitality and seen the amount of food that is being wasted for no other reason than imperfect legislation and poor planning. The hospitality sector, though not perfect, has much better procedures for utilising food reducing both their footprint and their food bill. There is a need to improve on the current practices of the grocery stores, and my dissertation explores one possible solution to decreasing wastage.

Convinced about the fact that business is the only sustainable and possible way of addressing social and environmental concerns, I wanted to come up with a novel solution to food waste. I believe that social entrepreneurship will become increasingly important and abundant in years to come, and I theorise that businesses will be more focused on solving problems rather than simply increasing shareholder wealth. We need to get smarter about solving current issues, and though this dissertation explores an ingenuous solution to a simple problem, I hope that it will spike my own, and perhaps others, motivation to create sustainable, social businesses stimulating change.

I would like to thank Professor Susana Frazão Pinheiro for her incredible patience and focused and professional guidance, and for allowing me to change to her seminar. I also need to extend my deepest gratitude to my family for all their support through my five years studying abroad, an achievement not possible without them. Lastly I wish to thank those who participated in my survey, and my friends for motivating and giving me feedback on my thesis.

List of acronyms

SVC	Shared value creation
CSV	Creating Shared Value
CSR	Corporate Social Responsibility
OECD	Organisation for Economic Co-operation and Development
UN	United Nations
HBR	Harvard Business Review
UNEP	United Nations Environmental Programme
GMA	The Grocery Manufacturers Association
FMI	Food Marketing Institute
NPS	Net Promoter Score
EU	European Union
GNP	Gross National Product
NSO	Norwegian Student Organisation
FC	the Food Crew
B2B/B2C	Business to Business/Business to Customer
NIPH	Norwegian Institute of Public Health

List of exhibits and annexes

- Table 1 – Food waste overview 19
- Table 2 – Costs 34
- Table 3 – Net promoter score 37
- Table 4 – Example food truck 46
- Table 5 - Truck shipping cost 47
- Table 6 - Cost of truck 48
- Graph 1 – Student loan grant 23
- Graph 2 – Decision factor price 34
- Graph 3 – Influence of buying decision 36
- Figure 1 – Organisational spectrum 45
- Figure 2 – Organisational structure 45

Introduction

Research question: is it possible to profit on precycled food?

A paradigm shift is currently taking place in business. Gone are the old views and sole focus on economic profit at the cost of society and environment (Nagler, 2007). More and more people, and more and more corporations are realising that meeting and solving the problems faced by society is profitable, and the old notion of philanthropy being a concept for do-gooders and other goodie two shoes companies is slowly disappearing. By addressing pressing issues, a business can change the lives of people to the better while simultaneously turn a profit.

In recent years, more attention has been given to the issue regarding food waste. This problem is prevalent throughout the western worlds, and is a result of the affluence level of the country (Stormoen, 2013). Both the European government and the Norwegian government are searching for strategies to reduce food waste through the entire value chain, and more and more food companies and retailers such are jumping on this trend. Worldwide reports estimate that some one third of the total food produced ends up directly in the trash before even reaching the plate (UNEP, 2011).

In addition to the growing concern of unethical disposal of edible food, the gap between poor and rich is increasing (Reardon, 2011). In Norway, students enjoy free tertiary education as well as being able to apply for student loans to the Norwegian State Educational Fund. The subject of concern is that this support, the lifeline for Norwegian students, is decreasing relative to the National Insurance Scheme, the basis from which other social welfare payments are calculated. Couple this with an inflated real estate market and a shortage of student housing, the financial situation of the average student is worse than it has been in many years.

The purpose of this feasibility study is to look at the prospective of developing a business model that can offer a healthy and cheap meal option to students whilst concurrently reduce food waste in the retail sector, referred to in the paper as “the Food Crew”. The proposed business model is neither purely a non-profit or for-profit venture, but rather a hybrid of the two, creating shared value. This means that the business will address a relevant societal problem at the same time as being financial viable.

Firstly, this paper will discuss relevant theories and frameworks before looking at other business ventures tackling the same concerns. It will then go on to look at the trends and developments, both macro and micro, and assess the current situation in the Norwegian industry and market. Also, consumer attitudes towards the concept will be evaluated. Next, the paper will take a look at the business model itself and gauge critical risk and success factors.

Lastly, limiting factors of the study will be defined and elaborated upon before a conclusion is drawn and future research is presented.

Literature review

Entrepreneurship

According to the definition by Zimmerer and Scarborough (2005), an entrepreneur is “*one who creates a new business in the face of risk and uncertainty for the purpose of achieving growth and profit by identifying significant opportunities and assembling the necessary resources to capitalise on them*”. Market conditions have changed dramatically the last years, and where the business environment twenty-five years ago favoured large corporations, the pace of change today is constantly accelerating giving the upper hand to small, agile businesses able to adapt to these changes instantly. These businesses can exploit opportunities within a matter of weeks where large corporations, due to administrative and bureaucratic constraints, need years and vast resources under their belt to capitalise on the market openings (Zimmerer & Scarborough, 2005). In addition to the favourable market conditions, newer generations no longer see launching a business as a risky venture, and the recent downsizing trend has damaged the long-standing attitudes towards job security in large corporations (Zimmerer & Scarborough, 2005).

The entrepreneur have been described by Zimmerer and Scarborough (2005) as having a set of traits including:

1. Desire for responsibility
2. Preference for risk
3. Confidence
4. Future orientation
5. Value of achievement over money

Social entrepreneurship

The key characteristics of social entrepreneurship are accountability for social outcomes and the double, or even triple, bottom line first termed by John Elkington: economic, societal and environmental sustainability (Savitz, 2013). A social business- man or woman is in some sense like the roman god Janus, having a dual identity caring for both profits and society.

As early as 1996 The Roberts Foundation Homeless Economic Development Fund defined social enterprise as "a revenue generating venture founded to create economic opportunities

for very low income individuals, while simultaneously operating with reference to the financial bottom-line." (Alter, 2007)

In addition to the traits described in the section above, social entrepreneurs are driven by a need to make a change. Progressively, entrepreneurs are starting businesses because they see an opportunity to make a difference in a cause that is important to them. The combination of concern for social issues and the desire to earn a good living (Zimmerer & Scarborough, 2005) has resulted in the development of a hybrid business models that is neither purely for-profit nor non-profit, sometimes referred to as social businesses (Elkington & Hartigan, 2008). Elkington and Hartigan argued in the book “The Power of Unreasonable People: How Social Entrepreneurs Create Markets That Change the World”, that social entrepreneurs are increasingly important as catalysts of development policies, both economic and social. Employment development, innovation for unmet social needs and capital creation for sustainable social and economic development were some of the factors highlighted by the authors. A great example of a social entrepreneur is Björn Söderberg. The young businessman has started multiple companies in Nepal promoting social and economic development by providing scholarship to those unable to provide to undertake education in exchange for a commitment to work for the company for a specified time (Soderberg, 2012). This model benefits both parties and is a sustainable social initiative that makes perfect business sense.

While some authors such as Dees et al (2002) still see the social entrepreneur mainly in the non-profit sector, most of the studies in recent years highlight that the boundaries between non-profit and for-profit vanish (Alter, 2007). Elkington and Hartigan (2008) described three versions of a social enterprise¹:

- Leveraged non-profit
 - Traditional social business based on donations and financial support from the private and public sector. Aimed at the most economically vulnerable in society. Multiple partners involved in enhancing the sustainability of the

¹ For a graphical explanation of the spectrum of businesses from traditional non-profit to for-profit please see Figure 1 and 2 in the appendices.

business, and founder often morphed into a figurehead as others come into manage the organisations.

- Hybrid non-profit
 - Also aimed at underserved markets as the leveraged non-profit, however the notion of making and reinvesting a profit is not totally out of the question. Marketing plans are typically developed to ensure access to more people in need. The organisation can recover some costs through sales. Funds are mobilised from private and public sector in addition to sales.
- Social business
 - This model is distinctly different from the two others. Set up as a for-profit business from the start, though with a social issue in mind. The profits are usually managed differently than a traditional business. The goal is to create a business that ushers in social or environmental change, and though profits are made, this is usually second priority and is used to grow the business to reach more people or have an even greater impact on the mission that the business is set out to achieve. The scaling opportunities of a social business model, compared to the two others described, is significantly greater as the business can more easily take on debt and equity.

Unlike its cousin terminology “entrepreneur”, the “social entrepreneur” is only loosely defined, and characterisations vary greatly between nations and authors. However, an extensively cited definition is however offered by Dees, Emerson and Economy. “A social entrepreneur is a change agent who:

- Adopts a mission to create and sustain social values
- Recognizes and relentlessly pursues new opportunities to serve that mission
- Engages in a process of continuous innovation, adaptation, and learning
- Acts boldly without being limited by resources currently at hand, and
- Exhibits heightened accountability to the constituencies served and the outcomes created.”

(Dees et al, 2002)

CSR

Corporate social responsibility is, due to the definitional disagreements in academia and the wide variety of practices in the corporate world labelled 'CSR', an elusive concept, which, to a certain extent defies quantification (Gjølberg, 2009). However, CSR has been defined as the "voluntary activities taken by corporations to enhance economic, social, and environmental performance." (Cretu & Brodie, 2005). According to research by Gjølberg (2009) on CSR across 20 OECD countries, the tendency to engage in CSR activities vary greatly across different nation states, hence the opportunities to improve in this area and capitalise on opportunities is certainly still present.

Corporate social responsibility has the hallmark of being a truly global idea. While originating in the United States (Carroll, 1999), CSR is now endorsed and actively promoted by key global institutions such as the World Bank, the OECD, and the UN (Gjølberg, 2009). That being said, CSR is not a new concept, though the term itself is of a more recent date. According to Blowfield and Frynas (2005) a preoccupation with business ethics and the social dimensions of business activity has been around for a very long time. Business practices based on moral principles and western thinkers such as Cicero advocated 'controlled greed' in the first century; India's Kautilya in the fourth century and Islam has publicly condemned certain business practices throughout history. Of the more modern forerunners to CSR Blowfield and Frynas mention the boycotts of foodstuffs produced with slave labour in the nineteenth century and the post-World War Two trials which saw the directors of the German chemical firm I. G. Farben found guilty of mass murder and using slave labour.

Though the notion of social responsibility in business is not a new phenomenon, its value has gotten more attention recently. Henry Stewart (2003) established in a study relating CSR to corporate branding that CSR is a powerful driver of brand due to a global shift from the shareholder model to the stakeholder model, increased pressure for transparency, a budding focus on intangibles in business, such as reputation, and the effects these components have on the ability of a firm to attract investments (Stewart, 2003). This claim is backed up Ruggie (2003) stating, "*CSR is in many ways interlinked with the process of globalisation, and the increased need to secure its human and environmental dimensions*". From a marketing perspective, the firm's economic benefits from CSR have been documented in its link to consumers' positive product and brand evaluations, brand choice, and brand recommendations (Brown & Dacin, 1997).

Furthermore, Lynch and de Chernatony (2004) indicated that “*brands based on intangible, emotive characteristics – are seen as more durable and less likely to suffer from competitive erosion.*” This statement highlights the strategic benefits for a company to invest in social programs, however a pure CSR strategy as defined by Michael Porter is perhaps an out-dated way of improving and securing a company’s reputation, and perhaps in some instances could be viewed as not being sincere due to a low level of commitment. By commitment in this case I am referring to the effortless possibility of simply shutting down a CSR program in times of financial distress. In an interview with Michael Porter at the FSG Impact Summit, Peter Brabeck-Lethmathe (2013), Chairman of Nestlé pointed out a drop in philanthropic donations from 2007 to 2008 of US\$40 billion. The way CSV (creating shared value) differs in this sense is simply that it is a part of the value chain and it is not only a side to activity, but the project or venture itself. Creating shared value happens because the company sees an opportunity to improve upon social or environmental matters whilst turning a profit, and not “wasting” shareholders’ money on philanthropic giving (Porter M. , Shared Value Leadership Summit, 2012).

A measure of company reputation is “being a good corporate citizen”. Cretu et al (2005) found in their study of “the influence of brand image and company reputation where manufacturers market to small firms” that there was a correlation between brand image and corporate reputation, thus suggesting a mediating effect between these two variables. This finding substantiates that by engaging in CSR activities a company can improve brand image, thus affecting brand performance.

Shared value creation

“Shared value is not social responsibility, philanthropy, or even sustainability, but a new way to achieve economic success. It is not on the margin of what companies do, but at the centre” (Porter & Kramer, 2011).

According to Porter and Kramer (2012), the more business has begun to embrace corporate responsibility, the more it has been blamed for society’s failures. The legitimacy of business has fallen to level not seen in recent history. A possible explanation of this is a general lack of transparency in business and CSR initiatives usually lack evidence of dedication in terms of hard, actual investment. This results in social responsibility programs often being abandoned in times of financial hardship (Brabeck-Letmathe, 2013). If social investments ought to

appear genuine it can be argued that they must be incorporated into the value chain itself, not treated as an addition to the daily business of a company.

Definition

Shared value creation (SVC), or creating shared value (CSV), is the concept of meeting and fulfilling two goals simultaneously, improving social and environmental welfare and increasing shareholder or company wealth. It is not a philanthropic business concept and in that sense it differs from corporate social responsibility (Porter & Kramer, 2011). Michael Porter and Mark Kramer are known as the driving force behind CSV in business academia and implementation of this concept in business schools. In their article “The Big Idea: Creating Shared Value” in Harvard Business Review they proposed the following definition: “The concept of shared value can be defined as policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates. SVC focuses on identifying and expanding the connection between societal and economic progress” (Porter & Kramer, 2011). Moreover, Porter and Kramer (2011) explain that shared value has nothing to do with personal beliefs, nor that it is an allotment of the existing value created by firms. It is not simply redistributing wealth. Unlike the Fair Trade program, which intention is to give more of the profits to the farmers or initial producers, CSV is to increase the size of the economic pie. The authors put forward an example of cocoa farmers in the Cote d’Ivoire. Fair trade agreements would increase the farmers’ income by roughly 10-20% whilst shared value investments have the potential to increase earnings by more than 300% (Porter & Kramer, 2011). By investing in the society in proximity to the business Porter and Kramer suggests that all parts will experience greater social and economic benefits. Give a man a fish and he has food for a day. Teach a man to fish and he has food for a lifetime.

History, development of term

Creating value for society is not exactly a new idea in business. One could argue that it is the fundamental driving force behind any company, however it seems as though this belief has been lost in recent years. The focus has gradually been shifted towards profit and maximising shareholder value, sometimes at the expense of society at large (Porter & Kramer, 2011). The idea of shared value, as an academic term, was initially explored in a December 2006 HBR article by Porter and Kramer, “Strategy and Society: The link between competitive advantage

and corporate social responsibility”. As the first academics to explore this concept it is fair to say that Porter and Kramer has to a large extent become the authorities on this topic.

In recent years business has increasingly been viewed as a major cause of social, environmental, and economic problems (Porter & Kramer, 2011). In the same article, Porter (2011) also stated that as more businesses have committed themselves to corporate social responsibility, the more society has blamed corporations for social and environmental failures. Further he asserted that, “*the legitimacy of business has fallen to a level not seen in recent history*”. These adverse effects of initiatives aimed at improving a business’ reputation could perhaps be that these investments lack sincerity. A problem that CSR has, according to Porter and Kramer (2011) is that it is not embedded in the value chain of a business, thus one can theorise that the legitimacy of these investments could be viewed as questionable from a stakeholders’ perspective. This became very apparent during the last financial crisis where many companies simply shut down their social programs to cut costs as previously mentioned. This sudden drop in social investments could perhaps signal an alternative motive to CSR other than wanting to do good by society, namely companies acting in pure self-interest and using CSR programs only to better their own reputation. Perhaps, such actions could weaken a company’s reputation more than being upfront and honest about not caring about societal issues outside the scope of their business. Moreover, CSR and other more philanthropically skewed donations and investments are in many countries tax deductible, again reducing the legitimacy of the intentions behind. Where CSV differs is in its transparent nature. There is no attempt in trying to cover over the fact that the business’ first priority it to be able to create a sustainable surplus, with the ripple effect being increased social value. In its pure form, CSV is just good business.

Why are social innovations important?

“We still lack an overall framework for guiding these efforts, and most companies remain stuck in a “social responsibility” mindset in which societal issues are at the periphery, not the core“ (Porter & Kramer, 2011)

Capitalism is an unparalleled vehicle for meeting human needs, improving efficiency, creating jobs, and building wealth. But a narrow conception of capitalism has prevented business from harnessing its full potential to meet society’s broader challenges (Porter & Kramer, 2011). Though not an avid advocate for CSR, Michael Blowfield (2005) still said that “*perhaps CSR’s biggest contribution has been to stimulate new thinking about the business–society*

relationship, and even if we are a long way from finding solutions, we are at least becoming aware of the need for new forms of dialogue”.

As the concept is still in its infancy it represents huge potential for value creation and opportunities in new markets. It is imperative to address some of our current issues before it is too late. Overfishing, plastic waste, global warming, public health are serious concerns that does not distinguish between sovereign states, thus increasing the need for business to address some of these issues.

Business opportunities

Companies have overlooked opportunities to meet fundamental societal needs and misunderstood how societal harms and weaknesses affect value chains. Our field of vision has simply been too narrow (Porter & Kramer, 2011). An important point that Porter and Kramer (2011) makes is rethinking productivity in the value chain. They point out six key areas:

- Energy use and logistics
- Resource use
- Procurement
- Distribution
- Employee productivity
- Location

As stated by Porter and Kramer (2011) *“It is not philanthropy but self-interested behaviour to create economic value by creating societal value”.*

PESTLE

This analysis tool is used to capture the forces in the environment, which are, and could in the future, affect the business and its operations (Haberberg & Rieple, 2007). The analysis looks at various aspects in the macro environment including political, economic, social, technological, legal and environmental. Examples of political factors would be incentive schemes, plans and goals and government frameworks. Economic factors include interest rates and market growth, consumer price index and unemployment rate, and the analysis of the social environment includes trends, population and culture. Technological aspects include innovations that affect the industry, legal factors include laws and regulations relevant to the industry and market the business operates in, and the last factor, environment looks at the

impacts the business will have on the local and global ecosystem (Johnson et al, 2008). To summarise, the PESTLE framework is a tool for analysing and monitoring the macro environment of a company. This enables the company to identify trends and opportunities and threats that impact the operation of the business (Henry, 2008). The questions that are being sought out are “what will affect the growth of the industry, and how will this impact our business?” (ICAI, 2013).

Methodology

To assess the feasibility of the project, both secondary and primary data has been collected and reviewed. Firstly, existing research on the topic of food waste in Norway was gathered and both reports from independent researchers and government opinions have been studied. The materials were collected from various sources including books, PDFs, websites, newspaper articles and other electronic sources such as interviews and conference recordings.

The primary data has been collected through an online survey distributed through various social media sites, but limited to a Norwegian audience. Though this has limited the number of participants, it was important to assess only the attitudes of the Norwegian people concerning the project. Though the target age group of the survey was those in their twenties, all results are deemed valuable as the proposed business initiative is not limited to a certain demographic. The results have been analysed using standard statistical calculations. The partakers were chosen at random, and their identity has been kept confidential.

This approach was chosen in order to evaluate the potential and viability of the proposed project. An important factor for the data collection methods was also time and efficiency and limited financial resources.

The initial part of the report is a review on the existing literature relative to this report. Looking in depth at entrepreneurship, social entrepreneurship and CSR sets the tone for the importance of similar ventures in changing the minds and attitudes of people and make business the driver of innovation and change. The information collated was found in renowned, published, peer-reviewed papers and articles. In addition, to assess the industry conditions the PESTLE analysis framework was used, thus explained in the literature review.

Backdrop: trends and context

“The EU and its Member States should strive to remove barriers that hold back resource efficiency and so create the right set of incentives for production and consumption decisions. This will require...: Encouraging more long-term innovative thinking in business, finance and politics that leads to the uptake of new sustainable practices and stimulates breakthroughs in innovation, and develops forward thinking, cost effective regulation” (European Commission, 2011).

Having worked in a large grocery chain, the author noticed the huge amount of food that was being wasted every day. The practice is confounding, and it is not easy to understand why this food cannot be utilised. But, things are changing. There are now several examples of companies, ventures and social and corporate initiatives to reduce wastage of usable food spoils. ForMat is an initiative by Matvett AS that aims to reduce total food waste in Norway by 25% within 2015 (Schröder, 2014). This is a measure by industry participants to educate the general public and also companies on actions they can take to reduce their own waste. Looking abroad, the European Union declared 2014 “the Year Against Food Waste” (European Commission, 2014). In a report to the European Parliament et al, the European Commission expresses concerns regarding sustainable growth, and one of the measures they put forward is reducing food waste. By implementing measures such as incentive schemes, subsidies, research initiatives and improving laws and regulations the EU hope to reach their ambitious milestone of halving Europe’s food waste by 2020 (European Commission, 2011). An example of businesses jumping on this recent trend is the French grocer Intermarché. They have an ongoing campaign promoting inglorious fruits and vegetables with the slogan “a grotesque apple a day keeps the doctor away as well” (Segran, 2014). Also, former Trader Joe’s President and CEO, Doug Rauch, has recently launched a non-profit business called the Daily Table in Boston, Massachusetts (Segran, 2014). The Daily Table will utilise foods that would normally be wasted, and serve wholesome and healthy dishes to the local community at very affordable prices, much like this proposed project. Of course, there are stigmas associated with this business, however, Dana Gunders, a scientist at Natural Resource Defence Council believes that this is symptomatic of how misinformed Americans are about food. “Doug has been criticized for trying to sell poor people trash,” she says. “But this points to a fundamental misunderstanding about what constitutes high quality food. Just because food does not look perfect, does not mean that it is not delicious and nutritious” (Segran, 2014).

There are also non-government organisations working on a plan to reduce food waste. In Europe the food labelling system is centralised, making it fairly easy to implement changes, and changes have been made to labelling of products such as sugar and vinegar. In the United States however, the system is not regulated by a government institution, making room for very confusing labelling practices. The Food Waste Reduction Alliance is a unity between The Grocery Manufacturers Association (GMA) and Food Marketing Institute (FMI). This assembly are tackling industry food waste, but are planning to examine the date labelling

practices as well (Bloom, 2014). These recent actions prove that food waste is a serious problem in the western world, and that governments and other organisations are taking the issue seriously.

The proposed venture differs from somewhat from the current efforts to confront the problem. The main purpose is to reduce waste, yet simultaneously the solution needs to be sustainable and scalable, hence the need to the business to create a surplus. If successful, the business will positively impact society and the environment and at the same time create value for the partner retailer through cost minimisation and marketing value. This happens at the same time as the venture itself is profitable, the triple bottom line. This solution might not be financially viable, and in that case the suggestion is to operate the subsidiary as a pure non-profit and benefitting from the marketing value and increase in goodwill.

The ForMat report 2010

Methodology: 30 grocery stores surveyed. Representative selection based on geography and type of shop, both with and without a fresh food department. For the consumer side of the report, 1000 people were surveyed.

The results from the assessment of edible food waste shows that fresh baked goods, fruits and vegetables are important food categories in all aspects of the food chain, from production to end user. This is true in terms of monetary value and weight/volume. Baked goods are also the category responsible for the largest percentage of food waste in terms of revenue through the entire value chain, both in the production stage and in the retail stage. Fruit and vegetables have also consistently high values of waste in both wholesale and retail stage, whilst meat and fish waste are most prevalent in the retail point.

The study found considerable discrepancies between the stores in the same chain of supermarkets, indicating a potential for reduction of edible food waste overall.

The main reason for not selling food was products being past their labelled date hence deemed not fit for sale. This does not mean however that the food is not edible, only that the producers cannot guarantee 100% quality. This is a question of brand protection rather than food safety.

European nations could soon be able to free more products from the best before labelling. In addition to salt, vinegar and sugar, which have already been exempted earlier this year,

products like coffee, rice, pasta and noodles have near indefinite shelf life and could be included under the new directive. Selina Juul, founder of the Danish initiative Stop Wasting Food, do not think the problem lies with shelf-stable foods, and points the finger to bread, fruit, dairy and vegetables (Bloom, 2014). Juul makes a valid point, and studies such as the ForMat report backs this up. Though the problem may not lie in removing dates on shelf-stable products, the result from this proposed expansion of exclusion could be increased awareness and acceptance of utilisation of less than perfect food amongst the general public. If so, this could have a positive effect on the acceptance of this suggested business.

Maintaining focus on labelling practices, 78% of those surveyed in the ForMat report stated that they were well aware of the difference between “best before“ and “use by” labelling (Østfoldforskning, 2010), however this number drops to 50% Europe wide (Bloom, 2014). While the awareness regarding labelling differences gives reason to be optimistic, consumers agree they believe expiration as the main reason for throwing away food (Østfoldforskning, 2010). On an upside, 54% reported to have gotten more conscious of the issue regarding food waste in the past year (2009-2010) (Østfoldforskning, 2010).

The table below shows some of the key figures from the ForMat report. The highlighted numbers are those of the highest interest, and it is obvious from the data that the retail sector is the worst culprit of the three industry participants, making room for improvement.

Industry wide food waste			
Food group	Production (% Of production)	Wholesale (% Of revenue)	Retail (% Of revenue)
Frozen meals	4.8	0.2	0.5
Fresh baked goods	12.9	0.7	6.4
Fruit and vegetables	1.2	4.8	5.1
Fish and other seafood	0.8	1.0	6.2
Meat	1.4	0.8	4.6
Dry goods	3.3	0.3	1.2

TABLE 1 - FOOD WASTE OVERVIEW

SOURCE: (ØSTFOLDFORSKNING, 2010). ADAPTED BY THE AUTHOR.

Industry analysis

Political

The political situation in Norway and in Europe as well seems very attentive to food waste reduction. The problem has definitely been put on the agenda, and both the Norwegian government and the EU have proposed measures in order to address the very real problem of food waste. According to Brekk (2008), the mounting issue of food waste is linked directly to an increase in affluence in society. Not only does this increased in unnecessary waste represent an environmental challenge, but also an ethical issue. The study asserts that most of the food waste is probably caused by unnecessarily discarding food. In an ideal world all food produced should be consumed by people as initially intended, but according to the food retail industry a lot of the wasted food is due to date marking. Though the regulations are set in place to ensure food safety and quality, the date marking is set by the industry participants themselves, posing a potential conflict of interest (Brekk, 2008). The Ministry of Agriculture and Food further states that all parts of the food value chain should be assessed, and that improvement can be made in areas such as packaging, shelf life extension, labelling and logistics. (Brekk, 2008)

Environmental Strategy 2008-2015, a report by the Ministry of Agriculture and Food, highlights some of the issues that the food industry is facing these days. Among them is waste of edible food. The study states that food waste represent an especially large challenge. According to this report, the whole value chain, from end user to industry and producers generate a total of 1 million tonnes food waste annually. This waste represents energy loss equivalent of 5% of the total fuel consumption of the road transport sector, or an energy potential of 2.1 TWh biogas.

On a more micro level, every Norwegian disposes of 46 kg of food per year, and though there is work being carried out to reduce this, there is a need to focus on the entire value chain, and not merely on the consumer. There are potential deals in the air, and both government and industry are positive to future arrangements (The Ministry of Agriculture and Food, 2014)

The Ministry's food policy strategy for 2008-2010, "Taste of Norway", is a strategy that will propose measures to stimulate the development of new, environmentally friendly products. These measures include improving market visibility by labelling of eco-friendly products and informing, involving and influencing value chain participants to shift towards an

environmentally sustainable food production and consumption. This will be achieved in part by enhancing awareness of the issue through campaigns directed at the public, schools and kindergartens in cooperation with the Ministry of the Environment, the Norwegian Association of Local and Regional Authorities and commercial enterprises. In addition to awareness campaigns and consumer-oriented activities such as food festivals, measures to reduce food waste in the food-processing industry, the food wholesale and retail trade, the food service industry and consumers will be implemented. (Brekke, 2008)

Additionally, Brekke (2008) stresses that to reduce or avoid food waste there is a need to educate the public. Especially on the topic of expiration labelling and how to utilise leftovers and keep from over buying food.

Not only is the government concerned with food waste reduction, but also there are efforts made to increase the amount of vegetables, whole grain and fish in the Norwegian diet while reducing simple sugars, salt and saturated fats. Many diseases can be prevented by adopting a wholesome and varied diet, and the government believes that ailments such as cancer, obesity, diabetes, cardiovascular disease, osteoporosis, constipation and tooth decay can be reduced. As some of these maladies are most prevalent among lower income groups, the government believes that targeted measures will effectively balance the social health situation (The Norwegian Government, 2003).

The focus on food waste is not only confined to Norway however. The trend is global, and in a report by the European commission to the European Parliament, the EU set a high priority goal to reduce food waste by 50% by 2020 (European Commission, 2011), and has declared 2014 the European Year Against Food Waste. Both the Swedish and Dutch ministers of agriculture are now in discussion regarding the removal of “best before” dating on a range of different products (Jansson, 2014). The proposition is supported by a number of European countries including Austria, Denmark, Germany and Luxemburg. The reason for the pivot is that there is a general consensus that a lot of food ends up in the landfills due to date labelling (Jansson, 2014).

Economic

Norway’s economy is strong, and a recent listing by the Legatum Institute ranking countries based on prosperity coined Norway as the most prosperous country in the world (Legatum Institute, 2014), and it has been consecutively for the last five years (Forbes, 2013). The

affluence of the nation is, as mentioned previously by Brekk (2008), one of the key drivers of food waste.

In a newly released country report by the Organisation for Economic Cooperation and Development (OECD) (2014), Norway's economic situation was described as well managed and thriving.

“The new government has taken over responsibility for a prosperous, well-managed economy, where people are generally “happy” - indicators of both material and non-material welfare are at high levels. Intelligent use of wealth from petroleum resources and active use of monetary policy within the flexible inflation-targeting framework have insulated Norway from the worst of the financial crisis-induced recession and supported the recovery. There are challenges in a number of areas, which are taken up in this Survey” (OECD, 2014).

The per capita GNP of Norway is 592,778 NOK (SSB, 2014). This number converts to roughly € 70,000.

Social

The total population of Norway is 5.156.451 (SSB, 2014). In 2013 there were a total of 269,063 students, and out of those 72,742 studied in Oslo (SSB, 2014). These numbers do not include online students. The unemployment rate is 3.7% (SSB, 2014).

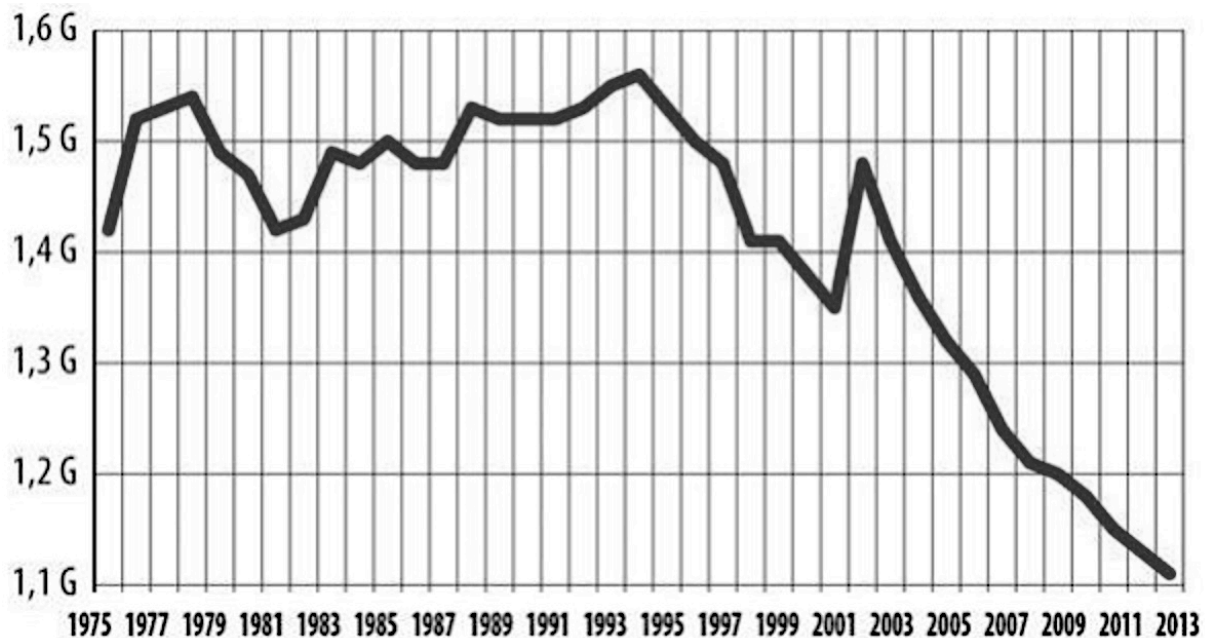
A theme in the Norwegian food debate has always been the price level of grocery stores. The industry is highly concentrated. And after the acquisition of ICA Norway by COOP Norway in October there are now only three actors in the market (Sundberg & Aarø, 2014). In spite of the monopolistic market and the public's impression of the inflated price level in Norway, people are wasting more food than before.

Gjermund Stormoen, the manager of Matsentralen, an initiative distributing food past its best before date expressed in an interview to Aftenposten:

“There are two main reasons why we waste so much food. First, food prices are too low, and second, the consumers' knowledge concerning food is abysmal. The issue is that the relationship between these two variables...A lack of food knowledge results in us not trusting our own senses.” (Stormoen, 2013).

Stormoen (2013) further voiced that even though the interest around food and cooking has increased recently, this has not increased our food knowledge, but merely given us a few more recipes.

Another pressing issue given more emphasis in recent years is the topic of national student loans and grants. Education is free in Norway, and Lånekassen, founded in 1947, provides financial support to students undertaking tertiary education (Lånekassen, 2014). The problem however, is that student loans are at an all time low since Lånekassen started recording statistics in 1975 (Wig, 2013). This is seen in relation to the National Insurance Scheme (G), which is used as the basis for calculating pension and other social welfare benefits and payments. The below graph shows the development over the last four decades and is clearly showing a drastic deterioration of students' financial situation. According to Norwegian Student Organisation (NSO), the financial support from the State Educational Fund only covers 41% of the student's budgetary demands (Wig, 2013).



GRAPH 1 - STUDENT LOAN GRANT

SOURCE: (WIG, 2013)

Alongside these developments we have seen new trends like “dumpster diving” and “freeganing” catching on among students and other social groups that safe to say would previously not even consider such actions (Møvik & Lien, 2014).

Moreover, according to Innova Marketing Insights:, the trend of 2014 is “Waste not, want not.”, in other words food waste reduction. “Many are looking at how they can derive

ingredients from their waste stream, while food waste at the consumer and retailer end of the food chain is also set for increased scrutiny” (Foodnavigator.com, 2013).

A grocery store that caught on to this trend was Kiwi. They have recently led a marketing campaign with the slogan “buy one, get one – protect your wallet and the environment” (Kiwi, 2013), in an effort to inform and reduce household food waste.

Technological

The technological requirements for the project are not substantial. What is needed is already available, and significantly decreases cost associated. Fully equipped food trucks are available for purchase, and recording and reporting in available foodstuffs from retailer to food truck operator can effortlessly be achieved by sending a photo using a smartphone.

Legal

The Norwegian Food Safety Authority is the government body supervising and upholding laws and regulations regarding food and drinking water to ensure safety and health. They also control and regulate the ethical keeping of animals, both for food production and leisure (Norwegian Food Safety Authority, 2014).

“Use by”. This date labelling is applies to food stuffs that spoil easily and that could potentially be hazardous after a short time of incorrect storage, and the labelling should be followed by the actual date. These goods cannot be sold after expiry (Norwegian Food Safety Authority, 2012).

Foods that do not spoil easily shall be labelled “best before”... or “best before the end of...”. This date refers to how long the food can keep without loss of quality or other specific traits. The product can be sold after the expiry at the discretion of the store, however the store is then responsible for the products’ quality (Norwegian Food Safety Authority, 2012).

Foods that do not require labelling

- Fresh fruit and vegetables
- Wines and beverages with high alcohol content
- Baked goods normally consumed within 24 hours

It is the producer himself that sets the date labels on the products. Products marked “best before the end of...” are only necessary to date month or year (Norwegian Food Safety Authority, 2012).

Environmental

The United Nations Environment Programme (UNEP) expects global emissions of nitrous oxide will increase 30-60 per cent leading up to 2030 and that methane gas discharges will increase 50 per cent by 2020 relative to levels of 1990. The cause of the increase is due to population growth and a rising demand for food (Department of Food and Agriculture, 2009). Besides population growth, we are facing another very serious issue that is not getting the focus it deserves. Climate change. In an attempt to forecast and model future conditions, UNEP has developed a series of possible scenarios based on our intervention, or not, in this matter. The scenarios described by the UNEP would severely alter conditions for food production for the much of the world, and surely not for the better for everyone. Though colder regions will experience a more forgiving temperature, extending the farming season, the milder climate will also result in unstable weather conditions, new pests and heavy rain (Department of Food and Agriculture, 2009). There is good reason to anticipate the changing climate propelling the food crisis.

Purpose

“Meeting needs in underserved markets often requires redesigned products or different distribution methods. These requirements can trigger fundamental innovations that also have application in traditional markets” (Porter & Kramer, 2011).

The purpose of this feasibility study is to investigate the possibility of a for-profit business by utilising food that is currently being disposed off by grocery stores. At present around 100 million tonnes of food in the European countries ends up as garbage without even touching the dinner plate, and this number is expected to grow to 126 million tonnes by 2020 if nothing is done (EU, 2014). Though households account for the largest relative portion of food wastage, producers, wholesalers and supermarkets account for the majority in kilograms (Østfoldforskning, 2010). In Norway alone, more than 377,000 tonnes of edible food is wasted every year (ForMat, 2014). Overall wastage of grocery stores sits roughly at 3.5% of total revenue from sales (Østfoldforskning, 2010), or 128,000 tonnes (ForMat, 2014). Apart from the obvious economic aspects of wastage there is also ethical considerations that should be addressed. Food production is a large source of carbon dioxide emissions and pollution with 17% of total emission in Europe (European Commission, 2011), and considering 1/3 of the food that is produced ends up in the bin there is a great potential for reductions in this area. Concurrently, we have an ethical obligation to reduce food waste as there are still some

805 million people that does not have enough food to live a healthy life (WFP.org, 2014). Though, this feasibility study regarding the financial viability of food wastage minimisation does not directly address food scarcity in developing countries, but rather improving utilisation of foodstuffs in Norway, the hope and mission of the Food Crew is to create awareness around the topic and to motivate and inspire other social entrepreneurs to create similar initiatives. We need to stop throwing away perfectly edible food just because it is not as aesthetically pleasing, or because a loaf of bread was not sold the same day it was baked and is not “oven fresh”. As the world population is increasing and expected to reach 9 billion by 2060 (Rosling, 2010) this will result in a 70% increase in food production (FAO.org, 2009) making optimisation of food utilisation paramount to ensure enough food for everyone. Considering that many people are not food secure today, this sure will become an ever-increasing issue as the populace grows. Additionally, most of the ingredients used in manufacturing fertilisers are for the most part non-renewable (Hood & Kidder, 1992), meaning that the production of foodstuffs will decrease in efficiency giving us no choice but to increase efficiency in utilisation.

In addition to the obvious environmental and ethical matters, there are groups in society with low income that would benefit from this business. Even though Norway is one of the richest countries in the world with a very high standard of living, and boasts an unprecedented social structure, diet related illnesses are not uncommon and pose a substantial challenge in public health (NIPH, 2013). And though the standard of living is high, there are groups that fall outside. Students are one of these groups. The goal for this project is to provide wholesome, nutritious and fresh food at a bargain price, initially, but not exclusively aimed at students.

One of the reasons for the food waste problem is the labelling of food, and dating practices put in place to safeguard producer’s own interest. Gjermund Stormoen, manager at Matsentralen, an initiative distributing unwanted food to societies less fortunate accurately stated:

“The “best before” labelling is not an expiration date, but the producers guarantee. To throw away food because the guarantee has expired is just as foolish as discarding your car when the warrantee runs out” (Stormoen, 2013).

The companies are of course concerned with protecting their brand, and this interest conflict seems to result in date labelling practices with a high margin for error.

The purpose of the proposed business is to explore the potential for:

1. Reducing wastage from retailers and producers.
2. Reducing wastage with consumers through increased awareness.
3. Improving the diets of students.
4. Creating a sustainable business.

Scope

Though this business project in theory could be implemented almost anywhere in the world, this report will focus solely on the Norwegian market and more specifically on the capitol, Oslo. The reason for this is the author's familiarity with the grocery chains, trends and habits of the Norwegian people. Also, it is a well-known fact that the students in Norway have a comparably low disposable income to the rest of the population usually resulting in poor food choices due to high price sensitivity.

Solution

The product

Description

Offer healthy meals to students and other groups with a low disposable income. The idea is to utilise cosmetically challenged fruit and vegetables as well as fresh bread products that have not been sold and would otherwise be thrown out. Also, the FC will use food products that are nearing or have passed their best before date. The main items for sale will be lunch style servings such as burgers, sandwiches, smoothies and salads.

The food will not be sold in a traditional store but rather distributed by selling from trucks and stalls. This is an attempt to keep overhead to a minimum, but also to increase the convenience aspect for the customers. By having a physical storefront, the reach of the Food Crew would be very limited.

Distribution

The food will be available for purchase through an outlet on wheels. There will be a food truck where most of the food will be prepared, and this truck will be driving around to various campus locations throughout the day to sell and distribute the prepared food. There will also

be opportunities for pickups at the central kitchen location for larger customers. Additionally, the soups, sauces and stocks that are not meant for immediate consumption will be sold through the partner grocers stores. These will be frozen products to ensure that there is no need for additives that unnaturally prolong the life of the products.

All the involved parties (grocery stores, restaurants, wholesalers) will be equipped with basket/crates from the Food Crew. Instead of throwing food in the trash at the end of the day or during the day, the suppliers will simply store the food in these crates and put them in walk in fridge overnight. An employee will provide the Food Crew with the details of what food is available for pick up in order for the Food Crew to plan the menu for the next day. In the morning, representatives from the Food Crew will pick up deliveries at the various locations and bring them back to the kitchen (or possibly just make food in the truck) for preparation before driving out to a university campus.

Suppliers

The most important partner in this operation is undoubtedly the grocery chain company. They will supply all the necessary food produce for production and preparation. The food will be collected from different grocery stores around Oslo, Norway. Additionally, the Food Crew would consider collecting from restaurants as well, however based on empirical observations they are much more concerned with utilising food and not wasting, hence there will most likely be little food left over diminishing the economical gains that can be made.

The partner supplier stores will be equipped with a program to easily and efficiently report on the available food in the store. The stores that are not directly linked to the program but still in near proximity will only be required to take a photo of the groceries and upload this to the FC supplier page. This is due to the obvious variation in stock availability. The FC will operate by a very flexible menu to limit the need for long transportation routes, however some basic ingredients are paramount for the successful and consistent operation and service.

Processes

This initiative requires little external personnel initially. The operation of the Food Crew will be Monday through Saturday, but the kitchen will be operating on Sundays as well due to the current nature of Norwegian grocery store opening hour laws requiring stores over a certain size to remain closed on Saturdays. This means that the largest deliveries of soon-to-expire produce will be available Saturday night.

Complementary products

The main business of the Food Crew is to provide students with affordable and healthy meals. However, some food is not salvageable as smoothies, sandwiches etc. In these cases, the Food Crew will cook up stocks, which in turn can be used for soups and sauces. These products will be sold through the partner grocery stores.

Product packaging

It is crucial that the packaging is in line with the branding of the company. As the product that is being sold carries with it a burden of social stigma, there is a pressing need to market and brand the products to appeal to consumers. A critical aspect is to convince customers that the food is not prepared from waste, rather that all grocers are willingly wasting food that is not spoiled due to labelling laws and dating practices that are put in place to safe guard the food producers.

Target market

Details

Many students leave the comfort of home to study abroad or in a different city. There are many advantages of living alone such as privacy, however an area where many students fail miserably is nutrition. As mom's cooking is no longer available, and many young do not know how to prepare food or even what food is nutritionally advantageous, their dieting is nothing less than appalling. Most students in my experience rely on pasta or other cheap, processed foods as their staple diet. Obviously, this is not optimal for someone whose mental focus and capacity is vital for acquiring knowledge and realizing their full potential. Additionally, at least in the case of Norwegian students, they are living on a shoestring budget and most people need to work fulltime in order to make ends meet. Not unexpectedly, food preparation and purchasing takes a lower priority. The FC wants to offer this group healthy and affordable meals, targeting specifically lunch hour.

Size

Ultimately, every person walking on the street is a potential customer. However this feasibility study will focus on students. The rationale behind this is to influence the younger generation to make better and more sustainable food choices, and to educate them further on what should be consider a healthy choice, and what is not. In a report by Østfold Forskning

for the ForMat project it was found that younger people tend to rely more on product dating than actual smell and taste compared to the older participants (Hanssen & Shakenda, 2010).

There were roughly 270,000 students in Norway in 2013, and approximately 70,000 of these studied and lived in Oslo (SSB, 2014).

Reputation

Students are on average a young group and therefore the expectation is that they are prone to try new things, adopt new technology and jump on new trends. The belief is that getting this group to embrace the idea that food past its expiry date and with blemishes is not necessarily bad, unhealthy or nasty could influence other groups in society. In a report on food waste in Norway from 2013 (Østfoldforskning, 2010) the results showed that the elder generation was less prone to throw away food due to expiration date, and younger people were most likely to throw this food away. Hence making it important to change the perception of labelling and food quality of this group.

Area of operation

As mentioned in the introductory part, the initial area of operation for the FC will be Oslo. More specifically, the FC truck will target universities, colleges and student areas including Blindern, Oslo University, Campus Christiania, Westerdahls and HIOA. Pick ups of food for preparation will also be limited to the central area of Oslo to limit travel distance and time, however this is not an exclusive clause as food availability will be very varying thus requiring agility and flexibility from the FC.

Target customer

The customer will be male or female, between 19 and 26 and living and studying in Oslo. He or she will be conscious of the need and benefits of eating healthier without being a health fanatic. Looking forward, the business will accommodate for all social layers, but the focus will be to create and deliver great value to those in society with lower income. As population density is crucial to reach enough customers to be able to operate, the business will focus on larger cities initially Oslo, but then Drammen, Stavanger, Bergen, Trondheim and Bergen, all situated in the southern part of Norway and with a substantial student population.

Why students?

The student group has been chosen due to an expectation that this group will be more likely to adopt the concept quicker than the rest of the public. This expectation is based on the

assumption of younger people's tendency to try new things and innovate, and also as a result of a need for cheaper meal options. Furthermore, the hope is to be able to influence this group to make healthier food choices and acquire knowledge regarding nutrition and food preparation. This will be achieved through cooking classes funded with the profit from the business.

In addition to these reasons, the belief is that by getting the approval from students, which generally do not belong to a certain "social group", it would be acceptable to address and sell to lower income groups that would perhaps without student approval not accept the service. This theory is based on the critiques of Doug Rauch's Daily Table where he has been accused of "selling rich people's garbage to the poor" (Segran, 2014).

Based on the survey results, 74% of the surveyed named friends as most likely source of positive influence in accepting and using this service.

Why food truck?

There are several reasons a food truck is the obvious choice for this venture. Confirmed in an article by Fuhrmann (2012), food trucks are increasingly popular, and new trucks are popping up in major cities around the world. A triggering factor for the recent trend in the food industry has been acclaimed the financial crisis of 2008-09. Customers became more price sensitive, however their palate did not change concurrently and so the opportunity of selling "gourmet" food from a mobile platform grew (IBISWorld, 2014). In addition to the increasing popularity the mobility is a great selling point giving access to a larger customer base from a single retail point meaning lower costs. A third reason is the functionality. Several companies customise and deliver food trucks with a complete, fully operational industrial grade kitchen specific to the customers' needs.

IBISWorld, a leading publisher of business intelligence, assessed in 2009 the yearly income from food trucks somewhere in the area of US \$1.2 billion. Additionally they estimated the annual growth rates from 2007-2012 near 8.4% (Fuhrmann, 2012), and growth rates from 2009-2014 were calculated at 12.4% (IBISWorld, 2014).

Food trucks can range from anywhere between US 50,000 to 200,000 depending on equipment and the truck itself. In the United states a reasonable price according to Fuhrmann (2012) is in USD 70,000-80,000-price range. This results in low capital investments and opens for a lean start of the venture, as overhead costs are virtually non-existing.

In this report, a truck to the value of USD 80,000 has been chosen for the purpose of financial estimates².

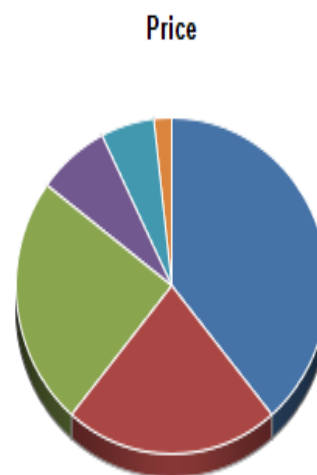
B2B or B2C

The business will mainly focus on the B2C section, however some products could be offered for sale back to the partner organisation or alternatively other retailers. These products include stocks, smoothie-mixes and soups that can be frozen to avoid the use of additives to prolong shelf life. This is an effort to further reduce waste, as cut offs and vegetables not fit for a salad makes an excellent base for a stock.

On what factors are buying decisions made

When asked about

the most important factors when shopping for food, the group between 20 and 26 years old answered that price was the most important factor with a mean of 2.24 out of a score from



1 to 6 where 1

represented most

important. The second most important decision factor was nutritional value and health. When all age groups are incorporated in the results, quality and nutritional value was the two most important factors. The results is coherent with the hypothesis that students are price sensitive and that buying decisions when it comes to grocery and food shopping unfortunately are made primarily on the basis of price. Further, when asked about whom influences their buying decisions, 84% of the 20 to 26 year olds reported that friends were the most likely influencers (81% for all age groups). This indicates that marketing through word of mouth should be strong and that the conversion rate and acceptance from customers will be efficient even

² Details about the truck can be found in appendices Table 3

without heavy marketing efforts. The credibility of having friends selling each other on the food gives very strong credibility and likelihood of acceptance.

Unique selling point

Apart from being able to sell at very low prices, the meals from the food truck should appeal to the conscientious people among us. Eating nutritionally sound food that is safe and tasty and at the same time helps reduce waste and reduce footprint is the unique selling point of this business.

Benefits and costs to potential adopter/partner

Improved public image

NorgesGruppen (a retail chain) is concerned and committed to CSR, and CEO Tommy Korneliussen voiced in the Annual Review 2013-2014 that he believes CSR plays a decisive role in peoples' choice of products, stores and workplace, and that this tendency will continue to grow (NorgesGruppen, 2014). The food truck should contribute to improving the public image of NorgesGruppen or any of the two other retail chains, by reducing food waste and serving the needs of lower income groups.

Increased revenue

NorgesGruppen is the largest grocery trading enterprise in Norway with a market share of 39.3%. In 2013 they had a turnover of NOK 67,4bn. Of that, 39.8bn was from retail and 25.1bn was from wholesale (NorgesGruppen, 2014). Using numbers from the ForMat report, waste is estimated at 1.75% for retail and 0.5% for wholesale. This result in a potential saving/opportunity loss of NOK 822m (696.5m retail, NOK 125.5m wholesale), a substantial figure.

Sales forecast

The sales forecast is developed using figures from the survey. The NPS has been used as a basis for calculating growth of sales, and the starting sales of NOK 30,000 is estimated based on daily sales of around 42 meals. The average price of a dish is NOK 30, and this is also based on survey result and is an average of the average price of the various dishes. The estimate is also based to a degree on other food trucks' revenue. The sales have been capped at NOK 200,000 per month due to anticipated restraints in operating time. This is equal to 6,667 meals per month, or 222 per day. The assumption for the forecasted cash flow is quite optimistic, and assumes that the results from the survey are true for the general public. In

comparison to other successful food truck businesses, the revenue stream is lower, however this is based on the fact that this business will be more niche focused than a typical four-wheeled restaurant business.

In addition to sales from the food truck, there are sales of sauce and stock in stores. These sales have also been capped for similar reasons.

On average, the respondents purchased a premade meal from similar kind of venues 3.1 times a week, and lunch was the most likely meal to be bought with a mean score of 1.92 (1 is most likely). The average price that the respondents found reasonable were:

- Sandwich NOK 30
- Smoothie NOK 23
- Soup NOK 26
- Warm dish NOK 44

Costs

Amounts in this section in USD have been converted using an unfavourable conversion rate of USD 1 to NOK 7. The average for the last year (2013) was NOK 6.2 (DNB, 2014).

Depreciation is calculated with an estimated life of the truck of 10 years. Depreciation per month is NOK 6,466. Other costs have been included in the cash flow estimations found in the appendices.

Estimated investment and staffing costs	
Price imported to Norway (Customs Norway, 2014)	746,073
Annual motor vehicle tax (Customs Norway, 2014)	3,490
Shipping cost	26,316.5
<i>Total capital expense:</i>	<i>775,879.5</i>
Average salary chef/cook (SSB, 2014)	330,000
Pension and payroll tax: 14.1% (Norwegian Tax Authority, 2014)	46,530
Labour cost per person	376,530
<i>Total labour cost (2 people per year)</i>	<i>753,060</i>

TABLE 2 - COSTS

Alternative solutions

In case the hybrid business model structure proves unsuccessful, there are a couple of options to change the operation or exit the project.

- Charity: one very viable option is to operate as a pure non-profit and donate the food to shelters, food distribution programmes and other social initiatives and operate similar to OzHarvest and CityHarvest. There are of course many organisations salvaging and delivering food to the poor, however perishable goods are not usually prioritised thus is still being wasted. Though the operation itself is not bringing in monetary value, one can still anticipate benefits from increased good will and favourable marketing in addition to possible grants and subsidies from the government. This report will not investigate this further.
- Sell the truck and cut the losses.

Survey results

As a part of research for this report, a survey was made and distributed electronically. Among the 143 people who started the survey, 91 completed. The aim of the survey was to gauge the interest and buying intention of “pre-cycled” food. The main focus of the report has been students, but since the distribution relies on a food truck, everyone in near vicinity is a potential customer, hence all respondents will be considered regardless of age group. The full report from the survey can be found in the appendices. 68% of the respondents were women and 60% were between 20 and 26 years old, the category most likely to be students. The study has been distributed exclusively to Norwegians to assess the country specific conditions and opinions.

The respondents were asked to comment on their opinion of the suggested project. Following are some of the commentaries made.

“I like the concept and find it sad that so much food is being wasted unnecessary. Still, I am personally concerned with date labelling so it would take a lot of convincing to convert me.”

“Not sure. It is a good effort, and something has to be done with labelling. It is complete nonsense, but I still get anxiety when I see food past its preservation date.”

“The food industry should have done this a long, long time ago! Cannot fathom it hasn’t been done already.”

“Awesome!”

“Amazing initiative.”

“Positive with better utilisation considering the world’s food shortage.”

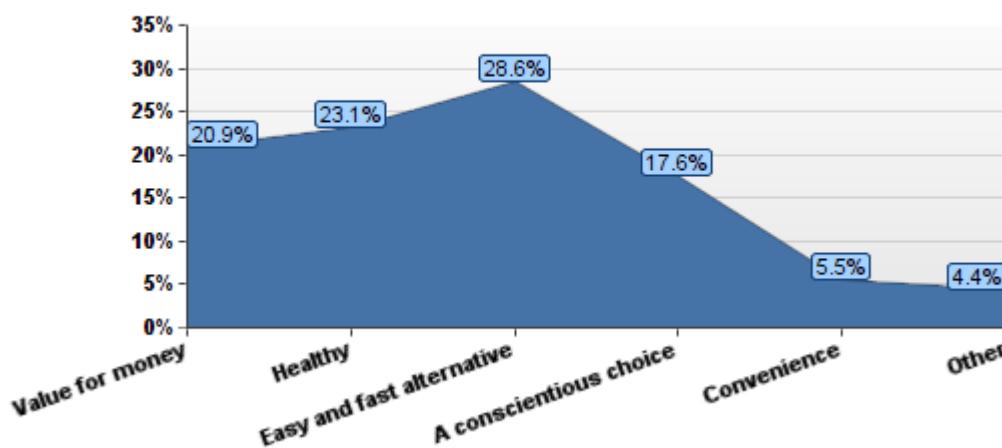
“An amazingly great concept, and an issue that should have been addressed earlier. To throw away food when so many people are food insecure is not right.”

Great thought. I have worked in grocery stores myself and I know how much food is wasted for no apparent reason.”

“Good idea but sounds difficult to organise.”

Another reason for the potential success of this project is the type of food that will be served. Instead of traditional fast food items such as burgers, french fries, hot dogs and kebabs loaded with greasy dressing, the aim is to base the meals on vegetables, fruits, eggs, some meat and wholemeal bread. The response from the survey was that nearly 50% asserted that “a healthy alternative to fast food” was very important in influencing their buying decision.

Convenience was also important for the surveyed with nearly 29% listing it as the single most



important factor when buying from the food truck, just ahead of health and value. Positively surprising, almost 18% reported that the conscientious aspect of purchasing and eating

GRAPH 3 - INFLUENCERS OF BUYING DECISION

recycled food was the most important factor, giving rise to the belief that people are concerned with food waste, and that this concern hopefully will become even more prevalent as we move forward.

In order to assess people’s propensity to positively influence friends and family, and to measure customer loyalty, the net promoter score (NPS) was used. Those surveyed were asked to rank their intention to tell others about the service/product on a scale from 0 to 10. The NPS is a loyalty metric developed by Fred Reichheld, and the metric tracks how customers represent a company to friends, colleagues, associates et cetera. It is calculated by subtracting the detractors from the promoters (Qualtrics, 2014). The focal group aged 20-26 had a NPS of 12, and for the total survey population the score was 11. The percentage of promoters however was 2% higher for the overall population than the focal group. Though a little above the average, these are not great scores, and could perhaps be a result of the lack of knowledge, acceptance and controversy concerning the proposed business model. Another possible solution will be suggested in another section of the report. On the bright side, however, when asked about the probability of using the service if it became available, more than 1 out of 4 answered that is was “very likely” or “guaranteed” that they would use the service if it became available. In the focal group (20-26) the percentage was as high as 29%, almost one third.

Answer	Response	%
0	0	0.0%
1	0	0.0%
2	2	2.2%
3	5	5.5%
4	2	2.2%
5	8	8.8%
6	10	11.0%
7	21	23.1%
8	9	9.9%
9	7	7.7%
10	27	29.7%
Total	91	100.0%

TABLE 3 - NET PROMOTER SCORE

Limitations

There are clear limitations to this report, and if a similar project is to be undertaken by any of the retailers, a new market research study should be undertaken and distributed to a broader audience. By addressing a larger population, the analysis will be more accurate when comparing the inclination of different age groups against each other.

The current survey is not without bias, and should only be considered as a pilot study. As the distribution of the survey has been done through the author's social media channels it is not unreasonable to expect participants to be more positive to the project than the general public.

Due to time and economic constraints, a study of food waste from retailers in the prospective geographic region has not been undertaken, but this would be necessary in order to more accurately forecast a potential menu and the related sales. Though hard data has been used, the current sales forecast is constructed on assumptions and estimates and should not be taken as fact. On the other hand, it paints a picture of a possible scenario, and could be valuable in assisting decision-making.

Another factor is the infancy of this kind of venture. The only known comparable initiative is the Daily Table by Doug Rouch, however there is near non-existing information on the operation and success of this venture, making this report evidently exploratory in its nature. This results in estimations and hypothesising being a natural and accepted portion of the feasibility study.

Conclusion

The aim of this study has been to assess the feasibility of generating income by selling food destined for the bin. Its other purpose is to stimulate and motivate for innovative thinking regarding social and environmental issues. Solving current environmental issues facing us today is paramount, but despite the attention, little is actually being done. This is where social innovations and social entrepreneurship can shine. The triple bottom line needs to be the standard for businesses and businesses is the only real player that can change the game and the course we are currently on. Magic happens when profit is generated, and this magic can change the world.

Keeping in mind the simplicity of this report, an initiative like the Food Crew seems possible. The attitudes of those surveyed paints a positive picture and gives reason to believe that the public does not really feel that this kind of food is tainted, and is suitable to buy and eat. By implementing this project the retailers can make a real impact on the current food waste problem and simultaneously generate a profit. The trend in Europe and budding change in legislation regarding food seems to create an ideal backdrop for projects of this nature, and the timing appears to be good. Keeping in mind fact that date labels are mostly aimed at protecting the brand of the producers, and not protecting customers from bad food is yet

another argument for the potential of selling expired and damaged food. As mentioned in the report, food currently wasted by retailers in Norway alone accounts for 127,000 tonnes of food, representing a huge loss of energy. On the positive side, the European Union have set a goal of reducing food waste with 50% by 2020, creating an increase in awareness around the topic. This gives reason to expect an increase in awareness and importance of such projects as proposed in this paper.

Though not being elaborated upon in this paper, hidden benefits in good will and public relations should be a good motivator for any of the three food retail chains to adopt similar projects, and the self-sustainability of the side business should increase the attractiveness and decrease the barrier to invest. In conclusion, a project of this nature looks doable and profitable.

Future research

The sheer amount of food that is thrown away globally is unfathomable. Combined with a growing income gap and mounting environmental concerns, similar initiatives should be considered globally. Reducing food waste is a huge task, but it is the opinion of the author that it is imperative that the matter is addressed and dealt with. To more convincingly sell the project to potential adopters, an in depth market analysis should be undertaken to more accurately forecast sales and adoption rates, and also to find out precisely what potential customers are looking for, where the food truck should be located geographically to maximise sales, and what stores produce the most waste and the variation in waste from weekdays to weekends. The costs also need to be investigated further. A pilot project selling precycled dishes at farmers markets or other similar venues could highlight and uncover costs not realised by simply theoretical research, and it would also give a clear indication on the actual mind-set of the customers.

Bibliography

- Alter, K. (2007). *Social Enterprise Typology*. 121: Virtue Ventures LLC.
- Bloom, J. (2014, June 2). *Food waste*. Retrieved November 25, 2014 from Civil eats: <http://civileats.com/2014/06/02/eu-moves-away-from-best-by-labels-will-the-us-follow/>
- Blowfield, M. (2005). Corporate Social Responsibility: reinventing the meaning of development? *International Affairs* 81 , 515-524.
- Blowfield, M., & Frynas, J. G. (2005). Setting new agendas: Critical perspectives on Corporate Social Responsibility in the developing world. *International affairs* , 499-513.
- Brabeck-Letmathe, P. (2013, June 19). FSG Impact - Executive Leadership's Pivotal Role in Shared Value. (M. Porter, Interviewer)
- Brekke, L. P. (2008). *Environmental Strategy 2008-2015*. Oslo: Ministry of Agriculture and Food.
- Brown, T., & Dacin, P. (1997). The company and the product: Corporate associations and consumer product responses. *Journal of Marketing* 61 , 68– 84.
- Carroll, A. B. (1999). Corporate social responsibility. Evolution of a definitional construct. *Business and Society* , 268—295.
- Crane, A., Palazzo, G., Spence, L. J., & Matten, D. (2014). Contesting the Value of "Creating Shared Value". *California Management Review* , 130-153.
- Cretu, A. E., & Brodie, R. J. (2005). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management* 36 , 230-240.
- Customs Norway. (2014, January 1). *Annual motor vehicle tax for 2014*. From Customs: <http://www.toll.no/en/international/english/motor-vehicles/annual-motor-vehicle-tax/annual-motor-vehicle-tax-for-2014/>
- Customs Norway. (2014, January 1). *Importation of motor vehicles*. From Customs: <http://www.toll.no/en/international/english/motor-vehicles/import-a-car-motorcycle-or-other-vehicle/importation/importation-of-motor-vehicles/?step=3>
- Dees, G. J., Emerson, J., & Economy, P. (2002). *Enterprising nonprofits: A toolkit for social entrepreneurs*. New York: John Wiley & Sons.
- Department of Food and Agriculture. (2009). *Klimautfordringene – landbruket en del av løsningen*. Oslo: Departementenes Servicesenter.
- DNB. (2014, December 14). *Bedrift: Markets - Gjennomsnittskurser 2014*. Retrieved December 14, 2014 from Den Norske Bank: <https://www.dnb.no/bedrift/markets/valuta-renter/valutakurser-og-renter/historiske/hovedvalutaer/2014.html>

- Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *Academy of Management Review* , 65-91.
- Elkington, J., & Hartigan, P. (2008). Creating Successful Business Models Lessons from Social Entrepreneurship. *Harvard Business Review* , 1-30.
- EU. (2014, November 28). *Food Waste*. Retrieved November 28, 2014 from European Commission: http://ec.europa.eu/food/safety/food_waste/index_en.htm
- European Commission. (2014, November 4). *Health and Consumers: Food*. Retrieved November 4, 2014 from European Union: http://ec.europa.eu/food/food/sustainability/index_en.htm
- European Commission. (2011). *Roadmap to a Resource Efficient Europe* . European Commission . Brussels: European Commission.
- FAO.org. (2009). *Global agriculture towards 2050*. Office of the Director, Agricultural Development Economics Division Economic and Social Development Department. Rome: High Level Expert Forum.
- Foodnavigator.com. (2013 йил 12-November). *Innova predicts top five food industry trend 2014*. Retrieved 2014 йил 7-November from Foodnavigator.com: <http://www.foodnavigator.com/Market-Trends/Innova-predicts-top-five-food-industry-trends-for-2014>
- Forbes. (2013, October 29). *The World's Happiest (And Saddest) Countries, 2013*. From Forbes: <http://www.forbes.com/sites/christopherhelman/2013/10/29/the-worlds-happiest-and-saddest-countries-2013/>
- ForMat. (2014, March 25). Matvett for næringslivet. *ForMat - Forebygging av matsvinn* . Oslo, East, Norway: ForMat.
- Fuhrmann, R. C. (2012, August 26). *Personal Finance: The Cost Of Starting A Food Truck*. From Investopedia: <http://www.investopedia.com/financial-edge/0912/the-cost-of-starting-a-food-truck.aspx>
- Gjølberg, M. (2009). Measuring the immeasurable? Constructing an index of CSR practices and CSR performance in 20 countries. *Scandinavian Journal of Management* , 10-22.
- Haberberg, A., & Rieple, A. (2007). *Strategic Management*. Oxford: Oxford University Press.
- Hanssen, O. J., & Shakenda, V. (2010). *Nyttbart matavfall i Norge – status og utviklingstrekk 2010* . Østfoldforskning . Oslo: NHO Mat og Drikke.
- Henry, A. (2008). *Understanding Strategic Management*. New York: Oxford University Press.
- Hertzberg, F. (2003). One more time: How do you motivate people? *Motivating People* , 87-96.
- Hood, C. F., & Kidder, G. (1992). *Fertilizers and energy*. Miami: Univeristy of Florida.
- IBISWorld. (2014, February 1). *Industry: Food Trucks*. Retrieved December 6, 2014 from Ibis World: <http://www.ibisworld.com/industry/food-trucks.html>
- ICAI. (2013). *BUSINESS STRATEGY & STRATEGIC COST MANAGEMENT*. Kolkata: Directorate of Studies The Institute of Cost Accountants of India .
- Jansson, K. (2014, May 19). *Livsstil*. Retrieved Novemeber 15, 2014 from NRK: <http://www.nrk.no/livsstil/datomerkingen-kan-bli-endret-1.11726749>

- Johnson, G., Scholes, K., & Whittington, R. (2008). *Exploring Corporate Strategy*. Essex: Pearson.
- Kindinger, J. P., & Darby, J. L. (2000). Risk Factor Analysis— A New Qualitative Risk Management Tool. *Project Management Institute Annual Seminars & Symposium* . Houston: Los Alamos National Laboratory.
- Kiwi. (2013, December 30). *Se filmen og bli inspirert*. Retrieved November 14, 2014 from Kiwi mini pris: <https://kiwi.no/Fordeler/kastmindre/Se-reklamefilm/>
- Lånekassen. (2014, April 28). *About the Norwegian State Educational Loan Fund*. Retrieved November 15, 2014 from Lånekassen: <http://www.lanekassen.no/nb-NO/Toppmeny/Languages/About-the-Norwegian-State-Educational-Loan-Fund-/>
- Legatum Institute. (2014, November 12). *Legatum Prosperity Index*. Retrieved November 15, 2014 from Legatum Institute: <http://www.prosperity.com/#!/ranking>
- Møvik, E., & Lien, M. (2014, March 17). *En måned med containerkost*. Retrieved November 5, 2014 from Studentradioen i Bergen: <http://srib.no/2014/03/17/en-maned-med-containerkost/>
- Nagler, J. (2007). *The Importance of Social Entrepreneurship for Economic Development Policies*. Univeristy of New South Wales. Sydney: UNSW.
- NIPH. (2013, January 4). *Overweight and obesity*. Retrieved November 25, 2014 from Norwegian Institute of Public Health: <http://www.fhi.no/artikler/?id=88630>
- NorgesGruppen. (2014). *Annual Review 2013-2014*. Oslo: NorgesGruppen.
- Norwegian Food Safety Authority. (2014, May 30). *About us*. Retrieved November 15, 2014 from Mattilsynet: http://www.mattilsynet.no/language/english/about_us/
- Norwegian Food Safety Authority. (2012, November 23). *Holdbarhetsmerking på matvarer*. Retrieved November 15, 2014 from Mattilsynet: http://www.mattilsynet.no/mat_og_vann/merking_av_mat/generelle_krav_til_merking_av_mat/holdbarhetsmerking_paa_matvarer.2711
- Norwegian Tax Authority. (2014, January 1). *Arbeidsgiveravgift*. From Tax Norway: <http://www.skatteetaten.no/no/Tabeller-og-satser/Arbeidsgiveravgift/?ssy=2014>
- OECD. (2014). *OECD Economics Surveys Norway Overview*. Paris: OECD.
- Porter, M. E., & Kramer, M. R. (2011). The Big Idea: Creating Shared Value. *Harvard Business Review* .
- Porter, M. (2012, May 31). Shared Value Leadership Summit. United States of America: FSG Impact.
- Porter, M., Hills, G., Pfitzer, M., Patscheke, S., & Hawkins, E. (2014). *Measuring Shared Value: How to Unlock Value by Linking Social and Business Results*. Cambridge: FSG.
- Prahalad, C. K. (2006). *The Fortune at the Bottom of the Pyramid*. India: Pearson Education.
- Prestige Food Trucks. (2014, January 1). *The Cheese Guy*. From Prestige Food Trucks: <http://prestigefoodtrucks.com/food-truck-builder-manufacturer/the-cheese-guy-78000/> 78k
- Qualtrics. (2014, January 1). *Net Promoter® Score Survey*. Retrieved December 16, 2014 from Qualtrics: <http://www.qualtrics.com/research-suite/survey-types/net-promoter-score/>

- Reardon, S. F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In G. J. Duncan, & R. J. Murnane, *Whither Opportunity?: Rising Inequality, Schools, and Children's Life Chances* (pp. 91-116). New York: Russell Sage Foundation.
- Rosling, H. (2010, June 10). Global population growth, box by box. Cannes, Cannes, France: TED.
- Savitz, A. (2013). *The triple bottom line: how today's best-run companies are achieving economic, social and environmental success-and how you can too*. New York: John Wiley and Sons.
- Schröder, A. M. (2014, Oktober 4). *Vis matvett - ikke kast mat*. Retrieved Oktober 4, 2014 from Matvett.no: <http://matvett.no/vis-matvett-ikke-kast-mat-som-kan-spises/>
- Segran, E. (2014, July 1). *Can America Learn to Love Misshapen Veggies?* Retrieved October 22, 2014 from The Atlantic: <http://www.theatlantic.com/business/archive/2014/07/can-america-learn-to-love-misshapen-veggies/373793/>
- Soderberg, B. (2012, November 23). *Combining social responsibility with profitability*. Retrieved November 16, 2014 from Johnson and Johnson - Corporate Citizenship Trust: <http://jjcct.org/news/social-entrepreneur-bjorn-soderberg/>
- SSB. (2014, January 1). *Statistics: Earnings in hotels and restaurants, 1 October 2013*. From Statistics Norway: <https://www.ssb.no/statistikkbanken/SelectVarVal/saveselections.asp>
- SSB. (2014, August 1). *Statistisk Sentralbyrå*. Retrieved November 15, 2014 from Statistisk Sentralbyrå: <http://www.ssb.no>
- SSB. (2014, May 23). *Utdanning*. Retrieved November 6, 2014 from Statistisk Sentralbyrå: <http://ssb.no/utdanning/statistikker/utuvh/aar>
- Stewart, H. (2003). Authentic not cosmetic: CSR as brand enhancement. *BRAND MANAGEMENT*, 10, 353– 361.
- Stormoen, G. (2013, December 26). *Vi kaster mat og klager på matprisene!* Retrieved November 5, 2014 from Aftenposten: <http://www.aftenposten.no/meninger/debatt/Vi-kaster-mat-og-klager-pa-matprisene-7380200.html>
- Sundberg, J., & Aarø, J. T. (2014, October 6). *Coop sluker Ica i Norge*. Retrieved November 15, 2014 from NA24: <http://e24.no/naeringsliv/coop-sluker-ica-i-norge/23310079>
- The Ministry of Agriculture and Food. (2014 йил 4-September). *The Ministry of Agriculture and Food*. Retrieved 2014 йил 7-November from Governement.no: <http://www.regjeringen.no/en/dep/lmd/whats-new/news/2014/Sept-14/Hele-verdikjeden-i-samarbeid-for-reduksjon-av-matsvinn-.html?id=766791>
- The Norwegian Government. (2003, January 1). *Helse- og Omsorgsdepartementet*. Retrieved November 15, 2014 from Regjeringen: <http://www.regjeringen.no/nb/dep/hod/dok/regpubl/stmeld/20022003/stmeld-nr-16-2002-2003-4/2.html?id=328670>
- UNEP. (2011, January 1). *FOOD WASTE FACTS*. Retrieved November 15, 2014 from United Nations Environment Programme: <http://www.unep.org/wed/2013/quickfacts/>

Vogel, D. J. (2005). Is There a market for virtue? The business case for corporate social responsibility. *California Management Review* , 19-45.

WFP.org. (2014). *Hunger Statistics*. Paris: World Food Programme.

Wig, K. (2013, July 27). *Her er krisegrafen for studenter i 2013*. Retrieved November 6, 2014 from Dine Penger: <http://www.dinepenger.no/bruke/her-er-krisegrafen-for-studenter-i-2013/21106301>

Østfoldforskning. (2010). *Nyttbart matanfall i Norge - Status og utviklingstrekk*. Oslo: ForMat-prosjektet.

Zimmerer, T. W., & Scarborough, N. M. (2005). *Essentials of Entrepreneurship and Small Business Management*. Upper Saddle River, New Jersey, USA: Pearson Education.

Appendices

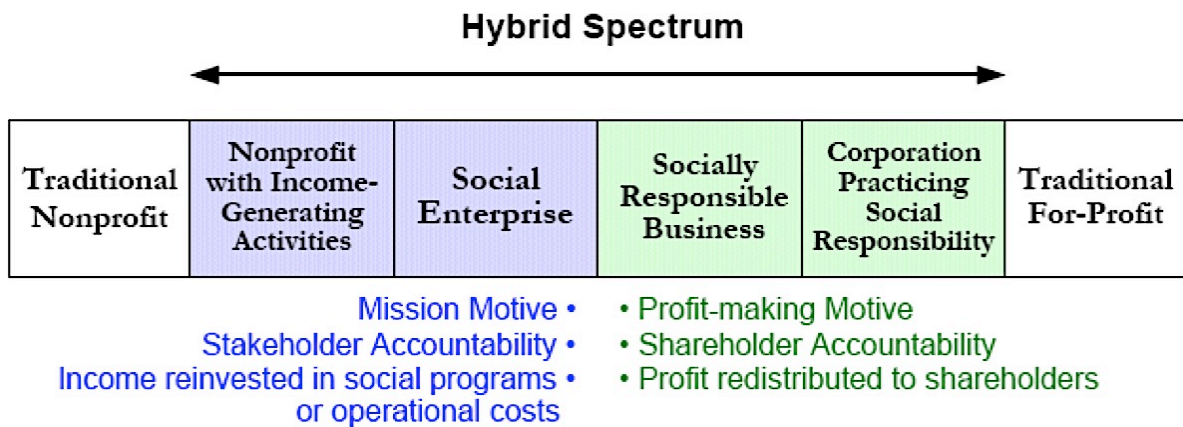


FIGURE 1 - ORGANISATIONAL SPECTRUM

SOURCE: (ALTER, 2007)

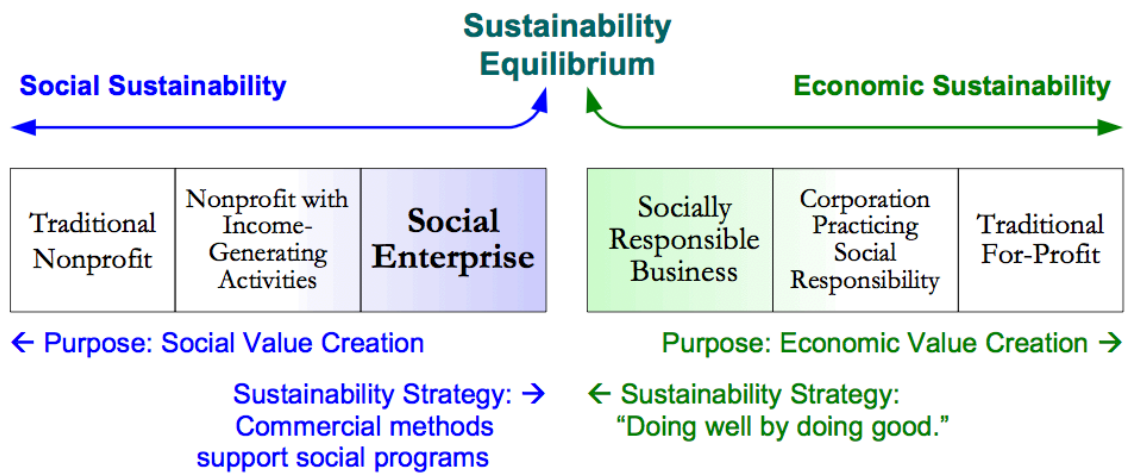


FIGURE 2 - ORGANISATIONAL STRUCTURE

SOURCE: (ALTER, 2007)

The Cheese Guy -\$78,000
18ft Freightliner
True T19 Refrigerator
True T19F Freezer
Blue Air BAPT28 Sandwich Prep Station
2-AF35-50 American Range Fryer
AR-6 American Range 6 Burner W/ Oven
AEMG-36 American Range Flat Top Griddle
AERB12 American Range Radiant Broiler
3 Bay Propane Steam Table
All Stainless Walls, Counter Tops & Equipment Stands
Honda GX630 10KW Generator

TABLE 4 - EXAMPLE FOOD TRUCK

SOURCE: (PRESTIGE FOOD TRUCKS, 2014)



6215 Ferris Square, Suite 150
 San Diego, California 92121
 Phone: (858) 547-0840
 Fax: (858) 202-0102
 www.shipoverseas.com
 Email: sales@shipoverseas.com

To: **Eirik Thorsen**
Orlando FL 32801 United States

Reference# **R1803883**
 Date: **12-10-2014**

Type	Cargo	Details
Others	2004 Freightliner M35 Food Truck	L: 21'11" x H: 8'0" x W: 8'11" V: 1582.0 cu.ft W: 11023.1 lbs

Ship From: **Jacksonville**
 Ship To: **Drammen**

PRICE QUOTE

Item	Description	
Shipping	Method: RoRo	\$ 3,550.00
Trucking	Method:	\$.00
Additional Trucking	Method:	\$.00
Other		\$.00
Other (2)		\$.00
AES		\$ 40.00
Customs	US Customs Clearance	\$.00
DHL/FedEx	For returning Certificate of Title and Bill of Lading documents	\$ 60.00
Insurance	Is provided at an additional charge. Please refer to the ' <u>Notes</u> '* section below for further details	\$.00
	If Payment is by Check or Cash	\$ 3,650.00
	If Payment is by Wire Transfer	\$ 3,685.00
	Any other form of Payment	\$ 3,759.50

TABLE 5 - TRUCK SHIPPING COST

Result (in Norwegian kroner)

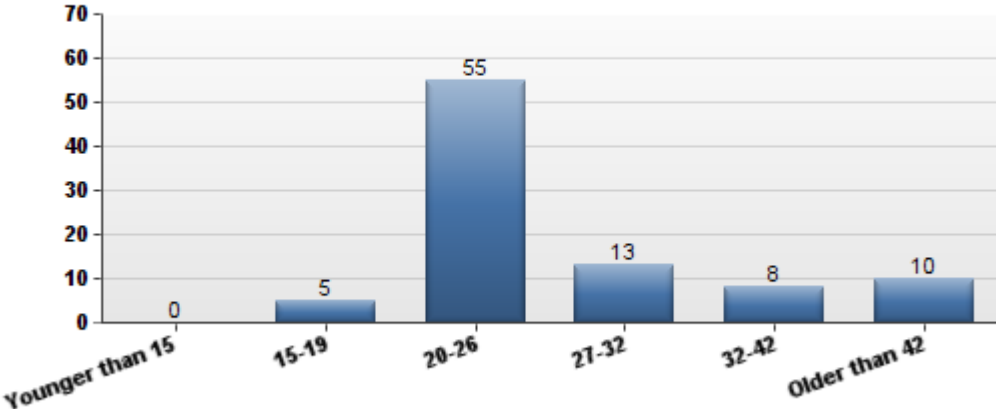
If you choose 1 January as the date of first time registration abroad, the second-hand vehicle deduction is calculated from 1 January the following year.

Vat tax:	136 500.00
One-time fee:	
Weight fee:	167 513.72
Fee for engine effect:	2 501.40
Engine effect fee:	77 952.90
NOx fee:	6 921.00
One-time fee for new vehicle:	254 889.02
Usage reduction (76 %):	- 193 715.66
One-off registration tax due:	61 173.36
Vehicle scrap deposit:	2 400.00
Total taxes:	200 073.36
Total for this vehicle including taxes:	746 073.36

TABLE 6 - COST OF TRUCK

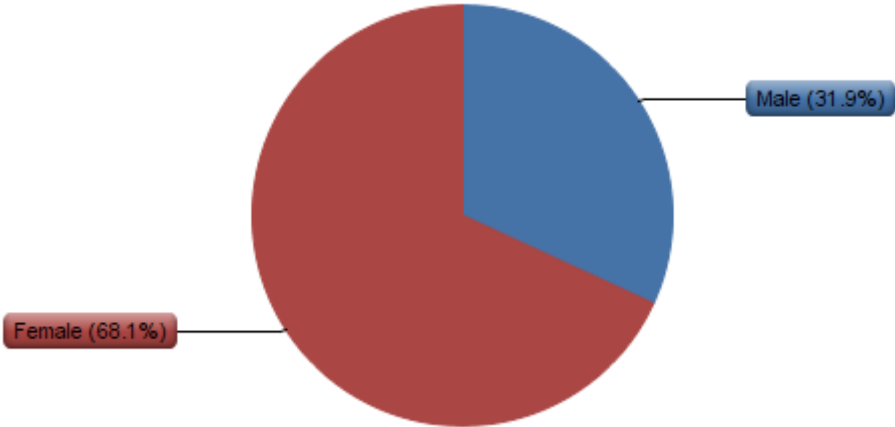
Survey food waste

1. How old are you?



Answer	%
Younger than 15	0.0%
15-19	5.5%
20-26	60.4%
27-32	14.3%
32-42	8.8%
Older than 42	11.0%
Total	100.0%

2. Are you?

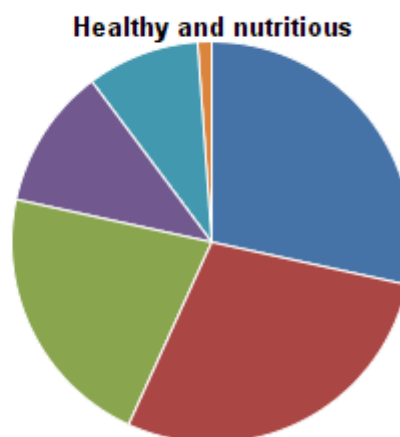
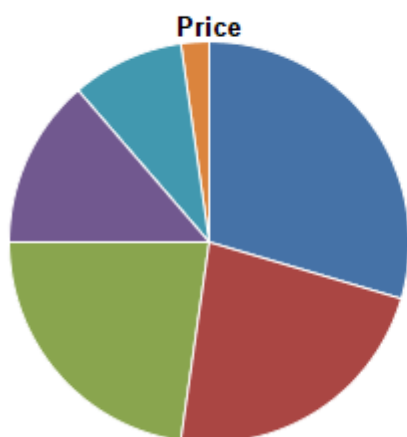


Answer	Response
Male	29
Female	62
Total	91

**3. What is more important to you when you are shopping for food?
Arrange from 1 to 6. 1 is most important, 6 is least important.**

Answer	1	2	3	4	5	6
Quality	24	26	25	8	4	1
Healthy and nutritious	25	25	19	10	8	1
Price	26	20	20	12	8	2
Convenience	9	9	9	23	26	12
Fast and easy to prepare	3	5	12	27	28	13
Produced organically	1	3	3	8	14	59

■ 1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6



Statistic	Price	Quality	Produced organically	Convenience	Fast and easy to prepare	Healthy and nutritious
Mean	2.6	2.4	5.4	4.0	4.3	2.5
Standard Deviation	1.4	1.2	1.1	1.5	1.2	1.3

4. What do you think about the idea of utilising produce that under normal conditions would be trashed?

Text Response

fett

God utnyttelse av rester som ikke trenger å bli kastet. Bra tiltak men vanskelig å få gjennomført?

Jeg liker konseptet og synes det er trist at så mye mat blir kastet unødvendig. Allikevel er jeg personlig veldig opptatt av datostempling, holdbarhet, etc., så det skulle tatt mye for å omvende meg dette.

God idé

Mye mat har kortere holdbarhetsstempling enn den virkelige holdbarheten som gjør at vi kaster mer mat enn nødvendig. Synes det er veldig bra at noen tar fatt i dette og lager alternstiver for mat som blir kastet uten grunn.

Flott konsept! benytter meg gjerne av dette!

Det virker som et interessant konsept. Det er ingen tvil om at mengden svinn av matvarer i dagens samfunn er uforenelig med sultsituasjonen i andre deler av verden, og er derfor moralsk forkastelig.

Jeg synes det er utrolig bra! Altfor mye mat blir kastet i Norge idag. Personlig bruker jeg matvarer etter de har gått ut på dato dersom de lukter/smaker godt!

Flott tiltak

ingen problemer med det.

DET er bra! Får utnyttet alt av det slaktede dyret, går ikke noe til spille.

Veldig bra!

hmm, ingen formening

Bra

Kjempe bra!

Fornuftig tanke, men lite utbredt

Veldig bra!

Jeg synes det er en veldig god ide. Det er trist å tenke på all den maten som blir kastet.

Miljøvennlig og fornuftig

Sure

Supert

Bra

veldig bra!

En umåtelig god ide!

Det burde matvarekjedene begynt med for lenge, lenge siden! Kan ikke fatte at det ikke blir gjort allerede.

Bra

positivt med bedre utnyttelse sett i lys av verdens matmangel.

Fantastisk tiltak.

bra

Er det et retorisk spørsmål? Så klart.

Eg anar ikkje

Fint

Flott

Fantastisk!

Veldig bra! Fremtidsrettet.

Det er bra

Bra

Høres spennende ut! Ville vært et godt konsept.

Jeg er er fult for det konseptet hvis metodene og/eller det er lett tilgjengelig/funksjonelt/ikke tar mye tid det syntes jeg er veldig bra og viktig.

Bra

Veldig positivt innstilt. Noe jeg kunne tenke meg å støtte økonomisk, selv om jeg ikke fikk sjans til å kjøpe selv. Et viktig tiltak, både økonomisk, miljømessig og etisk.

Veldig bra konsept, det kastes for mye mat.

Greit, men ikke viktig for meg

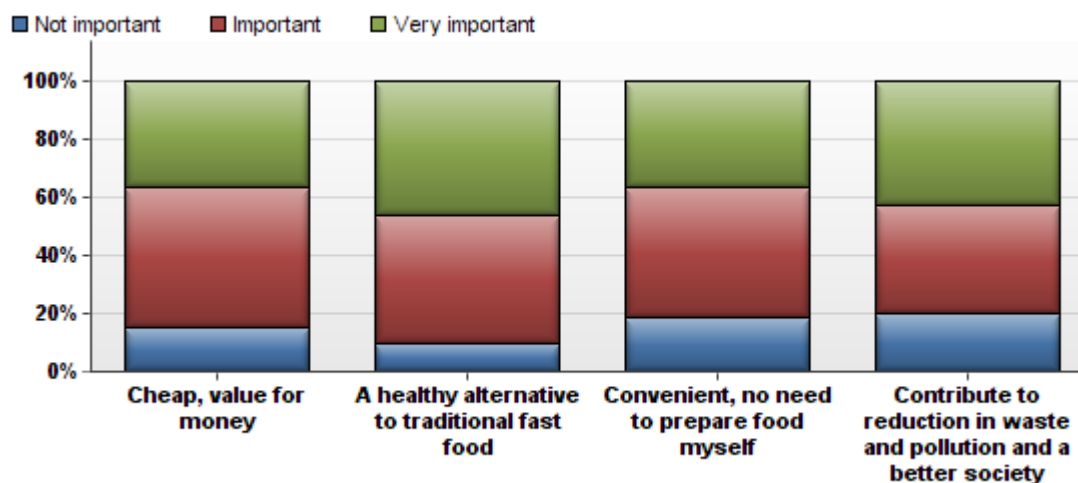
Veldig bra tanke, selv jobbet i butikk og vet hvor mye mat som blir kastet "uten grunn".

Supert

Bra hvis man får det til
Fantastisk
Spenstig!
Helt TOPP!
Supert!
Meget bra, hvis det ikke går utover kvalitet
Bra!
Flott men ville trolig ikke gjort bruk av det om jeg har råd til "normal" mat
Tommel opp
God idé, men høres ut som det er praktisk vanskelig å organisere.
Smart
Konseptet er bra, men det tiltaler meg ikke å kjøpe slik mat
Supert! Og på tide med slike foretak
Det synes jeg er fint.
Det kan være en gode idé så lenge kundene får vite at råvarene er i forsvarlig tilstand og riktig tilbredt.
veldig bra!
Veldig lurt, mye mat er ikke dårlig selvom det har gått ut på dato
Vet ikke helt. Det er jo bra, tror jnoe må gjøres med datostemplingen. Det er helt tullete, men jeg får angst når jeg ser at ting har gått ut på dato.
Liker det!
Vet ikke
Det er et utrolig bra konsept, som burde vært gjort noe med. Å kaste mat når så mange i verden ikke har nok, er ikke riktig.
Bra
Synes det er bra, for alt for mye mat som egentlig er helt ok blir kastet.
JA!! Muy importante
Høres veldig fornuftig og samfunnsmessig økonomisk.
Er helt greit å finne på noe for å redusere mat som blir til søppel!
Helt konge!
Det høres veldig lurt! Iallefall så lenge sikkerhet er i fokus. Det kastet alt for mye mat i Norge.
Veldig god ide!
Fornuftig
OK
Bra!
Bra
Å benytte råvarene - JA absolutt - men skeptisk til salg fra food truck. Da burde det heller blitt brukt på "veldigighet" for de som trenger det.
Bra konsept som bidrar til mindre utslipp osv.
Fantastisk
Veldig bra
Hvis det ikke er gammel eller dårlig mat så er det bra
Synes konseptet er bra
Superb
Veldig positivt!
Smart
Bra!
bra
Kult

5. If you wanted/could buy lunch from a food truck that was prepared using "recycled" food, what would be the reason that you chose this option?

Question	Not important	Important	Very important	Mean
Cheap, value for money	15.4%	48.4%	36.3%	2.2
A healthy alternative to traditional fast food	9.9%	44.0%	46.2%	2.4
Convenient, no need to prepare food myself	18.7%	45.1%	36.3%	2.2
Contribute to reduction in waste and pollution and a better society	19.8%	37.4%	42.9%	2.2

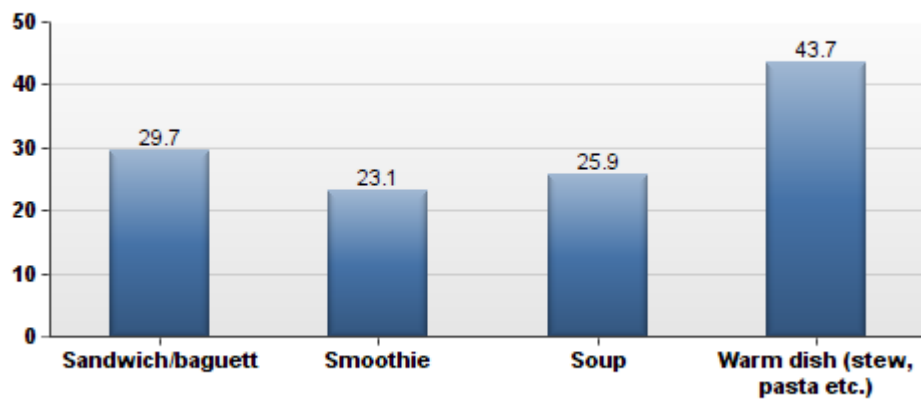


6. At what meal time is it most probable that you would use this deal if it was conveniently located near your university/workplace etc? Arrange scores from 1 to 4 where 1 is the most probable and 4 is the least probable.

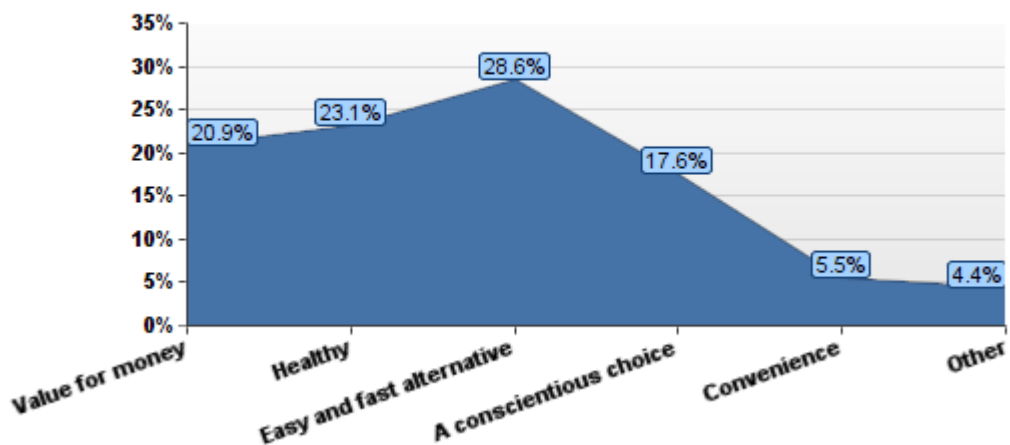
Answer	1	2	3	4
Breakfast	6.6%	9.9%	14.3%	69.2%
Lunch	68.1%	19.8%	6.6%	5.5%
Dinner	15.4%	25.3%	39.6%	19.8%
Snack	12.1%	44.0%	34.1%	9.9%

Statistic	Breakfast	Lunch	Dinner	Snack
Mean	3.5	1.5	2.6	2.4
Standard Deviation	0.9	0.8	1.0	0.8

7. Based on the description of the concept and alternatives that you currently have (grocery stores, cafes etc.), what do you think is a reasonable price for these products in Norwegian kroner? 1 Euro is app. 8 kroner. 1 US dollar is app. 7 kroner.



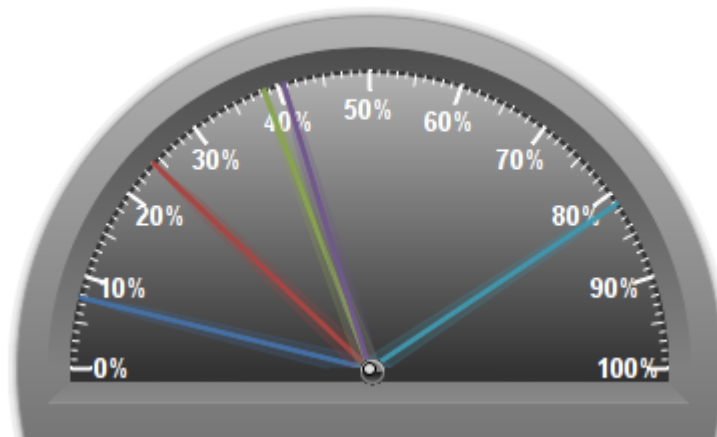
8. What is the most important reason why you would use this service?



Statistic	Value
Min Value	1
Max Value	6
Mean	2.8
Variance	1.8
Standard Deviation	1.4
Total Responses	91

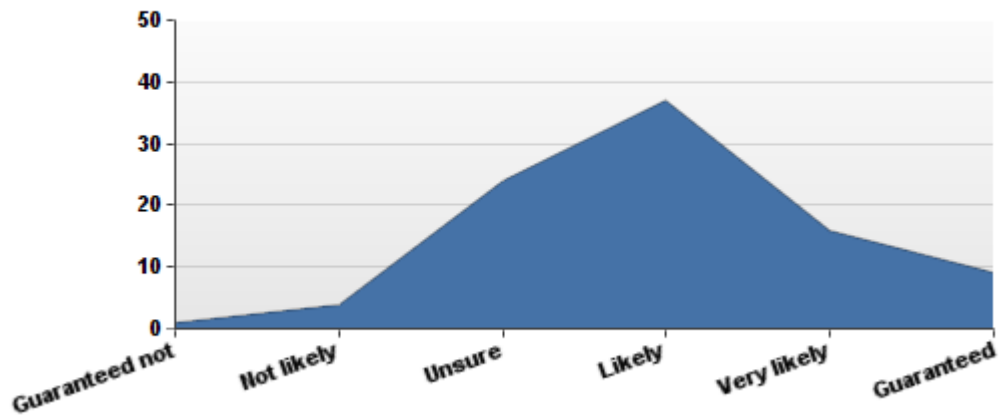
**9. Who is most likely to positively influence you to use this service?
You can choose more than one option.**

- Celebrities
- Nutritionist
- Family
- Chefs
- Friends



Answer	Response	%
Friends	74	81.3%
Family	35	38.5%
Nutritionist	22	24.2%
Teacher/professor	1	1.1%
Chefs	37	40.7%
Celebrities	7	7.7%
Politicians	3	3.3%
Others	5	5.5%

10. If this service would be available where you live/study/work, how likely is it that you would buy your breakfast/lunch/dinner/snack from this food truck?



Answer	%
Guaranteed not	1.1%
Not likely	4.4%
Unsure	26.4%
Likely	40.7%
Very likely	17.6%
Guaranteed	9.9%
Total	100.0%

Statistic	Value
Mean	4.0
Standard Deviation	1.1

11. On a scale from 0-10, how likely is it that you would tell your friends and/or colleagues about this service if it was to be realised?

Answer	Response	%
0	0	0.0%
1	0	0.0%
2	2	2.2%
3	5	5.5%
4	2	2.2%
5	8	8.8%
6	10	11.0%
7	21	23.1%
8	9	9.9%
9	7	7.7%
10	27	29.7%
Total	91	100.0%

Statistic	Value
Min Value	2
Max Value	10
Mean	7.5
Variance	5.0
Standard Deviation	2.2
Total Responses	91

12. Finally, dumpster diving is a phenomenon receiving increased attention recent years. An increasing number of people are "robbing" garbage-containers from grocery stores in search for food. Which of the following statements best describe your relation to dumpster diving?

Answer	Response	%
Never heard of. Don't know anyone who does it (to my knowledge).	13	14.3%
Heard about it, but wouldn't even consider it. Disgusting.	25	27.5%
I know there are people who do it, men I don't think I know anyone. Weird, but I understand it could be tempting if you're a bit of a cheap skate, and it's a shame to throw out edible food.	43	47.3%
Have friends who do it. It's disgraceful to throw away food.	7	7.7%
Have done it/joined friends who do it. Great way to save some money and reduce your footprint.	2	2.2%
I do it regularly/sometimes. Saves me a ton of money!	1	1.1%
Total	91	100.0%

Cash flow forecast

The Food Crew

Cashflow Estimates Year 1

	December Y0	January	February	March	April	May	June	July	August	September	October	November	December
Sales Food Truck	kr -	kr 30 000	kr 33 600	kr 37 632	kr 42 148	kr 47 206	kr 52 870	kr 59 215	kr 66 320	kr 74 279	kr 83 192	kr 93 175	kr 104 356
Sales Retail Stocks and Sauce	kr -	kr 7 000	kr 8 050	kr 9 258	kr 10 646	kr 12 243	kr 14 080	kr 16 191	kr 18 620	kr 21 413	kr 24 625	kr 28 319	kr 32 567
COGS (2.5% prices)	kr -	kr 1 850	kr 2 083	kr 2 344	kr 2 640	kr 2 972	kr 3 347	kr 3 770	kr 4 247	kr 4 785	kr 5 391	kr 6 075	kr 6 846
Fuel cost (avg 50km @ 0.39*13,- pr day)	kr -	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605	kr 7 605
Other operating costs	kr -	kr 3 000	kr 3 060	kr 3 121	kr 3 184	kr 3 247	kr 3 312	kr 3 378	kr 3 446	kr 3 515	kr 3 585	kr 3 657	kr 3 730
Wages	kr -	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00	kr 62 755.00
Advertising	kr -	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000	kr 1 000
EBITDA	kr -	kr 39 210	kr 34 853	kr 29 936	kr 24 389	kr 18 131	kr 11 070	kr 3 703	kr 5 887	kr 16 032	kr 27 481	kr 40 403	kr 54 987
Depreciation	kr -	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466	kr 6 466
EBT	kr -	kr 45 676	kr 41 318	kr 36 402	kr 30 855	kr 24 597	kr 17 536	kr 9 568	kr 578	kr 9 567	kr 21 016	kr 33 937	kr 48 521
Taxes	kr -	kr 13 703	kr 12 395	kr 10 921	kr 9 257	kr 7 379	kr 5 261	kr 2 871	kr 173	kr 2 870	kr 6 305	kr 10 181	kr 14 556
Cash Flow Map													
	0	1	2	3	4	5	6	7	8	9	10	11	12
Equipment	-kr	kr 775 880											
Total investment	-kr	kr 775 880											
Operational Cash Flow	kr -	kr 39 210	kr 34 853	kr 29 936	kr 24 389	kr 18 131	kr 11 070	kr 3 703	kr 5 887	kr 16 032	kr 27 481	kr 40 403	kr 54 987
Taxes	kr -	kr 13 703	kr 12 395	kr 10 921	kr 9 257	kr 7 379	kr 5 261	kr 2 871	kr 173	kr 2 870	kr 6 305	kr 10 181	kr 14 556
Cash Flows	kr -	kr 25 507	kr 22 457	kr 19 016	kr 15 133	kr 10 752	kr 5 809	kr 809	kr 5 714	kr 13 162	kr 21 177	kr 30 222	kr 40 431
Discounted Cash Flows (r = 10%)	kr -	kr 25 296	kr 22 087	kr 18 548	kr 14 639	kr 10 315	kr 5 481	kr 217	kr 5 625	kr 12 114	kr 19 329	kr 27 357	kr 36 296
Payback	-kr	kr 775 880	kr 775 880	kr 775 880	kr 775 880	kr 775 880	kr 775 880	kr 775 880	kr 769 819	kr 756 656	kr 735 479	kr 705 258	kr 664 827

Valuation Criteria

NPV (10%) = kr 2 018 833,86

Payback = 21 months

	0	1	2	3	4	5	6	7	8	9	10	11	12
# of meals sold	0	1000	1120	1254	1405	1574	1762	1974	2211	2476	2773	3106	3479
EBITDA / Sales		-106 %	-84 %	-64 %	-46 %	-30 %	-17 %	-4 %	7 %	17 %	25 %	33 %	40 %
Wages / Sales		-170 %	-151 %	-134 %	-119 %	-106 %	-94 %	-83 %	-74 %	-66 %	-58 %	-52 %	-46 %

The Food Crew

Cashflow Estimates Year 2

	December Y1	January	February	March	April	May	June	July	August	September	October	November	December
Sales Food Truck	kr 104 356	kr 116 879	kr 130 905	kr 146 613	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000
Sales Retail Stocks and Sauce	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567
COGS (2.5% prices)	-kr 6 846	-kr 7 472	-kr 8 174	-kr 8 959	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628
Fuel cost (avg 50km @ 0.39*13,- pr day)	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605
Other operating costs	-kr 3 730	-kr 3 000	-kr 3 060	-kr 3 121	-kr 3 184	-kr 3 247	-kr 3 312	-kr 3 378	-kr 3 446	-kr 3 515	-kr 3 585	-kr 3 657	-kr 3 730
Wages	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755
Advertising	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000
EBITDA	kr 54 987	kr 67 614	kr 80 878	kr 95 740	kr 146 395	kr 146 331	kr 146 266	kr 146 200	kr 146 132	kr 146 063	kr 145 993	kr 145 921	kr 145 848
Depreciation	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466
EBT	kr 48 521	kr 61 148	kr 74 412	kr 89 274	kr 139 929	kr 139 865	kr 139 800	kr 139 734	kr 139 667	kr 139 598	kr 139 527	kr 139 456	kr 139 383
Taxes	-kr 14 556	-kr 18 344	-kr 22 324	-kr 26 782	-kr 41 979	-kr 41 960	-kr 41 940	-kr 41 920	-kr 41 900	-kr 41 879	-kr 41 858	-kr 41 837	-kr 41 815

Cash Flow Map

	13	14	15	16	17	18	19	20	21	22	23	24	25
Operational Cash Flow	kr 54 987	kr 67 614	kr 80 878	kr 95 740	kr 146 395	kr 146 331	kr 146 266	kr 146 200	kr 146 132	kr 146 063	kr 145 993	kr 145 921	kr 145 848
Taxes	-kr 14 556	-kr 18 344	-kr 22 324	-kr 26 782	-kr 41 979	-kr 41 960	-kr 41 940	-kr 41 920	-kr 41 900	-kr 41 879	-kr 41 858	-kr 41 837	-kr 41 815
Cash Flows	kr 40 431	kr 49 269	kr 58 554	kr 68 958	kr 104 416	kr 104 371	kr 104 326	kr 104 280	kr 104 232	kr 104 184	kr 104 135	kr 104 085	kr 104 033
Discounted Cash Flows (r = 10%)	kr 36 296	kr 43 865	kr 51 701	kr 60 383	kr 90 677	kr 89 889	kr 89 107	kr 88 332	kr 87 562	kr 86 798	kr 86 040	kr 85 288	kr 84 542
Payback	-kr 664 827	-kr 624 397	-kr 575 127	-kr 516 573	-kr 447 616	-kr 343 200	-kr 238 828	-kr 134 502	-kr 30 222	kr 74 010	kr 178 194	kr 282 329	kr 386 414

Valuation Criteria

NPV (10%) =	kr 980 480,25
Operational Ratios	
# of meals sold	12 3479
EBITDA / Sales	43 %
Wages / Sales	-46 %
	13 3896
	48 %
	-42 %
	14 4363
	52 %
	-38 %
	15 4887
	56 %
	-35 %
	16 6667
	65 %
	-27 %
	17 6667
	65 %
	-27 %
	18 6667
	65 %
	-27 %
	19 6667
	65 %
	-27 %
	20 6667
	65 %
	-27 %
	21 6667
	65 %
	-27 %
	22 6667
	65 %
	-27 %
	23 6667
	65 %
	-27 %
	24 6667
	65 %
	-27 %

The Food Crew

Cashflow Estimates Year 3

	December Y2	January	February	March	April	May	June	July	August	September	October	November	December
Sales Food Truck	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000	kr 200 000
Sales Retail Stocks and Sauce	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567	kr 32 567
COGS (2.5% prices)	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628	-kr 11 628
Fuel cost (avg 50km @ 0.39*13,- pr day)	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605	-kr 7 605
Other operating costs	-kr 3 730	-kr 3 805	-kr 3 881	-kr 3 958	-kr 4 038	-kr 4 118	-kr 4 201	-kr 4 285	-kr 4 370	-kr 4 458	-kr 4 547	-kr 4 638	-kr 4 731
Wages	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755	-kr 62 755
Advertising	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000	-kr 1 000
EBITDA	kr 145 849	kr 145 774	kr 145 698	kr 145 620	kr 145 541	kr 145 460	kr 145 378	kr 145 294	kr 145 208	kr 145 121	kr 145 032	kr 144 941	kr 144 848
Depreciation	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466	-kr 6 466
EBT	kr 139 383	kr 139 308	kr 139 232	kr 139 155	kr 139 075	kr 138 995	kr 138 912	kr 138 828	kr 138 743	kr 138 655	kr 138 566	kr 138 475	kr 138 382
Taxes	-kr 41 815	-kr 41 792	-kr 41 770	-kr 41 746	-kr 41 723	-kr 41 698	-kr 41 674	-kr 41 648	-kr 41 623	-kr 41 597	-kr 41 570	-kr 41 543	-kr 41 515

Cash Flow Map

	26	27	28	29	30	31	32	33	34	35	36	37	38
Operational Cash Flow	kr 145 849	kr 145 774	kr 145 698	kr 145 620	kr 145 541	kr 145 460	kr 145 378	kr 145 294	kr 145 208	kr 145 121	kr 145 032	kr 144 941	kr 144 848
Taxes	-kr 41 815	-kr 41 792	-kr 41 770	-kr 41 746	-kr 41 723	-kr 41 698	-kr 41 674	-kr 41 648	-kr 41 623	-kr 41 597	-kr 41 570	-kr 41 543	-kr 41 515
Cash Flows	kr 104 034	kr 103 981	kr 103 928	kr 103 874	kr 103 818	kr 103 762	kr 103 704	kr 103 645	kr 103 585	kr 103 524	kr 103 462	kr 103 398	kr 103 333
Discounted Cash Flows (r = 10%)	kr 83 843	kr 83 108	kr 82 379	kr 81 656	kr 80 938	kr 80 225	kr 79 518	kr 78 816	kr 78 119	kr 77 428	kr 76 742	kr 76 061	kr 75 385
Payback	kr 386 414	kr 490 447	kr 594 429	kr 698 357	kr 802 231	kr 906 049	kr 1 009 811	kr 1 113 515	kr 1 217 161	kr 1 320 746	kr 1 424 270	kr 1 527 732	kr 1 631 131

Valuation Criteria

NPV (10%) =	kr 1 034 217,29
-------------	-----------------

Operational Ratios

	12	13	14	15	16	17	18	19	20	21	22	23	24
# of meals sold	6667	6667	6667	6667	6667	6667	6667	6667	6667	6667	6667	6667	6667
EBITDA / Sales	63 %	63 %	63 %	63 %	63 %	63 %	63 %	62 %	62 %	62 %	62 %	62 %	62 %
Wages / Sales	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %	-27 %

