

# Increasing Green Credentials beyond Greenwash

Ethical and Sustainable Standards, Organisations and Certification in the Apparel Industry in the 21st century

> LAHTI UNIVERITY OF APPLIED SCIENCES Faculty of Technology Materials Technology Textile and Clothing Technology Thesis 02/2016 Mila Paula Marianne Mikkonen

Lahden ammattikorkeakoulu Tekstiili- ja vaatetustekniikka

MIKKONEN, MILA: Kartuta viherarvoja ilman viherpesua

Kestävän kehityksen ja eettisten arvojen standardit, organisaatiot ja

sertifikaatit 2000-luvulla

Tekstiili- ja vaatetustekniikan opinnäytetyö, 70 sivua, 15 liitesivua

Kevät 2016

TIIVISTELMÄ

Opinnäytetyö vastaa PK- ja startup-yritysten tarpeeseen saavuttaa validoidut ympäristöarvot ilman, että syntyy vaikutelma viherpesusta. Opinnäytetyö pyrkii vastaamaan tähän tarpeeseen esittelemällä mallin PK- ja startup-yrityksille, jossa tarkastellaan kestävää kehitystä ja eettisiä arvoja koskevia standardeja, organisaatioita ja sertifikaatteja.

Opinnäytetyö koostuu teoreettisesta osiosta, jossa käsitellään yhteneväisyyksiä esitetyn mallin ja alan julkaisuissa esitettyjen teorioiden välillä, ja tutkimusosiosta, jossa vahvistetaan opinnäytetyön hypoteesi.

Malli koostuu kolmesta tasosta: 1. yrityksen itsearviointiin ja omaan julkisuuteen perustuva validointi; 2. yhteistyöhön perustuva validointi vaatetusalan kestävän kehityksen sektorin toimijoiden kanssa; 3. ulkoiseen sertifiointiin perustuva validointi.

Opinnäytetyön tutkimusosio koostuu kyselystä ja sen tuloksista. Tulokset vahvistavat hypoteesin, että kuluttaja on valmis maksamaan hieman enemmän vaatteesta, johon liittyvä organisaatio on tuttu; tuntemattomuus vaikuttaa negatiivisesti.

Yhteenvedossa pohditaan mahdollisuuksia jatkaa tutkimusta tapaustutkimuksin, jotka tarkastelevat kuluttajien suhdetta tuotemerkkeihin ja sitä, miten tämä nostaa organisaatioiden/yritysten liikevaihtoa.

Avainsanoja: vaatetus, PK-yritys, startup-yritys, kestävä kehitys, muoti, eettisyys, viherarvot, viherpesu, tuotantoketjun hallinta, sertifikaatio, malli, liikevaihto

Lahti University of Applied Sciences

Degree Programme in Materials Technology

MIKKONEN, MILA: Increasing Green Credentials beyond

Greenwash

Ethical and Sustainable Standards, Organisations and Certificates in the

21st Century

Bachelor's Thesis in Textile and Clothing Technology, 70 pages, 15 pages of appendices

Spring 2016

**ABSTRACT** 

This Bachelor's Thesis is made in response to the demand for small and medium sized enterprises and start-ups to achieve validated green credentials without appearing as greenwash. The aim of the thesis is to respond to this demand by proposing a model for small and medium sized enterprises and start-ups that examines sustainable and ethical standards, organisation and certification in the apparel industry.

The thesis consists of two parts: a theoretical part, which part draws parallels between the proposed model and theories from literature, and an empirical part, which confirms the hypothesis of the Thesis.

The proposed model consists of three levels: 1<sup>st</sup> Validation via self-assessment and self-declaration, 2<sup>nd</sup> Validation via partnerships within the sustainable and ethical fashion sector and 3<sup>rd</sup> Validation via third party certification.

The empirical part of the Thesis is a questionnaire and its findings. The results confirmed the hypothesis that consumers are more likely to pay slightly more for a garment affiliated with organisation that they know than when the organisation is unknown. In conclusion, the model requires further empirical research in the form of case studies with a focus on monitoring consumer engagement leading to higher turnover for the enterprise.

Key words: clothing, small and medium-sized enterprise, start-up, sustainable fashion, ethical fashion, green credentials, greenwash, supply chain management, certification, model, revenue

1	INTRODUCTION			
2	LITERA	LITERATURE REVIEW		
3	VALIDATION VIA SELF-ASSESESMENT AND SELF- DECLARATION			
	3.1	Supply Chain Management and Compliance	12	
	3.1.1	Best Practice	13	
	3.1.2	REACH	14	
	3.2	Logistics	14	
	3.2.1	Carbon Miles	15	
	3.2.2	Sourcing	16	
4	VALIDATION VIA PARTNERSHIPS			
	4.1	Labour ethics in Western countries	21	
	4.1.1	Sustainable Apparel Coalition	22	
	4.1.2	MADE-BY	23	
	4.2	Labour laws in the Third World countries	24	
	4.2.1	Fair Trade	25	
	4.2.2	Fair Wear Foundation	26	
	4.3	Contributing to welfare of animals and people	27	
	4.3.1	OXFAM	29	
	4.3.2	Red Cross	30	
	4.3.3	Pink Ribbon	31	
	4.3.4	The Vegan Society	32	
	4.3.5	People for the Ethical Treatment of Animals (PETA)	33	
5	VALIDATION VIA THIRD-PARTY CERTIFICATION			
	5.1	Organic cotton production	39	
	5.1.1	Pesticide Action Network (PAN)	40	
	5.1.2	Global Organic Textile Standard (GOTS)	41	
	5.1.3	Organic Content Standard	42	
	5.1.4	Soil Association	43	
	5.2	Production process standards	44	
	5.2.1	Synthetic and man-made fibres	45	

			IV
	5.2.2	Bluesign	46
	5.2.3	OEKO-TEX 100	47
	5.2.4	Climate Neutral Certification	47
6	CONSUMER SURVEY RESPONCES		49
	6.1	Responses	50
	6.2	Analysis	51
7	CONCLU	JSION	60
so	URCES		61
APPENDIX			
	7.1	Questionnaire	71
	7.2	Statistics of responses	77

#### 1 INTRODUCTION

The demand for validated green credentials has increased within the apparel industry in the 21<sup>st</sup> century. Green is defined as "Of a product designed, produced, or operating in a way that minimizes harm to the natural environment" (Oxford English Dictionary 2015a). Credentials as "A qualification used as a recommendation" (Oxford English Dictionary 2015b). This need for validation originates from an increase in greenwash. Greenwash is defined as "To mislead (someone) by falsely representing a product as being environmentally responsible" (Oxford English Dictionary 2015c).

As consumers have become sensitized to greenwashing a trend can be seen towards validation from a trusted source. Terms such as sustainable, eco and natural are being used misleadingly in greenwash advertising. A report by the Advertising Standards Authority, an independent UK advertising regulator, points out the desensitization of consumers to greenwashing. While the amount of green advertising has increased, complaints on its truthfulness have not risen to the same level. (Advertising Standards Authority 2008, 4.) The United Nations General Assembly (1987) defined the term sustainability: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (The United Nations General Assembly 1987, A/42/427).

Brands should be 'Doing green rather than claiming green' (Arnold 2009, 490.) This marks the aim for this thesis. The objective was to propose a replicable model that achieved this demand based on different stages of validation. The research questions are as follows:

- Can a model be drawn from literature and journal articles within the sustainable apparel industry to illustrate the different levels of validation for green credentials?
- How can the sustainable and ethical organisations, standards and certificates be grouped within the model?

 What is the consumer response to premium pricing through validated green credentials?

The scope of this thesis has been drawn to consist of theories that apply to traditional retail enterprises excluding theories on cradle-to-cradle (C2C) business models. The scope is further focuses on green credential validation via supply chain management and charitable affiliation, ruling out green credential validation via slow fashion and reduced consumer consumption.

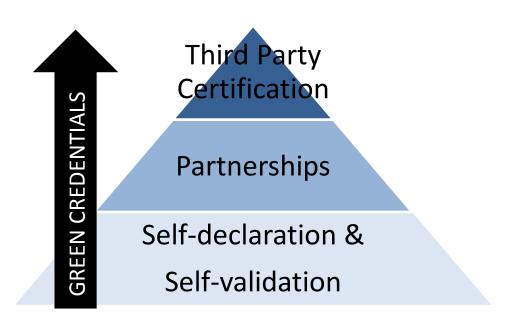


Figure 1. The Proposed Model

The approach is a combination of theoretical and empirical methodology to achieve a dialogue between the proposed model, literature and empirical findings. Chapter 2 draws parallels between theories from literature and journal articles to form a model for small and medium sized enterprises and start-ups. The model is illustrated in Figure 1 and Figure 2.

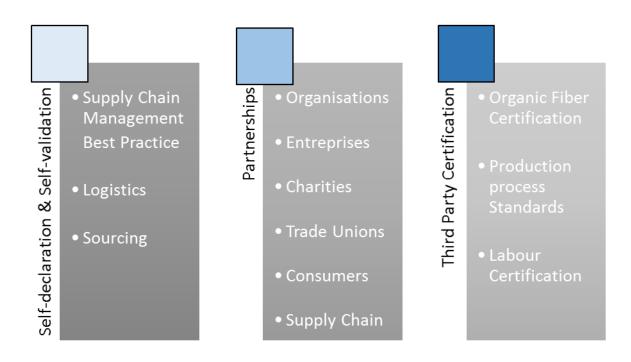


Figure 2. Content of the Proposed Model

Chapter 3 focuses on the first level in this model – Validation via Self-assessment and Self-declaration – by exploring findings from the literature that indicate transparency and accountability to be the most important aspects to achieve consumer validation of green credentials. The Questions 10 and 11 of the questionnaire, which asks which points affect consumer purchasing decision and would a consumer pay premium for garments with green claims, support this chapter. Themes discussed are:

- Supply Chain Management and Compliance
- Transparent Supply Chain
- Code of Conduct
- Best Practice
- Logistics
- Sourcing

Standards and organisations discussed are:

- REACH
- Carbon Miles

Chapter 4 focuses on the second level in the model – Validation via partnerships – by discussing the literature findings of enterprises working in partnership with and beyond their supply chain. The Question 12 of the questionnaire, which asks which organisations are known to the consumer, supports this chapter. Themes discussed are:

- Labour ethics
- Contributing to animal and human welfare

Standards and organisations discussed are:

- Sustainable Apparel Coalition
- MADE-BY
- Fair Trade
- Fair Wear Foundation
- OXFAM
- Red Cross
- Pink Ribbon
- The Vegan Society
- People for the Ethical Treatment of Animals

Chapter 5 focuses on the third level of the model – Validation via third-party certification – by exploring the literature findings that advocate certification to avoid greenwash allegations. The Questions 13 to 16 of the questionnaire, which confirm the hypothesis that consumer knowledge of the affiliated organisation is important in a purchasing decision, supports this chapter. Themes discussed are:

- Organic cotton production
- Production process standards
- Synthetic and man-made fibres

# Standards and organisations discussed are:

- Pesticide Action Network
- Global Organic Textile Standard
- Organic Content Standard
- Soil Association
- Bluesign
- OEKO-TEX 100
- Climate Neutral Certification

In Chapter 6 the model is discussed in the light of a consumer questionnaire and its empirical findings. The findings confirm the hypothesis that knowing an affiliated organisation plays an important role in a purchasing decision. In addition, a willingness to pay more for garment affiliated with known organisation with the unwillingness to pay more for affiliation with an unknown organisation was shown. Chapter 7 concludes the theoretical and empirical findings and points to areas where further research is required.

The questionnaire in full can be found in Attachments. The raw data of the replies can also be found in Attachments.

#### 2 LITERATURE REVIEW

In the past 25 years, a large number of articles has been published, exploring sustainable business models for apparel companies. This chapter provides theoretical perspectives on the models offered in literature about how to become more sustainable and ethical. One of the big successes in the sustainable apparel industry is that of outdoor clothing company Patagonia, who advocate Daniel Goleman's creed: Know your impacts, favour improvement, share what you learn. (Chouinard & Stanley 2013, 954.) This has greatly influenced the proposed model presented in this thesis.

The need to become more sustainable can be seen as so great that it necessitates the overthrowing of the capitalist system (Hoskins 2014, 3167). The same theme can be seen as the need to denounce crony capitalism in the favour of Conscious Capitalism, which aims to provide value for all stakeholders (Mackey & Sisodia 2013, 492). Rather than coming together around a single ideology, efforts towards sustainability in fashion are as multifaceted and diverse as the people who work in it. This diversity can be narrowed down into eight design journeys that offer new food for thought. (Fletcher 2013, 356.) At the core of this is the concept that actions speak louder than words especially when it comes to avoiding greenwash (Arnold 2009, 490). Behind all the corporate social responsibility statements and sourcing strategies is a global network of people who design, manufacture and produce garments. While looking at the industry provides insight, the final responsibility for sustainability within the garment industry lies with the consumer (Rivoli 2014, 3727). One model offered to prolonged consumer engagement with products is emotionally durable design, which aims to change the current status of consumption and waste (Chapman 2015, 204).

Literature referred to in Chapter 3 consists of a dialogue between Chouinard & Stanley (2013) and Arnold (2009) who all advocate internal scrutiny for enterprises considering their first steps towards becoming more sustainable and ethical. This discussion is narrowed down in Supply Chain Management and Compliance with definitions by Hugos (2011) and Dahlsrud (2006). Chapters in Best practice and Logistics offer distinctly different views by Rivoli (2014) who emphasizes the human element and Flether (2013) who emphasizes environmental impact. The final chapter on Sourcing offers insight into Premium Pricing (Gittings 2002) as an aspect of elitism in green consumption. (Barendregt 2014).

In Chapter 4 Validation via Partnerships, parallels are drawn between Hoskins (2014) who stands for communism and Rivoli (2014) who chronicles how free market forces raise people out of poverty. These two opposing views agree on the importance of unions and partnerships and Chouinard & Stanley (2013) open the dialogue of the ways clothing company Patagonia has benefitted from partnerships.

Fletcher (20130) offers a strong case for the need for validation of green credentials in Chapter 5 Validation via Third Party. This point is further emphasized in Organic cotton production by Boncamper (2011), Arnold (2009), Fletcher (2013) and Chouinard & Stanley (2013) who all point to ways in which cotton production can be improved and why standardisation is important. In Production process standards, Fletcher (2013) points to the need for sustainable production processes becoming the norm instead of a novelty.

The research completed supports a three level model to achieve green credentials which can be communicated to consumers. Only by truthfully communicating the actions taken as a corporation for sustainable development can a brand be seen as having green credentials rather than just riding the greenwash bandwagon. Communication is defined as "Something that communicates information, sent or transmitted from one person to another; a letter or a message" (Oxford Popular English Dictionary 1990, 148.) Does the brand give back to the environment or take from it? The response to a sceptical customer cannot be misleading;

unless the business operates with nature it does more harm to it than it gives back. (Chouinard & Stanley 2013, 93.)

At its core greenwash is just that, change in practises without doing the background work and follow-through. There are numerous examples of greenwashing in the fashion industry and the current consensus is that it is better not to portray a green image unless it can be backed up with hard evidence. In the UK, Primark receives far less criticism for their green credentials than H&M, because although both operate within the fast fashion industry H&M has made claims on sustainability which Primark has not made. The hard evidence needed to back green claims is third party certification.

Looking into different standards and certificates has made it clear that the industry has yet to define itself. Nothing is as controversial as the term 'organic'. Its meaning can range from pesticides to irrigation to labour laws. Certifiers such as GOTS have campaigned to define the term as "Natural fibres that are certified 'organic' or 'organic - in conversion'" according to Regulation (EC) 834/2007, USDA National Organic Program (NOP), or any (other) standard approved in the IFOAM Family of Standards for the relevant scope of production (crop or animal production) (Global standards, 2014.) The most commonly used definition "Free from herbicides, pesticides, or genetically modified seeds" seems to be from Plunkett's apparel and textiles industry almanac, where the definition has no further source (Plunkett 2008, 48 and 49.)

The certificates and standards shown here are just the tip of the iceberg. For the purpose of brand recognition, it is very important to choose your certificates wisely or consumers will associate it with greenwashing. Certifiers such as SCS Global Services do not have the same recognition as OEKO-TEX 100 or GOTS, and are therefore not likely to achieve the same level of consumer awareness.

# 3 VALIDATION VIA SELF-ASSESESMENT AND SELF-DECLARATION

The voluntary exchange mechanism behind every purchase is complex and diverse, but has a strong foundation in trust. In principle, if a brand is trusted it creates brand loyalty, which creates repeated sales. Behind trust is a knowledge of brand values and ethos. If these factors match the consumers values, a sense of trust is created between the two. (Arnold 2009, 384). The only way for a consumer to find out about the brand's values and ethos is through the brand's actions, communication and products. Only if this communication is transparent within the brand's processes can a complete view be achieved. Transparency may entail publishing the enterprise's factory list or educating the customer about the negative impact of dyestuff on aquatic life. Many companies find it hard to become and stay transparent, but without transparency, it is not clear what actions need to be taken to move forward in sustainability (Chouinard & Stanley 2013, 1230.)

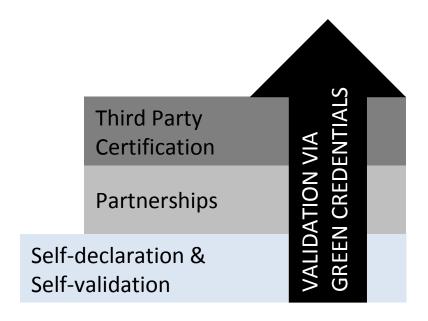


Figure 3. First level: Validation via Self-declaration & Self-validation

The three-step model offered by Chouinard & Stanley (2013) inspires the proposed model of this thesis. Chouinard & Stanley (2013) state that the three steps in becoming green are to engage the internal team, define shared values and actions, and to correct in one issue at a time (Chouinard & Stanley, 2013, 956.) For the purpose of the proposed model for validation via green credentials, the first step is called the first level: validation via self-declaration and self-validation as can be seen in Figure 3.

The mechanisms of this level support each other and lead to further validation as can be seen from Figure 4. The first level is where the actions taken are or become sustainable, but do not fall under a specific certificate. Actions that fall under this level include standards and practices such as Carbon Miles, REACH, Transparent Supply Chain and Code of Conduct. The first level is very accessible to consumers as the customer can count the carbon miles from California to Shanghai or see the factories in Vietnam. Although no third party certifier is required and there are no yearly fees, a lot of time needs to be spent internally to fully disclose all practises. In addition, this information needs to be constantly updated to match with currently advertised practices.

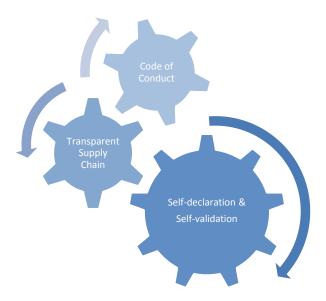


Figure 4. Mechanism of first level

The most accessible way to communicate internal information to the customer is through the brand's website. A great example can be found on the Nudie Jeans website under Production Guide. Through the platform one can track not only the production country of the garment, but also which supplier manufactured it and which subcontractors they work with. Each supply chain partner is audited by Nudie Jeans and all reports can be found on the platform. (Nudie Jeans 2015). A similar platform can be found on Patagonia's and Everlanes websites, but transparent supply chains still remain an industry curiosity rather than a standard (Patagonia 2015; Everlane 2015.)

When looking to start changing processes it is important to draw from shared values. What process is found most at odds with the company values? By finding an angle of least risk and cost the process of changing this area of the business can begin. It is important to decide who will get involved and what the team's initial success will look like. Without predetermined milestones it will be impossible to determine if the work done has created measurable change. (Chouinard & Stanley 2013, 956).

Ethical fashion is defined by design, quality and value, and therefore it should not compete with low price. Marketing of green credentials clashes with brand behaviour if the perceived value does not match the asserted value. How can a £7 t-shirt be made of organic cotton? Brand behaviour not only encompasses price, but also design. Ethical fashion, or any brand with green credentials, can only succeed with great design. The consumer finds it irrelevant how ethical an outfit is, if it does not look good (Arnold 2009, 2921.)

When the brand starts to communicate their current practises there can be hidden pitfalls. Once the supplier base has been communicated, it reflects badly on the brand if it is later found out that child labour was used in part of it. Three Indian companies supplying Primark were discovered to be subcontracting work out to companies that used child labour. The pitfall was not simply that child labour was found, but the way Primark reacted to it. Instead of tackling this problem head on by continuing to work with and monitor the three suppliers to eliminate child labour Primark denied all allegations and cancelled their orders with the suppliers. This decision left thousands of people without income. (Arnold 2009, 526).

# 3.1 Supply Chain Management and Compliance

This chapter focuses on how companies follow laws set by each country that is a part of their supply chain and how best practice shapes conduct. Supply chain management is defined as:

"The coordination of production, inventory, location, and transportation among the participants in a supply chain to achieve the best mix of responsiveness and efficiency for the market being served" (Hugos 2011, 337.)

Apparel production is often overlooked in favour of buzzword subjects such as organic farming and fair trade labour, but this is the level that truly shapes the industry. Deeper level changes are made with legislation that binds countries beyond their own borders. Also significant are initiatives such as 'No Airfreight' policies, where no goods may travel in an

aeroplane, and Codes of Conduct, which are defined as "A moral principle relating to business; a set of such principles conceived of as forming a code of conduct in business" (Oxford English Dictionary 2015d.)

The common theme for these smaller scale changes is called corporate social responsibility, which has yet to be defined in a singular meaning. Of the 37 meanings most commonly used, the most popular is "A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (Dahlsrud 2006, 7.)

As an example, the model for Filippa K's corporate social responsibility is based on four interrelated and equally important areas: environmental responsibility; social responsibility; financial responsibility and ethical responsibility. They state that "As a global company, our goal is to contribute to a long-term sustainable future for all our stakeholders, with minimal negative impact on our surroundings." (Filippa K 2015).

#### 3.1.1 Best Practice

In clothing manufacturing, efficient production processes differentiate factories working at high capacity from factories working at low capacity. The best, most efficient production processes are defined as best practice and they are regarded as an industry-wide benchmark. Before the rise of the conscious consumer, best practice was centred on time management and reduced cost. Today best practice involves new stricter legislation and toxic source reduction.

While the industry standard in China might be to cut costs and dump toxic waste into rivers, in Europe this would be unheard of due to REACH legislation (Rivoli 2014, 3727.) The REACH legislation is explained in Chapter 3.1.2. The aim of best practice is to go beyond industry standards and to do so with fewer source materials and less energy, water, labour, time and waste, thus making best practice sustainable and ethical.

#### 3.1.2 REACH

Since the 1st of June 2007 all parts of a supply chain that are within the European Union's jurisdiction must comply with REACH legislation. The abbreviation stands for Registration, Evaluation, Authorisation and Restriction of Chemicals. Under this legislation manufacturers and importers alike must register all substances in their products with The European Chemicals Agency or ECHA for short. Every registration is evaluated and assessed for compliance and risk manageability. Substances harmful to humans and the environment can be banned if their risks are unmanageable. (ECHA 2015).

Understanding what REACH is and how it acts as a safety net for all European consumers is something brands based in the EU often overlook. EU policies are not seen to add value to green credentials as all apparel companies operating from the EU gain the same benefit, but when competing on a global scale this is a strong advantage, as such legislation is unique on the planet. Also worth noting is the fact that compliance to REACH does not require any membership fees or yearly auditing. That is one reason why sourcing fabric mills and dye houses in the EU gives a brand a competitive edge for green credential when compared to a brand sourcing from China. The cost of standardisation, auditing and enforcing compliance abroad is much higher and less efficient than enforced legislation that binds both parties.

## 3.2 Logistics

Logistics is defined as networks of companies that coordinate their actions to deliver a product to market with a focus on procurement, distribution, maintenance, and inventory management. The meaning differs from supply chain management in that supply chain management also entails activities such as marketing, new product development, finance, and customer service. (Hugos 2011, 341).

T-shirts commonly move around the world when it comes to modern logistics (Rivoli 2014, 315.) The raw material is often grown completely separate from where it will be spun to yarn, let alone sewn into a garment. Manufacturing and retail are often continents apart and even after consumption the garments are shipped beyond borders to a third country. All this travelling comes at a high cost for enterprises, amounting to a third of the costs associated with the supply chain; it is no surprise that the cost to the environment is even higher. (Hugos 2011, 521). The environmental cost associated with logistics is often measured in Carbon Miles, which are discussed in Section 3.1.4. A solution to the problems arising from globalisation is to go back to localism. Localism is an uncommon term in today's society and is defined as "Disposition to favour what is local" (Oxford English Dictionary 2015f.) On a local scale others immediately notice an individual's actions and thus change becomes apparent very quickly. This transparency encourages responsibility (Fletcher 2013, 3293.) As this paradigm shift is yet to take place, enterprises must look to other means of becoming accountable.

## 3.2.1 Carbon Miles

Although widely accepted generally, the notion of a Carbon Footprint, where a products raw materials, making, distribution, use and disposal are given a CO<sub>2</sub> discharge value to give an overview of the environmental impacts of products, the application of this to distribution and short supply chains in fashion has been rare. Not only is a shorter supply chain nimbler, but it also brings savings in shipping and taxes. CO<sub>2</sub> emissions are a complex issue where small adjustments in processes can lead to big changes in the output of the whole supply chain. (CENSA 2007).

Calculating exactly how much carbon is created in manufacturing garments and showing the amount in miles is something the customer can comprehend without any background knowledge in sustainable apparel production. Enterprises do this by doing research into the origins of each fibre and its transportation methods. In addition, detailed audits into

production and the supply chain are necessary. The best way to reach consumers with this information is through interactive online platforms. The initial start-up cost for gathering all necessary information and creating the platform would be high but once it is up and running there will be no annual third party costs.

# 3.2.2 Sourcing

Sourcing is defined as "the obtaining of goods and components from a specified or understood source" (Oxford English Dictionary 2015g.) When planning future sourcing strategies the traditional model focuses on vendor selection based on product quality, service levels and on time delivery (Hugos 2011, 1307.) The amount of approved vendors is then narrowed down over time, in order to achieve better volume and price ratios (Hugos 2011, 1311.) In sustainable best practices this is taken further by looking at ethical and sustainable aspects such as the energy and water consumption of a raw material and working conditions in the factories. The focus is on the sustainable aspects of the supplier as a whole. Sustainable sourcing strategies include not only where energy is acquired but also how wastewater is treated. From the traditional point of view these aspects are secondary and thus often completely missed. This lack of oversight has led to the majority of Chinas river systems to be unsuitable for human contact (Rivoli 2014, 2589.)

From a sourcing point of view, green credentials create higher production costs. If sourcing is limited to using organic or recycled materials, limited in countries of origin due to ethics and limited in shipping due to carbon miles, the price per product will be above industry standard. For this reason, competition with high-street brands distorts the pricing policies of small green consumer brands.

An often-overlooked part of supply chain management is product value.

Product value is not only production costs and margins, but also perceived value determined by the customer. If a product is sold at half of the

perceived price, customers will not value it as highly as the more expensively priced product. This ideology is mostly used for Premium Pricing utilized by luxury brands, where the price of the goods is artificially high to encourage perceptions of quality and scarcity. (Gittings 2002).

This also works in an eco-brand's advantage, as green consumerism is now associated with the elite (Barendregt 2014, 1.) The implication of this is that eco goods are expected to have a higher value than their conventional counterparts. Many brands have jumped at the chance to raise prices, leading to greenwashing in the industry. In 2010 H&M was under public scrutiny as the organic cotton from India was found to contain GM cotton (Organic Consumers 2014.) One can argue about whether this was a mistake from the sourcing department or a deliberate way to cut costs, but nonetheless this and other organic frauds create mistrust in consumers.

#### 4 VALIDATION VIA PARTNERSHIPS

Goleman (2009) offers three rules for enterprises going green: "Know your impacts, favor improvement, share what you learn" (Chouinard & Stanley 2013, 522.) By sharing the enterprises knowledge beyond its supply chain, new ways of working can become industry standards implemented across the board. Small reductions in water usage can reverse damage to aquatic life if implemented by the whole industry. Thus, the second level is that of partnerships, as can be seen from Figure 5. As sustainable development enterprises come to see benefit in teaming up with a fellow brand or organization the actions to be taken become more clearly defined.

This level can include communication of partnerships, new technology, charity work with the Red Cross or running a marathon for Pink Ribbon, setting up a sustainable coalition and campaigning with PETA. The third level communicates that the brand is taking a stand in what is wrong and right in the world and is prepared to face adversity for this choice.

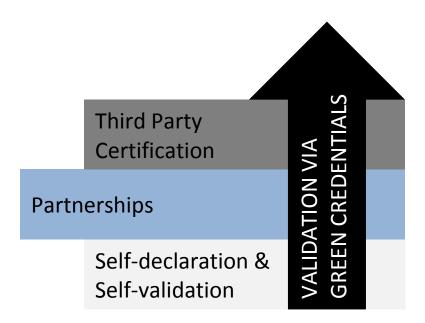


Figure 5. Second level: Validation via Partnerships.

Companies work with other companies in their supply chain, and can widen their horizons to other partners, such as customers and communities. One strong partner can be found in trade associations.

Trade associations act as a gateway for new business standards, benchmarks and practises that then elevate all parties' green credentials.

A whole network can be built to support the enterprise's sustainable ethos as can be seen from Figure 6. The most accurate way to find out what green credentials the customer wants is to ask them. Events or open forums where their voices can be heard and quantified into actual data can be organised. When a company has a partnership with a local community, action and outcomes are easily quantifiable. (Chouinard & Stanley 2013, 120).

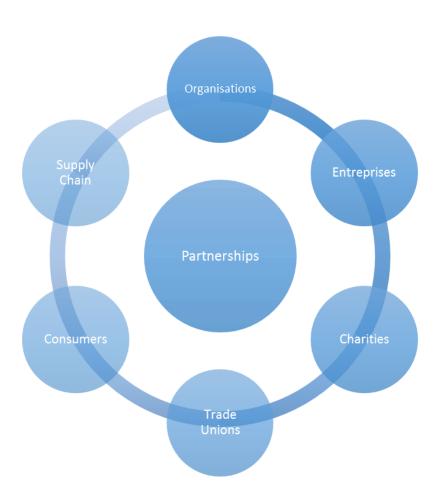


Figure 6. Network of possible partnerships.

Successful partnerships between company and organisation with green credentials include: Lindex with Pink Ribbon, Stella McCartney with PETA, and the People Tree with GOTS. Some of these partnerships are integrated into the value statement of the brand, others are later additions causing no sustained change to the processes of the company. This is something worth deciding on in the beginning: is this a partnership that can cause change on an organisational level? Without sustained change in processes green claims ring hollow. (Lindex 2015, Stella McCartney 2015, People Tree 2015).

All seams need human hands to become reality unless made using a whole garment or circle-knitting machine. Despite millions of dollars used for research on mechanization, people are still required to piece together fabric and feed it into sewing machines – a practice most often associated with the sweatshop. (Rivoli 2014, 2514). A sweatshop is defined as "A workshop in a dwelling-house, in which work is done under any system of sub-contract" (Oxford English Dictionary 2015h.)

Pietra Rivoli looks at life expectancy under these conditions in different parts of the world: in Manchester, England, life expectancy was under 30 in 1800, while 50 years later in Fall River, Massachusetts, it was 35 (Rivoli 2014, 3572.) Working in sweatshop conditions can involve life-threatening risks, such as inhaling stone dust and being maimed by a machine due to lacking safety equipment. The best workers are described by factory owners as docile women straight from the farm who have no alternatives. However, in country after country, and factory after factory, the women workers were at the forefront of social and economic change. (Rivoli 2014, 2724).

A lot has changed since the early days of the industrial revolution. New legislation follows changes in the global market and child labour is seen more as an outrage than business as usual. The globalisation of labour is best described as a race to the bottom, where companies move their production to countries providing cheaper labour. Race to the bottom is a

term used to describe how the labour market moves from a deregulated country to the next.

Hoskins (2014) describes the many different forces at work in the apparel industry beyond that of the companies, suppliers and consumers, activists that drive social change, such as: trade unions; migrant worker 'guerrilla groups' and anti-corporate campaigns like UK Uncut and the anti-sweatshop campaigns of Labour Behind the Label, and many others. (Hoskins 2014, 3113). She and Rivoli both emphasize the importance of these organisations as a counterbalance to market forces. Rivoli (2014) emphasizes that it is because of the work of activists who lobbied for the abolition of child labour that the notion that children belong to school has become so dominant (Rivoli 2014, 3524.)

#### 4.1 Labour ethics in Western countries

The industrial revolution began in the United Kingdom after the invention of the cotton gin. The cotton gin is a machine that separates cotton fibers from their seeds. As the capacity of cotton production grew, so did the factories and millions of people flocked from the countryside to work in the new factory compounds. Often the whole family worked at the same factory, but with time, the factory owners would place preference on women and children due to their docile nature and deft hands. In the late 1700s, the physician and social reformer Dr Thomas Percival proposed a radical reform for the Manchester England cotton mills. Not only did he suggest that interference in the management of the cotton factories might be allowable but also that legislation might limit the hours that children were employed in the mills; typically, 14 per day including night work. A struggle between business interests and Percival's allies ensued leading to waves of the Factory Acts—in 1819, 1825, 1833, 1844, and 1878— that gradually shortened children's working hours and raised the minimum age for work in the factories. (Rivoli 2014, 3509).

The golden era of British cotton manufacture had peaked by 1912 and

changes in the global markets led to New England in North America emerging as the new leader in the race to the bottom. Manufacturing moved to France, Germany, and Italy in Europe, and from the East Cost to the West coast in the United States; changing the social landscape where it went. The industrial revolution created a completely new class in society – the working class. Previously divided to the genteel and the peasants, now the working class emerged as a stepping stone from one lifestyle to the next (Rivoli 2014.)

Hoskins (2014) discusses the changes in the labour laws in today's society and how the global trend of neoliberalism in the United States of America has eroded workers' rights by deregulation and the cutting back and privatisation of labour law enforcement. This is well exemplified in the number of workers that a single wage and hour investigator is responsible for inspecting, a number that has risen from 40,000 in 1957 to 140,652 workers during President Clinton's term of office. (Hoskins 2014, 3011).

# 4.1.1 Sustainable Apparel Coalition

Sustainable Apparel Coalition, or SAC for short, was founded in 2010 from the collaboration between unlikely partners Patagonia and Walmart, who invited 12 other companies into the organisations inaugural meeting. The Coalition began work by identifying the need for a comprehensive supply chain measurement tool, specifically focused on environmental and social impacts. Drawing on Nike's Environmental Design Tool and The Outdoor Industry Association's Eco Index the Sustainable Apparel Coalition has built the Higg Index, which has in five years become an industry benchmark (Kester & Ledyard 2012.)

The Higg Index measures sustainability performance for members by using an online tool. By entering data into the member's industry segment the module generates standardized performance scores, which can be reviewed against previous scores and work as benchmark standards within the industry. (Sustainable Apparel Coalition 2015a). Brands who

work closely with the Apparel Coalition include the above mentioned Patagonia, Walmart, Nike and also many other brands such as Levi Strauss & Co and C&A.

Levi has used the Higgs Index to identify that the salt collected in their wastewater plant from reverse osmosis could be introduced in the production process during the dye phase, resulting in a closed loop. Innovations like this make it possible to drive change across different stages of the supply chain resulting in a comprehensive plan on how to constantly improve sustainable practices. (Sustainable Apparel Coalition 2015b).

Working with the Sustainable Apparel Coalition gives a brand a lot of tools and information on where their green credentials truly stand, but the value for the consumer is not as clear. As SAC is not a standardizing body nor a well-known non-profit organisation, becoming a member is more suited for brands with big supply chains, looking for a long-term plan for sustainability.

#### 4.1.2 MADE-BY

MADE-BY is a European not-for-profit organisation founded in 2004 by Solidaridad, the same Dutch NGO that set up the fair trade movement in 1998 with the Max Havelaar coffee label. MADE-BY works with brands on a consultancy basis, with offices in the Netherlands, Germany and the United Kingdom. Today their focus is the same as when the organisation started: to improve environmental and social conditions in the fashion industry. (MADE-BY 2015a).

MADE-BY has many partner brands, such as Globetrotter, KappAhl, Acne and Eileen Fisher. The mission of the organisation is to improve the full lifecycle impact of garments from fibres to manufacture to disposal. The consultancy also offers packages for brands to focus on an area of the supply chain, such as 'Sustainable Fibre Masterclass' where the focus is on new sourcing strategies. (MADE-BY 2015b).

Besides the consultancy service MADE-BY offers also a sustainability tracking tool called MODE Tracker. Designed to offer brands a way to make clear progress, the tracking tool helps brands develop their sustainability plan: how to make verifiable improvements and how to communicate the said improvements effectively. The MODE tracker is based on MADE-BY's popular Scorecard system and can be broken down to three simplified steps. The first step is for the brand to share information confidentially about their goal for sustainability and current supply chain management. MADE-BY then crosschecks this information against industry best practice. This then provides the brand with a complete overview of their sustainability engagement and suggest improvements. (MADE-BY 2015c).

MADE-BY does not certify or audit, but rather works as an information sharing entity. The purpose of working with MADE-BY is to reach cohesiveness across the whole supply chain when making improvements towards a more sustainable future. Working with MADE-BY could be most beneficial to an established brand looking to qualify their green credentials in a comprehensive way, while using a method not as strict as standardization.

#### 4.2 Labour laws in the Third World countries

Today's world is divided by opportunity; being born in the rich west gives you access to education, healthcare and equality. Being born anywhere else however, can be seen as a step back in time, where there is no freedom of associate or freedom of speech and where your gender defines your future. In China this is exemplified in the hokuo system, which defines where a person lives unrelated to where they actually are. Rivoli (2014) defines these people as liudong renkou, which translates roughly to 'floating people', who represent 70 to 80 percent of China's textile and apparel workers. These workers work 25 percent more hours per week but earn 40 percent less than those with urban hukous but do not have access to the urban residents welfare services such as subsidized housing,

education, childcare, healthcare, and pension benefits. (Rivoli 2014, 3071).

Rivoli (2014) examines data given by the National Labour Committee of the median Chinese garment worker: young women forced to work seven days a week, 12 hours a day, earning as little as 12 to 18 cents an hour with no benefits, housed in cramped, dirty rooms, fed on thin rice gruel, stripped of their legal rights and under constant surveillance (Rivoli 2014, 2580.) And as the race to the bottom continues from China, Hoskins (2014) examines why Burma appeals to clothing manufacturers; very cheap labour with factory wages as low as 5p an hour, ban on trade unions and lack of health and safety laws (Hoskins 2014, 1510.)

#### 4.2.1 Fair Trade

The Fair Trade principle is to use trade as a way to secure better deals and a more sustainable future for farmers and workers in disadvantaged parts of the world. This means that the standard cannot be applied to products made in the EU or North America (Fairtrade International 2015.)

The Dutch development agency Solidaridad launched the first Fair Trade label under the name Max Havelaar in 1988. The label grew internationally in the next ten years to encompass different names, such as Fairtrade Mark in the UK and Reilu Kauppa in Finland. Fairtrade Labelling Organizations International (FLO) was established in Bonn, Germany in 1997 to unify and certify the different organisation involved. Fairtrade International took the next step and began the use of the international FAIRTRADE Certification Mark in 2002. This clear logo is used by producers and consumers alike to identify and distinguish authentic Fair Trade products. (Fairtrade International 2015).

Fairtrade is made up of three organisations: World Fair Trade
Organization, Fairtrade International and FLO-CERT, which complement
each other and together form the international Fair Trade movement. It is
important to mention that while Fair Trade refers to the ideology and

values behind the movement, Fairtrade refers to all or any actions taken by FLO eV, FLO-CERT, Fairtrade producer networks, national Fairtrade organizations and Fairtrade marketing organizations. The term Fairtrade is also used by products certified by Fairtrade International. (World Fair Trade Organization, Fairtrade International & FLO-CERT 2011).

Fletcher (2013) describes the social practices of Fairtrade Mark as a fair price received for a product, acceptable working conditions and gaining access to education and health care. Not only do the cotton producers earn a minimum price for the cotton seeds but also a further premium which is to be used for community development projects. Protective equipment is required for use of approved pesticides, minimising the risk of pesticide poisoning. (Fletcher 2013, 916).

#### 4.2.2 Fair Wear Foundation

Where Fair Trade is about the farmers who grow natural fibres, Fair Wear Foundation (FWF), established in 1999 in the Netherlands, is about the workers who sew and finish textile products. The independent, non-profit organisation aims to improve labour conditions for garment workers by collaborating with their 80 member companies that represent over 120 brands and 20,000 retail outlets (Fair Wear Foundation 2015.)

The organisation consists of four parts to safeguard its independence as a verification initiative:

- Independent chairperson
- Board which consists of further four parts;
- 1) business associations for garment suppliers
- 2) business associations for garment retailers
- 3) trade unions
- 4) NGOs (non-governmental organisations)
- Multi-stakeholder Committee of Experts
- National Stakeholder Platform

This is very important when compared to other organisations, where the omission of stakeholder parties is apparent. (Fair Wear Foundation 2015).

Contrary to many other organisations, the Fair Wear Foundation publishes its membership fees, making it easier to for a brand to make an informed choice. The fee is based on company turnover, making it especially interesting for smaller brands or designer labels. The membership fee covers all areas of Corporate Social Responsibility planning, except auditing, which can either be done by Fair Wear Foundation, the brand's own Ethical Compliance team or a third party auditor. Every year the organisation compiles a Brand Performance Check, where they asses the members supply chains compliance to established corporate social responsibility or CSR practices. If non-compliant or refusing to share their findings, the brand can end up on the organisations Suspended members list. The list mentions affiliates and members from as far back as 2009, making it unforgiving for any brand looking to gain green credentials. (Fair Wear Foundation 2014).

# 4.3 Contributing to welfare of animals and people

Clothing and charity work have always been tied together – a generous person is someone who will give you the shirt off his or her back. In the 21<sup>st</sup> century the most common charity and clothing combinations fall under four categories: brands that give a percentage of their yearly proceeds to charity, brands that do charity work, brands that do limited editions and give part of the proceeds to charity and charities that sell clothing.

Hoskins (2014) describes the practices of brands that do charity work with the casefile of TOMS, a US-based shoe company whose unique selling point is BOGO (Buy One Give One). For every pair of TOMS shoes bought the company donates a pair to a child in a third world country. Two million pairs of shoes were given away by 2013 and every customer enters in a prize draw with the chance to visit a poverty-stricken village and hand over shoes. This creates a very high level of customer engagement and yet the

TOMS BOGO policy fails to deliver sustainability. Creating jobs with a shoe factory would do more to help poverty than giving shoes, crippling the local shoe industry. This can be seen clearly in Africa, with a 40 per cent decline in apparel production and 50 per cent decline in employment over the period 1981–2000 due to charitable clothing imports. (Hoskins 2014, 3042).

Lindex is one example of a brand that does limited edition collections and gives part of the proceeds to charity. Partnering with Pink Ribbon and a famous designer since 2010 Lindex has operated a sales strategy where 10% of the sales price is donated to the cause. The designer collaborations include Narciso Rodriguez, Missoni and Jean Paul Gaultier. By 2014 Lindex had donated £5.5 million to Pink Ribbon, a breast cancer charity. The partnership has been well received by consumers since its beginning in 2003 and has created engagement beyond that of ordinary marketing campaigns. (Backteman, Batmunkh, & Ström 2009, 36).

In the ethical food chain, animal welfare rates highly. The 2014 PETA expose on the Angora rabbit fur industry caused an outrage with consumers and caused many brands, such as H&M, C&A and New Look to stop production of merchandise with the said fibre. Psychologists believe we have a stronger emotional reaction to animal suffering than to, for example, soil erosion, because we can see their eyes. This gives an important insight into the mind of the consumer and explains the thousands of advertisements where an animal is pictured with its eyes fixed on the viewer. Thus it can be said that using animal products not associated with this reaction, such as fish skin, can be less controversial than using rabbit fur. (The Guardian 2013).

Not all animal products are grown for the fashion industry. In most countries the production of wool is a secondary benefit of sheep farming. Due to this, the sheep are not bred for their wool, resulting in poor quality coarse wool, which is often discarded due to low market value and thus becomes a wasted resource. The main bulk of all wool fibres come from

Merino sheep farmed in Australia. This special breed can produce 5kg of suitable wool for apparel manufacture and is therefore priced above the wool produced by the food industry. (Fletcher 2013, 574).

The longest tradition of animal-based fiber production used solely in fabric manufacture is that of silk, produced by the larvae of the mulberry silkworm Bombyx mori. The practise is known as sericulture and details the feeding of larvae with mulberry tree leaves and then extracting the silk fibres from the cocoon of the larvae before it transforms into a silk moth. The cocoons are first steamed to kill the silk moth chrysalis and then washed in hot water with detergents to loosen the silk fibre. (Fletcher 2013, 599). PETA estimates that 6,600 silkworms are killed to make 1 kilogram of silk, creating a need for a more ethical alternative. Peace or ahimsa silk is marketed as an answer to the animal cruelty of the industrial silk production, because the pupae are left to break the cocoon before the silk is harvested. Critics point to the lack of certification, as in 2015 there is no guaranteed way to know that the fabric sold as peace silk is indeed produced in an ethical way. (PETA 2015a).

Only a few brands take a strong stance against animal cruelty and abstain from all animal products. Most brands decide on a fine balance between offering some higher price point garments with animal fibres and making their biggest sales revenue in their vegan merchandise sold at a lower price point. Exactly what is this vegan merchandise? This often means the use of acrylic fibre instead of wool and polyurethane instead of leather. Neither of these fibres are currently widely recyclable and as such can be seen as more polluting than their protein fibre counterparts.

#### 4.3.1 OXFAM

The name 'OXFAM' comes from the Oxford Committee for Famine Relief, a group founded during the Second World War in 1942 in Britain that called for food supplies to be sent to the starving women and children in enemy-occupied Greece. The group has grown in 70 years to become the

OXFAM International confederation with 17 member organisations in Australia, Belgium, Canada, France, Germany, Great Britain, Hong Kong, Ireland, India, Italy, Japan, Mexico, The Netherlands, New Zealand, Quebec, Spain and the United States. (OXFAM International 2015).

The organisation is run by donations. Donated clothing gets sorted and the most commercially suited gets sold through the OXFAM shops and e-commerce platform. The rest either get sold through the international rag trade or are donated to countries in need, such as Nepal during the 2015 earthquake (BBC News 2015.)

A brand that has collaborated with OXFAM since 2008 is M&S. As a part of their Plan A initiative, in this partnership the brand tackles the difficulty of disposal. The alliance works by 'shwopping' in two ways: by customers donating unwanted clothes to OXFAM at M&S stores, and by donating unwanted M&S clothes directly to OXFAM shops, with a coupon given as an incentive. The partnership has been hugely successful in not only raising £8 million for OXFAM but also being voted twice as the UK's most admired corporate and charity partnership in the Corporate-NGO Partnership Barometer. (OXFAM UK 2015).

## 4.3.2 Red Cross

Begun in 1859 by one man who was moved by the suffering he witnessed the Red Cross is now the most recognised relief organisation in the world. Witnessing 40,000 men die or be left wounded on the battlefield in a single day, Swiss businessman Jean-Henri Dunant was struck by the lack of basic hygiene and medical attendance. His experiences were to become the cornerstones of his book 'A Memory of Solferino' which led to the formation of what we now call the International Red Cross and Red Crescent Movement in 1863. (The British Red Cross 2015a).

The Red Cross has many corporate partners today, but the most relevant is the partnership with H&M. Since 2011 H&M has donated end-of-season lines and damaged goods which have been sold through the Red Cross

charity shops raising £1 million for the organisation. (The British Red Cross 2015b). A very comprehensive list of all activities and collected amounts of garments and funds in all countries between H&M and all the charities they work with in all countries they operate in can be found on Charity Star (Charity Star 2015.)

There are five ways to collaborate with the Red Cross: cause-related marketing, donating products or expertise, licensing, recycling and sponsorship. The organisation is well regarded and trusted and stays relevant by creating content on Twitter, Instagram and Facebook. A partnership with an organisation of such standing is well worth the possible loss in revenue.

#### 4.3.3 Pink Ribbon

Pink Ribbon was founded in 1991 by Evelyn Lauder from Estée Lauder and Alexandra Penney from the women's health magazine Self, to promote breast cancer awareness and support women and men with breast cancer. The organisation today has become an international association with a local version in many countries around the world. (Pink Ribbon International 2015).

The charity collects funds by collecting donations and by selling licensed merchandise. A minimum of 90% of all revenue is donated to international breast cancer research. This makes the organisation a great collaboration for brands that mainly sell to women, such as Victoria's Secret, Avon and Lindex. Lindex has partnered with Pink Ribbon since 2003 and has found a winning formula of using a big name designer to collaborate on the collection with part of the proceeds going to Pink Ribbon. This way the consumer can shop with a clear conscience. The campaign had collected 9.5 million euros by 2014. Collaboration partners include Missoni and Jean Paul Gaultier. (Lindex 2015).

Pink Ribbon has been criticized for over licensing their trademark and thinning out the brand impact on consumers by saturating the market with merchandise. The question is to either work with a well-known charity such as Pink Ribbon where your brand is only one of the many brands that contribute, or to work with a smaller, not as well-known charity where the brand will make a bigger difference. The answer to this question lies in the demographic. If the brand appeals to the masses, it must seek partnerships with charities known by the masses. Small brands are better off partnering with small charities, as that will bring them more credibility with their target consumer.

# 4.3.4 The Vegan Society

The Vegan Society was founded in 1944 in the United Kingdom by a group of vegetarians who were against eating dairy and eggs due to ethical reasons. This ethos was defined in 1949 as the word vegan using the first three and last two letters of vegetarian and in 1979 a defined meaning:

[...]a philosophy and way of living which seeks to exclude—as far as is possible and practicable—all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose; and by extension, promotes the development and use of animal-free alternatives for the benefit of humans, animals and the environment. In dietary terms it denotes the practice of dispensing with all products derived wholly or partly from animals. (The Vegan Society 2015a).

Today the Vegan Society has grown and the European Convention for the Protection of Human Rights even protects veganism as a human right under Article 9. The vegan lifestyle is promoted by the use of their own registered vegan trademark which can be found most commonly in food items. In relation to fashion, living a vegan life means no leather or animal fibres can be used. Also no animal by-products can be used in finishing or treating the fabrics and yarns. (The Vegan Society 2015b).

The Vegan Society has at its core the same values as PETA, but without using aggressive campaigning tactics. The Vegan Society would not throw red paint on women wearing animal furs or campaign against angora wool.

The Vegan Society is best suited for a company with an older audience, which understands that change happens gradually from everyday choices.

## 4.3.5 People for the Ethical Treatment of Animals (PETA)

People for the Ethical Treatment of Animals, or PETA for short, is an organisation dedicated to veganism and obliterating animal cruelty and was founded in 1980 in the United States. PETA has reached many ground breaking milestones with their fierce and controversial campaigning, such as cruelty charges filed against a factory farmer for cruelty to chickens and getting the first ever court ruling against animal testing in U.S. Supreme Court. (PETA 2015b).

PETA continues as a trailblazer known for its radical campaigns. The angora rabbit expose of 2014 led to several high street brands pulling garments with angora from the shops and production lines. For the world's largest fast fashion retailer Inditex this resulted in \$900,000 revenue loss which was turned into charity by shipping the unsellable stock to Syrian refugees in Lebanon in February 2015. This action was accepted by PETA, as the only excuse of wearing fur is being in a desperate need of basic necessities. (PETA Blog 2015).

Collaborating with PETA can bring companies credibility and at the same time cause it to lose credibility. As is apparent from the responses to the questionnaire in this thesis, not all responders were in agreement with PETA's campaign methods and were alienated from products due to their association with the organisation. At the same time PETA is a good partner for companies that value the cutting edge and pushing boundaries. A company with a younger audience and strong ethical stance benefits from a strong partner that can promote it through its international network. Successful partnerships include Stella McCartney and Tom Bihn. (PETA 2015c).

#### 5 VALIDATION VIA THIRD-PARTY CERTIFICATION

When looking to confirm the success of implementing social and environmental standards across the supply chain, third party certification becomes in important tool (Chouinard & Stanley 2013, 1396.) This tool is based on standardisation, where parameters are drawn and individual enterprises must comply within them to become certified. This means that the consumer can evaluate one enterprise over the other, as both are certified using the same standards. This forms the base for the third level: validation via third-party certification of the proposed model can be seen from Figure 7. The core of the third level is being certified by a well-known certified body and communicating this throughout the brand identity. If the first and second levels are taken with care then becoming certified will only strengthen the brand ethos, rather than greenwashing it, thus making it worth all the time and money spent in the supply chain management and sourcing departments. Certification also raises the cost of each product, depending of course on the certificate chosen, and will raise the price of the product beyond average.

The effect of knowing or not knowing an organisation affiliated with a garment in a purchasing decision was researched in the questionnaire. This aspect was shown to be highly important in choosing a commercially acceptable price point for the consumer. A trend of the willingness to pay slightly more for affiliation with known organisation also became apparent through the questionnaire. Thus education the consumer of green credentials through the first and second levels becomes important before implementing premium pricing strategies to cover the costs of certification.

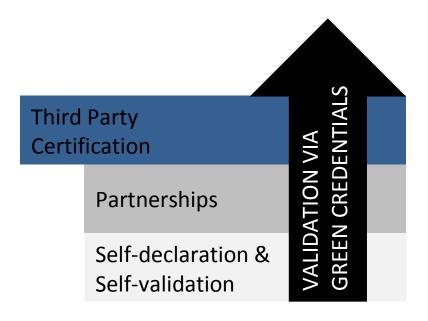


Figure 7. Third level: Validation via Third Party Certification.

As discussed in this literature review Premium Pricing policy depends on perceptions of the quality and scarcity of luxury goods. As brands expand into new markets and adapt to the different needs of wholesale, ecommerce and bricks and mortar stores, it is important to adhere to and communicate green credentials through all channels. Once a negative view has been formed due to greenwashing or organic fraud allegations, the branding established for premium pricing strategies is lost and a drop in sales can be expected.

The willingness to accept premium pricing for products with green claims is dependant on the knowing of the certifying organisation. In the questionnaire conducted for the thesis the two segments analysed responded in majority towards paying slightly more for garments if the organisation affiliated with them is known, as can be seen in Figure 13.

Green credentials are the new luxury and many brands are tapping into this consumer trend. Consumption in the 21st century is held to be a way of defining individuality and in line with this trend buying green has become primarily a matter of lifestyle rather than ethics.

It is not enough to own an organic t-shirt, consumers now expect recycled trousers and underwear free from harmful substances. This is where being certified becomes an advantage. When a new consumer is looking to broaden their sustainable lifestyle, the choice of a certified brand with green credentials over a brand with green claims only is a clear one.

Brands that have successfully transitioned from conventional to sustainable are few, which can be attributed to two things. Firstly, lack of knowledge of the many ways companies can become more conscious of their actions and secondly the unclear financial gains from operating more sustainably. Not all certification is expensive; the question is rather which certification brings the company the greatest increase in green credentials with minimum decrease in purchase volume. Indeed, the scenario created in this thesis increases purchase volume as customers expect and trust the new level of service the company now provides. A brand delivering transparency, communication and consistency across all channels creates brand loyalty with every transaction. Add to this a third party certification and the perceived value becomes higher than the actual price point.

But we also live in an age of greenwash branding, where consumers are being misled with 'natural' and 'pure' products. Enterprises must find cost efficient standardized certificates that also promote brand awareness. With over a hundred worldwide certificates and standards for sustainability and ethics, enterprises need to thoroughly research which actually will create a difference for the consumer.

The three main certification paths explored in this thesis are organic fibre production, production process standards and labour certification. As can be seen from Figure 8 there are many ways of being certified. Seen through surveying people based in Finland and the United Kingdom for this thesis there is a trend of consumers placing more value on garments produced in collaboration with organisations they know rather than organisations they do not know.

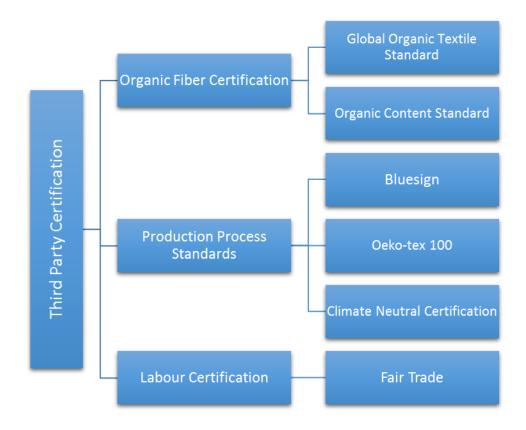


Figure 8. Certification paths presented in this thesis

Becoming certified is not the beginning of building a brand, but it rather marks a transition point. It solidifies the brand values of sustainability and defines the customer base. This can be seen with cotton brand Kuyichi that features Fairwear, MADE-BY and Fair Trade organisation logos in their page footer. Founded in 2001 by Solidaridad, the same organisation that started the Fair Trade movement, Kuyichi is defined by its use of organic cotton and fair trade labour. A cult following has formed for the brand and its denim products are coveted by fashion editors around the world. What differentiates Kuyichi from other green brands is their credibility. If Kuyichi suddenly changed to using conventional cotton and moved production to unaudited factories, the outrage among its customer would cause a huge drop in sales. (Kuyichi 2015).

The key to sustainability in production for enterprises is through working with the companies in their supply chain. Only then can the enterprises truly work with the supply chain more intelligently and productively and thus work to improve working conditions and environmental impact.

Knowing the supply chain will also serve the enterprise well if advocacy groups, like Greenpeace and PETA, or individual citizens using social media, confront the company regarding their practices. In these situations, being able to show a line of actions that have been taken to reduce the risk of the said practice always looks better than having no knowledge of them. (Fletcher 2013, 416).

At the centre of all efforts towards a more sustainable fashion industry lie textile fibres. Textile fibre refer to the pieces of which a textile structure is made of. These pieces are usually thin long strips that are spun together to form yarn, the most basic starting point for both woven and nonwoven fabrics. Fibre manufacture is divided into two: natural fibres or synthetic fibres. Both have their strengths and weaknesses, which fabric suppliers try to reduce by mixing them together to form more durable fabrics. From a sustainability point of view fibres can be seen as either water or energy consumers. Natural fibres are seen to use more water: cotton needs to be watered and wool needs to be washed. Synthetic fibres such as elastane and polyester (which are petroleum based substances) use more non-renewable resources. (Fletcher 2013, 524).

Flether (2013) classifies natural fibres as 'exclusively made from plant or animal sources'. These fibres are also biodegradable, unless treated with a synthetic coating (for example for flame retardancy or anti wrinkling). Their production is often seasonal, as plants grow during summer time and wither during wintertime. (Fletcher 2013, 528). The next sections will focus on cotton, the natural fibre most commonly used by the clothing industry.

## 5.1 Organic cotton production

Cotton is the silky staple fibre that grows around the seeds of the cotton plant, genus Gossypium in the family of Malvaceae. Thin individual strands grow to form a protective boll that not only protects the seeds but also helps them disperse in the wind. The bolls are either picked by hand or with a cotton picker. They are very susceptible to pests such as insects and mold. (Boncamper 2011, 101). To prevent damage, insecticides are sprayed on the plant or a GM crop is used. GM refers to Genetically Modified, which refers to the modification of the crop's genetic makeup to better suit the industrial purpose. In the USA, 96% of cotton production is GE, Genetically Engineered, cotton. (USDA 2014, 26).

Once the bolls are harvested they are dried and cleaned to prepare for ginning. The first patented cotton gin was made in 1793 by Eli Whitney and could process 23kg of lint per day (National Achieves 2015). The lint is carded or combed to align the fibres for higher quality yarns and then spun into yarns as a blend or as a pure quality. Common blends are made by using polyester and elastane. Polyester is added for durability while elastane is added for stretch. (Boncamper 2011, 112).

A lot of research and funding has been used to find ways to lessen the impact of conventional cotton production in the last 40 years (Boncamper 2011, 114-116.) Initiatives include BCI (Better Cotton Initiative), Fair Trade Cotton and Organic Cotton. Organic Cotton should not be mixed up with Green Cotton, which is a shrink resistant fabric that has been treated with formaldehyde compounds (Boncamper 2011, 117.) The term organic is not standardized and can be misleading. Some scepticism cannot be avoided and many believe there is less production of organic cotton than pales of organic cotton sold (Arnold 2009, 2185.)

Water usage is an important aspect of cotton production. Up to 3800 litres of water can be used to grow only 10 kg of cotton, depending on agricultural practise and climate. As water is in a perpetual natural cycle and cannot be quantified in just usage, it can be argued that water used in

cotton farming denies access to water for other uses. (Fletcher 2013, 552). Water can also be a curse as runoff from fields prepared for cotton production with organophosphates acts as a neurotoxin and increases dead zones in the oceans (Chouinard & Stanley 2013, 700.) Cotton pollutes not only by common cultivation methods, but by common dyeing and treatment methods accumulating to 20% of all industrial water pollution in textile production (Chouinard & Stanley 2013, 730.)

Enterprises choosing to use only organic fibres versus conventional fibres have made a good start, but how to assure consumers that the garments sold are indeed made from organic fibres? Fletcher (2013) points to the limited supply of organic cotton as the main factor explaining why the use of conventional cotton is still so prevalent. The limited supply of organic cotton is tied to the organic production quantities that have not surpassed that of conventional cotton. How viable can organic cotton be seen when its productivity is 50% less than that of conventional cotton? (Fletcher 2013, 856).

These issues aside, there are numerous benefits in going for organic instead of conventional, ranging from low levels of toxicity to smaller carbon footprints. To avoid being labelled as greenwash it is best to go for certified organic fibres, even though there might be costs involved in getting certified and changing established procedures.

Sections 5.1.1 to 5.1.4 discuss the different organisations that act as stakeholders in the standardisation and certification of organic cotton. The organisations focused on are Pesticide Action Network, Global Organic Textile Standard, Organic Content Standard and the Soil Association. These organisations have been chosen to offer insight into the organic textile industry and how it has yet to define itself.

## 5.1.1 Pesticide Action Network (PAN)

Pesticides do not respect national borders and that is why Pesticide Action Network, or PAN for short, operates in over 90 countries with 600

participating nongovernmental organizations, institutions and individuals. Founded in 1982 with the ethos of replacing the use of hazardous pesticides with ecologically sound and socially just alternatives, PAN operates as five independent yet collaborating Regional Centres that implement its projects and campaigns. (Pesticide Action Network International 2015).

The health risks associated with pesticides are well documented. Silent Spring, written by Rachel Carson in 1962, was the first of its kind to link pesticide usage with high mortality rates of animals high in the food chain, such as prey birds. The book caused a public outrage that led to a ban on the pesticide DDT, but the subject remains controversial in North America. (Pesticide Action Network, North America 2015).

Pesticide Action Network UK promotes organic cotton under its own project name Wear Organic. The project is mainly focused on small family farms in Africa, specifically in Benin and Senegal. Wear Organic acts more as an awareness and educational campaign than a standardisation system and can be used as a sourcing tool. The value associated with transparency of origin, in this case knowing where the organic cotton comes from and being able to measure the economic impact the bought garment has made on the community, is something not to be overlooked. (Pesticide Action Network UK 2015).

### 5.1.2 Global Organic Textile Standard (GOTS)

GOTS stands for Global Organic Textile Standard and is an independent organisation that certifies organic fibres ranging from cotton to hemp. Established in 2006, the organisation has gained universal recognition and is seen by consumers and companies alike as a reliable quality assurance concept. (Global Organic Textile Standard 2015a).

To achieve this certification, the fibres must comply with GOTS requirements: farming that maintains and replenishes soil fertility without the use of toxic, persistent pesticides and fertilizers; requirements

throughout the supply chain for both ecology and labour conditions in textile and apparel manufacturing; adequate animal husbandry and the exclusion of genetic modification. GOTS is a widely recognized standard due to its global partners (USA, Japan, Germany and UK). Becoming certified by such a well-established organisation would highlight the company positively from the competition and justify a premium price point to the customer. The certification is not for free, costing for a mid-sized brand as much as 4000€ per season. The price is also dependent on the quantity of styles certified, creating a financial limit to smaller companies regarding their collection size per season. (Global Organic Textile Standard 2015b).

Fletcher (2013) highlights the strong social elements and ethical production principles included in organic production. It can be seen as agricultural guidelines but are a tool for social change. Not only does the Global Organic Textile Standard include lists of permitted process chemicals and recommendations for dyeing and finishing techniques but is also built around the concept of supporting struggling small family farmers to compete with large commercial farms by receiving a premium for their products. (Fletcher 2013, 844).

### 5.1.3 Organic Content Standard

The Textile Exchange started the OCS (Organic Content Standard since 2013; previously OE 100 and Blended Standards) in 2007 as a way to standardize the tracking and verification of organic fibres. Originally developed for organic cotton, the standard was modified to encompass all organic fibres in 2013. A non-profit organisation with strong connection in the fashion industry, Textile Exchange put their standards out for review and comment by professionals from the certification community before publication in order to reach the highest quality and to avoid bias. They also keep an extensive list of suppliers and manufacturers accredited by them. (The Textile Exchange 2013).

The standard traces the organic fibre flow throughout the entire textile supply chain, making it complementary to GOTS. Even when the minimum GOTS claim of 70% of organic fibres is not met, with OCS a textile product is allowed a corresponding organic 'fibre claim'. The OCS can be used as a stepping-stone to GOTS, which has high standards for compliance and due to some overlap between the two standards. Some styles are best certified via OCS as certain garments cannot comply with GOTS because of their composition, dyestuff or trims. (Global Organic Textile Standard 2015c).

The drawback with OCS is that it is not as well known by consumers as GOTS, making it more difficult to justify for small and medium brands. The standardisation for OCS is not as complicated as for GOTS, making it a viable option for brands not looking to overhaul their whole supply chain. For specifics on the supplication and certification process, Ecocert's guide to OCS certification is highly recommended (Ecocert 2015, 4.)

#### 5.1.4 Soil Association

The Soil Association is very well known and respected in Great Britain and the main certifying body for the GOTS certificate in the United Kingdom. The stringent certificate applies not only to organic textiles but also to organic garments, where only 5% of non-organic materials including accessories is permitted. The rules for organic textiles are as follows: Grade 1 'Organic textile' is 95% organic fibres, 5% non-organic natural or synthetic fibres, Grade 2 'Made with organic fibres' is 70% organic fibres, 25% non-organic natural fibres and 5% synthetic fibres. The Soil Association certifies within not only the fashion industry, but also food and cosmetics. (Global Organic Textile Standard 2015d).

Founded in 1946, the organisation focuses on four principles:

- The loss of soil through erosion and depletion
- Decreased nutritional quality of intensively produced food
- Exploitation of animals in intensive units

Impact of large intensive farming system on the countryside and wildlife

Propelled to action following the Second World War by the health implications of increasingly intensive agricultural systems the group researched different agricultural methods to draw up their first standards in 1967, saying:

The use of, or abstinence from, any particular practice should be judged by its effect on the well-being of the micro-organic life of the soil, on which the health of the consumer ultimately depends (Soil Association 2015).

Not only does the consumer benefit from organic textiles, but also the farmers and workers that handle the fibres at the source. Working with organic products is protection in the form of stringent social criteria and total traceability and transparency across the entire supply chain with a ban from using poisonous pesticides and defoliants. Large multinational companies that sell these toxic compounds often tie the farmers into a treadmill of debt, where income from next year's crop is needed to pay for this year's pesticides. (Continental Clothing Co. 2014).

## 5.2 Production process standards

Fibre is spun into yarn, yarn is woven or knitted into fabric, the fabric is dyed and treated with finishing agents and is cut and sewn into garments, all of which involve energy, water and chemical consumption at varying levels. How these processes are run and how their waste is treated determine the carbon foot print of the said activity, but some practises can be recommended over others. Fletcher (2013) recommends these best practices: the use of automated systems for dosing and dispensing of chemicals and controlling machine variables, to maximize efficiency; measures to attain water- and energy-efficiency; to avoid fabrics dyed with hazardous dyestuffs and auxiliaries, substituting alternatives that are biodegradable or bio eliminable; to reuse and exhaust dye stuff on repeat

shades and reuse rinse water for the next dyeing; to make sure wastewater is treated prior to discharge. (Fletcher 2013, 1543).

Keeping on top of all the new production techniques can require very considerable resources and using a certifying body is time and cost effective. Not only do certifying bodies provide credibility but also professional knowledge. Finding one that suits the company's needs can be a daunting task, as the different organisations overlap and their compliance standards and level of brand awareness differ. For this thesis the focus is placed on the two most well-known standards, to showcase how they suit different markets and price points.

## 5.2.1 Synthetic and man-made fibres

Synthetic fibres are made from non-renewable resources and thus focusing on reducing energy and water consumption, laundering needs and recycling into use in new garments are key to reducing overall environmental impact. Polyester is not biodegradable, but can be efficiently recycled. Fletcher (2013) suggests that over half of all staple polyester fibre in Europe is now made from recycled materials (Fletcher 2013, 1080.) Polyamide is known for its durability and recyclability. The industrial regeneration system can draw from post- and pre-consumer waste to create new fabrics. Elastane as a fibre is not seen as a viable option for recycling due to its complicated structure. (Boncamper 2011, 339-342). Some advances have been made in finding solutions for this but biodegradable elastane is not currently produced commercially.

Man-made fibre undergoes highly toxic processes to become suitable for the apparel industry but innovations such as closed loop-production methods have become commonplace. Lyocell is the third generation of viscose production. Conventional viscose manufacturing uses highly corrosive heavy metals and is very energy consuming. Lyocell was developed to find an alternative to those methods and to raise efficiency levels. Rolls of wood pulp are cut into small squares, which are then

dissolved in a solution. The solution used is low toxic and 99.5% of it is collected back after the fibres have been formed. The fibre strands are washed and once the solution has dried in a drying area, the chemicals used are recovered. (Boncamper 2011, 249). Lyocell can be recycled into paper.

Although it is sustainable to use recycled materials the benefit gained from that is lost if the fibres cannot be recycled again at the end of their new life. Garments made using a blend of fibres are difficult to recycle, as the fibres are hard to separate from each other. The reason for the high number of blended garments is that the garments benefit from the characteristics of both fibres.

## 5.2.2 Bluesign

Bluesign Technologies AG was founded in Switzerland in 2000. The organisation works to combine chemistry, textile technology; environment technology and supply chain management to offer a solution for the whole textile industry (Bluesign Technologies AG 2015.)

The strength of the certification is in its clarity to the customers. Bluesign clearly focuses on water usage and pollution. Thus it is clear how it benefits the environment. The certification process is even stricter than for the GOTS certification, as it requires not only specialized processes, but also specialist dyeing machinery. This will add to the production costs of each garment, in addition to the certification cost.

Bluesign announced two big sportswear partnerships in 2014 with rival brands Puma and Adidas. Both brands intend to reduce the use of toxic chemicals in the form of dyestuffs and finishing agents in their production by implementing compounds from the Bluesign database. Also Berghaus, the first UK sportswear brand to sign up to the Bluesign standard, has communicated their commitment to reduce the amount of toxic chemicals used by their suppliers. (Puma 2014; Barrie 2014; McHale 2015).

### 5.2.3 OEKO-TEX 100

OEKO-TEX® was founded in Switzerland in 1992 with the aim to offer a guarantee of quality for textile products. The certified garments would be free from harmful substances and give consumers confidence in textiles, a wording the organisation later used as their slogan. (OEKO-TEX Association 2015a).

The compliance standard for the OEKO-TEX® Standard 100 differs from the bluesign® system in that each component and process of the garment is certified separately. The independent testing and certification system can be used for textile raw materials, intermediate and end products at all stages of production, including raw and dyed/finished yarns, raw and dyed/finished fabrics and knits, ready-made articles. (OEKO-TEX Association 2015b).

Very well-known and widely used in Germany, this European standard is known as an easy way into standardization. Built as a process rather than a subjective audit, each component of the garment is tested for compliance. As long as the brand continues using the same certified components – trims, fabric and finishing – all new products can be certified to carry the OEKO-TEX 100 label.

### 5.2.4 Climate Neutral Certification

The Carbon Neutral Company was founded in 1997 and in 2015 has offices in London and New York. The company has worked with 350 companies in 35 countries including many big clients such as Marks & Spencer, Ted Baker and ASOS. The company offers CarbonNeutral® certification, which once achieved can be communicated on websites, reports and packaging. (The Carbon Neutral Company 2015a).

A company can become carbon neutral with a combination of internal reductions and carbon offsets. This cost effective way of optimizing the supply chain works well for brands with a wholesome image like Neal's

Yard Remedies, where the consumer is already conscious of the environmental impact of their purchase. The CarbonNeutral Company offers constancy packages for companies, but also runs events and webinars. (The Carbon Neutral Company 2015b).

At the same time The Carbon Trust, founded in 2001 in London, also offers a carbon neutral certification but under the name Carbon Trust Standard. 1,100 organisations have successfully applied for the standard and the company has offices in UK, China, Mexico, Brazil, South Africa and the USA. The Carbon Trust operates as a consultancy and as an advisory board, running projects with the World Bank and upcoming Olympics around the world. (The Carbon Trust 2015).

One of the apparel companies that The Carbon Trust has partnered with is Continental Clothing, a company that sells business to business. Offering t-shirts and sweatshirts for promotional use, Continental Clothing succeeded in a 90% reduction in their carbon footprint and their EarthPositive® products carry the registered mark "Climate Neutral". (Continental Clothing Co, 2015).

#### 6 CONSUMER SURVEY RESPONCES

The purpose of the questionnaire is to aid the study of consumer behaviour when it comes to purchasing and brands with green credentials and to establish any possible trends, which show values held by customers. The hypothesis is that consumers are willing to pay more for brands when affiliated with an organisation they know and less when affiliated with an organisation they do not know. In addition, the questionnaire studies how purchasing patterns change when shopping for someone other than yourself, centring on the idea that mothers of young children are more concerned to buy organic cotton for their children than themselves. The questionnaire was conducted using Google Forms.

The questionnaire is written in English and the link was spread via international LinkedIn communities and Facebook and received most responses from Finland. In the questionnaire, the respondent is asked about their awareness of specific organisations that work in sustainability and/or ethics. The Red Cross was used as a control measure as it is a well-established international organisation. The hypothesis was that all responses would choose 'I know it' with regard to the Red Cross.

By 28<sup>th</sup> July 2015, 249 responses were received. This is enough to draw conclusions for the purpose of this thesis.

The questionnaire does not explore the particular characteristics of the shopper for two reasons: to establish a typical shopper there must a defined product, which this person buys, and as big a section as possible of the particular customer base for that product would have to be surveyed in order for the data to be accurate.

As this thesis is not concerned with particular products and has no access to an existing customer base, the questionnaire was geared around the perceived value of different green credentials, rather than around specific products.

The questionnaire ends with a freely formed list of five online shopping platforms for the conscious consumer. The list was used to add more interest in filling out the questionnaire and to attract more responses. The questionnaire can be found in the chapter Attachments with the statistics of all responses.

## 6.1 Responses

The most common response came from a woman in Finland, 25-35 years old who shops at High street brands. High street is defined as "(of retail goods) catering to the needs of the ordinary public" (Oxford English Dictionary, 2015e.) Last month she bought 0-4pcs of clothing and buys for no-one else than herself. If she buys for someone else, the main criterion of purchase are cost, fit and durability; and she would be willing to pay premium for garments that were fair trade, organic or made in Europe. In question 9 the majority of consumers responded that the person for whom the garment is bought has somewhat of a say in what is bought for them. When buying for themselves the most important criterions of purchase are fit, cost and quality and the participants would be willing to pay more for garments that are fair trade, organic or made in Europe.

All but 11 people knew the control organisation the Red Cross, and the best-known organisations were the biggest ones: PETA, WTFO and Pink Ribbon. Surprisingly, only 53 people of the 249 who responded know The Vegan Society. There can be seen a small difference between willingness to buy a garment if it was associated with an organisation or indifference to it. When looking at buying a garment associated with organisations that were unknown, a majority of 191 responses choose 'doesn't affect', meaning that they would shop regardless.

Most importantly, when asked if they would be willing to pay more for garments that were associated with an organisation they know, 160 people said they were willing to pay 'slightly more'. Following the initial hypothesis, a clear majority of 211 people responded that they would be

unwilling to pay extra for a garment that was associated with an organisation they did not know.

# 6.2 Analysis

For further analysis, the response group has been narrowed down to women living in Finland or the United Kingdom of age groups 18-24 year olds and 25-35 year olds who shop in the High Street or mid-range shops. The questions analysed are questions 10-16.

Question 10 'When buying garments for yourself, which of these points do you look at?'

Of the eight options available recycling was unanimously the point least considered during a purchase decision. The top three concerns were garment cost, fit and material tied in with durability, as can be seen in Figure 9. The result corresponds with Arnold (2009, 2921) who asserts that the consumer finds it irrelevant how ethical an outfit is, if it does not look good.

Slight differences can be seen in how the 25-35 year olds place more importance in what material the material is made of than how fashionable the garment is. This trend is reversed in the 18-24 year olds are more aware of how fashionable the garment is but who do place such weight on what the garment is made of. These two age group replied quite similarly and no big distinguishing factor can be seen between the two.

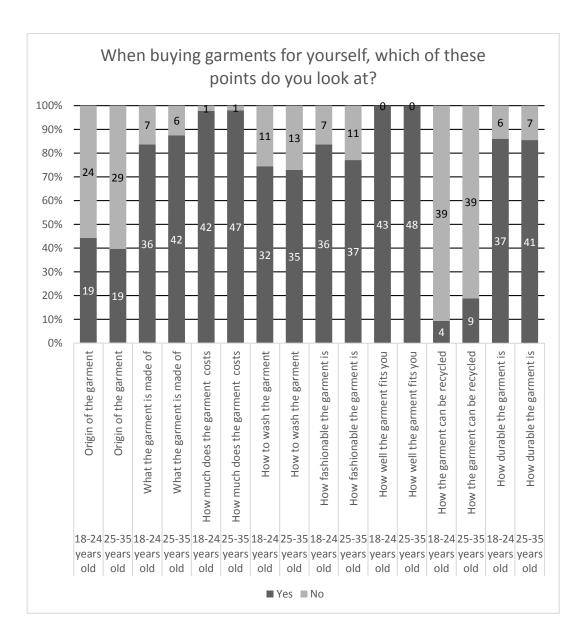


Figure 9. Analysis of question 10.

Question 11) 'When buying garments for yourself, would you pay premium for garments that were:'

The two age groups responded similarly, but slight differences can be seen. Fair Trade was a lot more important to 25-35 year olds when compared to 18-24 year olds for whom 'Made in Europe' was most important. Both groups also highly rated Organic with least interest into Recycled green claims, as can be seen in Figure 10.

Corresponding with question 10 where how much a garment can be recycled was the least important concern when purchasing a garment in question 11 would you pay premium for garments were biodegradable received the least yes-responses. The age group of 25-35 year olds replies indicate that this age group is in general more willing to pay premium for garment with green claims than the 18-24 year olds who responded.

An average count of no-replies from both age groups is 39% and indicates that the responding consumer is unwilling to pay premium for a green claim. This count of indifference to green claims is an important parameter to enterprises looking to become green. Is a company has a high indifference percentage, the financial loss of being certified might not be outweighed with the rise of sales.

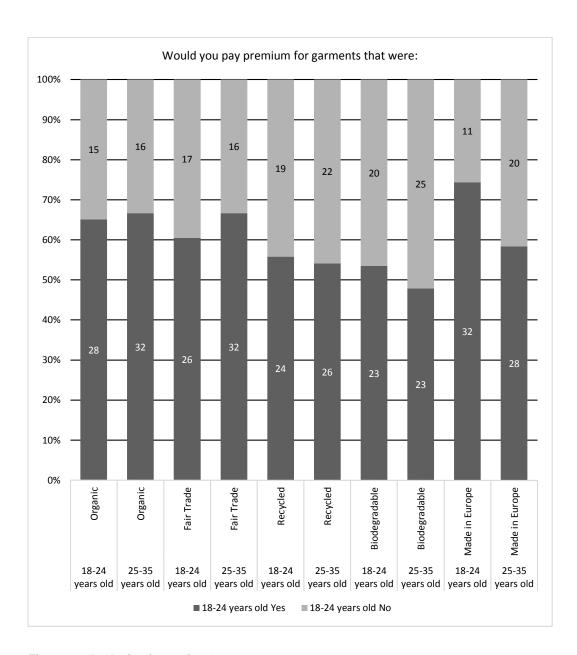


Figure 10. Analysis of question 11.

Question 12) 'Do you know these organisations?'
Bluesign, Sustainable Apparel Coalition, MADE-BY, Fair Wear Foundation and PAN were known by less than 13 consumers and thus these organisations were omitted from further analysis.

Surprisingly a bigger percentage of consumers within the 25-35 year olds know the Vegan Society better than 18-24 year olds. Knowledge of EKO-TEX appears also higher within this age group. GOTS is not well known by either of the age groups, which indicate that although organic fibers are well established in today's apparel market, the consumer is not aware of the certificates available.

As can be seen in Figure 11, 58% of all yes responses in these two segments came from the 25-35 year olds. The conclusion to be drawn from this is that the 25-35 year olds who responded to this questionnaire know more organisations than 18-24 year olds. Perhaps this is an indicator of a longer period of brand education or may be associated with changes in lifestyle as maturity sets in.

The 18-24 year olds, who didn't know as many organisations as the 25-35 year olds, responded percentage wise more willing to pay for affiliation with an organisation that they do not know then the 25-35 year olds. This can be seen in Questions 13 to 16, Figures 12 and 13.

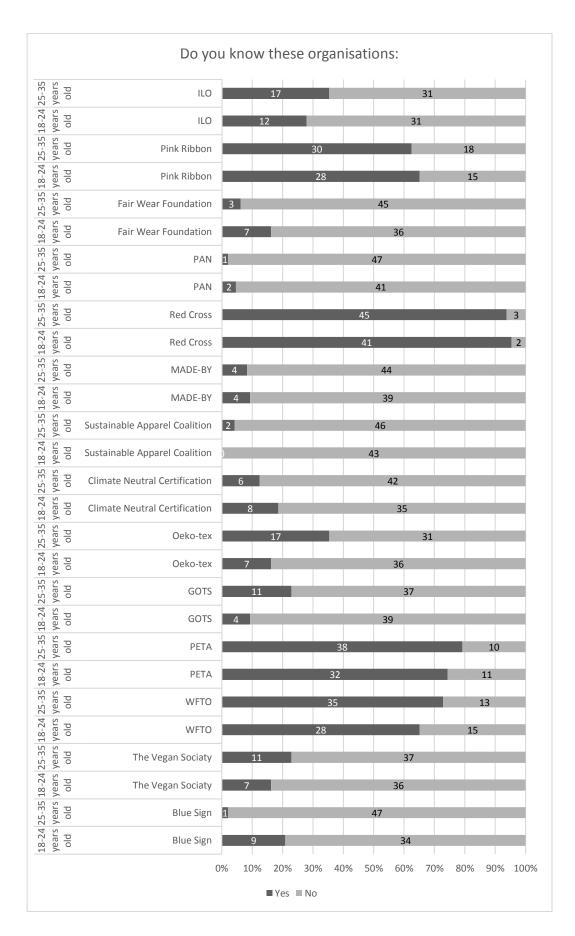


Figure 11. Analysis of question 12.

The hypothesis of this thesis is confirmed in responses to Question 13) 'If you know the organisation how likely would you be to buy a garment?' A high percentage of 98% in both age groups give either the response of 'Doesn't affect' or 'More likely', as can be seen in Figure 12. Over 50% of both age groups responded that it would be more likely that they would purchase a garment is they knew the organisation associated with it.

The trend is not reversed when the organisation is not known in Question 14) 'If you don't know the organisation how likely would you be to buy a garment?' The most common response being that not knowing an organisation does not affect the purchasing decision, as can be seen in Figure 12. Only 2% of all responses within these two segments would be more likely to purchase a garment even when they did not know the organisation.

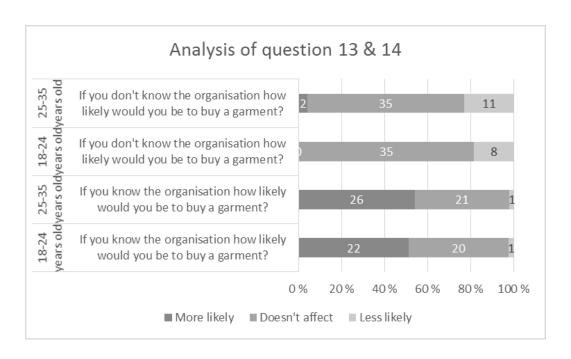


Figure 12. Analysis of question 13 & 14.

When looking at Question 15) 'If you know the organisation how much more are you willing to pay for a garment?' the trend among the responses is towards paying slightly more for affiliation with an organisation that is known, as can be seen in Figure 13. Only 4% of all responses indicate willingness to pay substantially more for a garment affiliation with an organisation they knew. This indicates that a slight increase in price is commercially acceptable to the consumer.

The hypothesis is confirmed again in Question 16) 'If you don't know the organisation how much more are you willing to pay for a garment?' as the majority of all responses indicate willingness to pay no more for affiliation with an organisation they do not know, as you can see in Figure 13.

Enterprises looking to implement premium-pricing strategies to counter the financial loss of being certified must place high importance in being certified by an organisation that is well known to their customer base.

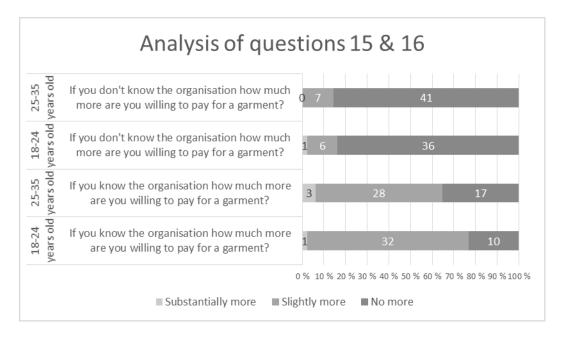


Figure 13- Analysis of question 15 & 16.

The most relevant comments in response to question 17 were:

- The questionnaire does not take into account consumers that only shop second hand.
- Recognition of an organisation is not enough to prompt a purchasing decision; indeed, recognition of an organisation might hinder a purchasing decision.
- If an organisation has good branding, the consumers purchase decision can be influenced, even without prior knowledge of said organisation.
- One response came from a small fabric shop in New Zealand with a comment on price threshold: "Consumers will only pay maximum 20 to 30% premium for these sorts of garments."
- More consumer education on the environmental impact of fashion is required.

## Other interesting open comments:

I make the decision of buying clothes based on whether I would wear the garment after 5-10 years. Is it durable enough, does it get better with age and do I love it enough. I usually leave the garment in the shop for a couple of days even if I like it to make sure if I really will miss it in my closet. No light decisions or Friday dresses.

How an organization's brand would affect depends on the organization: I would not care for pink ribbon, but Red Cross is important etc.

My clothing purchasing is based on the functionality of the piece. It's combined by the fabric, style, how to wash the piece and how much the clothing costs. Ecological or other reasons mentioned in this questionnaire might make me choose between two otherwise equal pieces if the price and all are the same. Otherwise I'm not willing to buy something just because it's eco-friendly.

If a sustainable/ethical garment costs way too much only because of the brand or organisation, it's no better than a bigger corporation that sells products at low prices and exploits their employees.

### 7 CONCLUSION

This thesis has explored different ethical and sustainable apparel standards, organisations and certification systems in the apparel industry in the 21st century. A model was drawn from books and journal articles to illustrate the different levels of validation for green credentials. The proposed model was presented to arrange the standards, organisations and certificates in a manner that considers labour and cost efficient means to ensure that brand affiliation and supply chain management are in line with green credentials. Further research was done to determine where the ethical and sustainable apparel standards, organisations and certification are placed within the different levels of the proposed model. Green credential validation via supply chain management, charitable affiliation and third party certification was presented at the core of the model in dialogue with the proposed model and literature.

This thesis offers many further research paths, including:

- 1. Case studies of enterprises utilizing the proposed model.
- Investigation of ethical and sustainable organisations, standards and certification in order to gain a more complete view of the sustainable apparel industry.
- A broader empirical study into consumer behaviour and response to green claims is needed to fully comprehend how the consumer distinguishes between validated green credentials and greenwash.
- 4. Research into other proposed models for increasing green credentials.
- 5. Research into the financial impacts of being seen as greenwash on enterprises.
- 6. Research into financial gain of validated green credentials on enterprises.
- 7. Further study into ethical and sustainable values within different age groups and purchasing habits.

### **SOURCES**

Printed sources

Arnold, C. 2009. Ethical Marketing and The New Consumer: Marketing in the New Ethical Economy Kindle Edition. 1<sup>st</sup> edition. Chichester: Wiley.

Barendregt, B. & Jaffe, R. 2014. Green Consumption: The Global Rise of Eco-Chic. London: Bloomsbury Academic.

Boncamper, I. 2011. Tekstiilioppi Kuituraaka-aine. HAMKin julkaisuja 7/2011. Hämeenlinna: Hämeen ammattikorkeakoulu.

Chapman, J. 2005. Emotionally Durable Design: Objects, Experiences and Empathy. 1<sup>st</sup> edition. Abingdon: Routledge.

Chouinard, Y & Stanley, V. 2013. The Responsible Company Kindle Edition. 1<sup>st</sup> edition. Ventura: Patagonia Books.

Fletcher, K. 2013. Sustainable Fashion and Textiles: Design Journeys Kindle Edition. 2<sup>nd</sup> edition. Abingdon: Routledge.

Gittings, C. 2002. The Advertising Handbook. New York: Routledge.

Hoskins, T.E. 2014. Stitched Up: The Anti-Capitalist Book of Fashion (Counterfire) Kindle Edition. 1<sup>st</sup> edition. London: Pluto Press.

Hugos, M. 2011. Essentials of Supply Chain Management (Essentials Series) Kindle Edition. 3<sup>rd</sup> edition. Chichester: Wiley.

Mackey, J & Sisodia, R. 2013. Conscious Capitalism, With a New Preface by the Authors: Liberating the Heroic Spirit of Business Kindle Edition. With a New Preface by the Authors edition. Boston: Harvard Business Review Press.

Oxford Popular English Dictionary. 1990. Great Britain: Parragon Plus.

Plunkett, J. W. 2009. Plunkett's apparel and textiles industry almanac. Houston: Plunkett Research Ltd.

Rivoli, P. 2014. The Travels of a T-Shirt in the Global Economy: An Economist Examines the Markets, Power, and Politics of World Trade. New Preface and Epilogue with Updates on Economic Issues and Main Characters Kindle Edition. 2<sup>nd</sup> edition. Chichester: Wiley.

#### Standards

The United Nations General Assembly (1987) 37 Report of the World Commission on Environment and Development: Our Common Future.

Transmitted to the General Assembly as an Annex to document A/42/427 - Development and International Co-operation: Environment. [referenced on: 06/12/2015]

### Electronic sources

Advertising Standards Authority. 2008. Event Report Environmental claims in advertising. Is green a grey area? p. 4 [referenced 06/12/2015]. Available on:

https://www.asa.org.uk/~/media/Files/ASA/Reports/EnvironmentalClaimsS eminarReport.ashx.

Backteman, R. Batmunkh, T. & Ström R. 2009. CSR - A marketing tool? A case study of ICA's and Lindex's Pink Ribbon campaign [referenced on: 06/12/2015]. Available on: <a href="http://www.diva-portal.org/smash/get/diva2:305822/FULLTEXT01.pdf">http://www.diva-portal.org/smash/get/diva2:305822/FULLTEXT01.pdf</a>.

Barrie, L. 2014. Germany: Adidas aims to use only Bluesign®-approved chemicals [referenced on: 06/12/2015]. Available on Just-style: <a href="http://www.just-style.com/news/adidas-aims-to-use-only-bluesign-approved-chemicals\_id122765.aspx">http://www.just-style.com/news/adidas-aims-to-use-only-bluesign-approved-chemicals\_id122765.aspx</a>.

BBC News. 2015. Where do your old clothes go? [referenced on: 06/12/2015]. Available on: (<a href="http://www.bbc.co.uk/news/magazine-30227025">http://www.bbc.co.uk/news/magazine-30227025</a>.

Bluesign Technologies AG. 2015. About us [referenced on: 06/12/2015]. Available on: <a href="http://www.bluesign.com/home/about-us#.VmS0tbiLSUm">http://www.bluesign.com/home/about-us#.VmS0tbiLSUm</a>.

Carbon Trust. 2015. Introducing the Carbon Trust [referenced on: 06/12/2015]. Available on:

http://www.carbontrust.com/media/314596/carbon-trust-booklet-2015.pdf.

CENSA. 2007. ISAUK Research Report 07-01 [referenced on: 06/12/2015]. Available on: <a href="http://www.censa.org.uk/docs/ISA-UK Report 07-01\_carbon\_footprint.pdf">http://www.censa.org.uk/docs/ISA-UK Report 07-01\_carbon\_footprint.pdf</a>.

Charity Star. 2015. H&M Countries Activities [referenced on: 06/12/2015]. Available on: <a href="http://www.hm.charitystar.com/en/home/">http://www.hm.charitystar.com/en/home/</a>.

Continental Clothing Co. 2014. About Earth Positive Apparel [referenced on: 06/12/2015]. Available on: <a href="http://www.continentalclothing.com/page/about\_earthpositive\_apparel/?langen.">http://www.continentalclothing.com/page/about\_earthpositive\_apparel/?langen.</a>

Continental Clothing Co. 2015. Carbon footprint reduction [referenced on: 06/12/2015]. Available on:

https://www.continentalclothing.com/home/about.

Dahlsrud, A. 2006. How Corporate Social Responsibility is Defined: an Analysis of 37 Definitions [referenced on: 06/12/2015]. Available on: <a href="http://www.mcxindia.com/csr/newsarticle/pdf/csr\_news45.pdf">http://www.mcxindia.com/csr/newsarticle/pdf/csr\_news45.pdf</a>.

ECHA. 2015. Understanding REACH [referenced on: 06/12/2015]. Available on: http://echa.europa.eu/regulations/reach/understanding-

### reach.

Ecocert. 2015. Certification process OCS Organic Content Standard [referenced on: 06/12/2015]. Available on: <a href="http://www.ecocert.com/sites/default/files/u3/OCS-certification-process.pdf">http://www.ecocert.com/sites/default/files/u3/OCS-certification-process.pdf</a>.

Everlane. 2015. Factories [referenced on: 06/12/2015]. Available on: https://www.everlane.com/factories.

Fairtrade International. 2015. History of Fairtrade [referenced on: 06/12/2015]. Available on: <a href="http://www.fairtrade.net/about-fairtrade/history-of-fairtrade.html">http://www.fairtrade.net/about-fairtrade/history-of-fairtrade.html</a>.

Fair Wear Foundation. 2014. FWF Membership fee 2014 [referenced on: 06/12/2015]. Available on: <a href="http://www.fairwear.org/ul/cms/fck-uploaded/documents/forcompanies/membershipfees/Membershipfee2014">http://www.fairwear.org/ul/cms/fck-uploaded/documents/forcompanies/membershipfees/Membershipfee2014</a>. <a href="http://www.fairwear.org/ul/cms/fck-uploaded/documents/forcompanies/membershipfees/Membershipfee2014">http://www.fairwear.org/ul/cms/fck-uploaded/documents/forcompanies/membershipfees/Membershipfee2014</a>. <a href="http://www.fairwear.org/ul/cms/fck-uploaded/documents/forcompanies/membershipfees/Membershipfee2014">http://www.fairwear.org/ul/cms/fck-uploaded/documents/forcompanies/membershipfees/Membershipfee2014</a>.

Fair Wear Foundation. 2015. About [referenced on: 06/12/2015]. Available on: <a href="http://www.fairwear.org/22/about/">http://www.fairwear.org/22/about/</a>.

Filippa K. 2015. Corporate Social Responsibility [referenced on: 06/12/2015]. Available on: <a href="http://www.filippa-k.com/en/company/csr">http://www.filippa-k.com/en/company/csr</a>.

Global Organic Textile Standard International Working Group. 2014.

Global Organic Textile Standard. Version 4.0 [referenced on: 06/12/2015].

Available on: <a href="http://www.global-standard.org/images/GOTS">http://www.global-standard.org/images/GOTS</a> Version4
01March2014.pdf.

Global Organic Textile Standard. 2015a. Comprehensive rules for ecological and socially responsible textile production [referenced on: 06/12/2015]. Available on: <a href="http://www.global-standard.org/">http://www.global-standard.org/</a>.

Global Organic Textile Standard. 2015b. About us [referenced on: 06/12/2015]. Available on: <a href="http://www.global-standard.org/about-us.html">http://www.global-standard.org/about-us.html</a>.

Global Organic Textile Standard. 2015c. What is the difference between GOTS and OCS (Organic Content Standard of Textile Exchange) and of the related certification systems? [referenced on: 06/12/2015]. Available on: <a href="http://www.global-standard.org/information-centre/faqs.html#what-is-the-difference-between-gots-and-ocs-organic-content-standard-of-textile-exchange-and-of-the-related-certification-systems">http://www.global-standard.org/information-centre/faqs.html#what-is-the-difference-between-gots-and-ocs-organic-content-standard-of-textile-exchange-and-of-the-related-certification-systems</a>.

Global Organic Textile Standard. 2015d. General description [referenced on: 06/12/2015]. Available on: <a href="http://www.global-standard.org/the-standard/general-description.html">http://www.global-standard.org/the-standard/general-description.html</a>.

McHale, J. 2015. Berghaus is first British outdoor brand to adopt bluesign eco-mark [referenced on: 06/12/2015]. Available on Grough: <a href="http://www.grough.co.uk/magazine/2015/05/08/berghaus-is-first-british-outdoor-brand-to-adopt-bluesign-eco-mark">http://www.grough.co.uk/magazine/2015/05/08/berghaus-is-first-british-outdoor-brand-to-adopt-bluesign-eco-mark</a>.

Kester, C. & Ledyard, D. 2012. UC Berkeley Haas School of Business. The Sustainable Apparel Coalition: A Case Study of a Successful Industry [referenced on: 06/12/2015]. Available on Centre for Responsible Business:

http://responsiblebusiness.haas.berkeley.edu/CRB SustainableApparelCaseStudy\_FINAL.pdf.

Kuyichi. 2015. Homepage [referenced on: 06/12/2015]. Available on: https://www.kuyichi.com/.

Lindex. 2015. Pink Ribbon [referenced 06/12/2015]. Available on: <a href="http://about.lindex.com/en/pink-ribbon/">http://about.lindex.com/en/pink-ribbon/</a>.

MADE-BY. 2015a. FAQ [referenced 06/12/2015]. Available on:

http://www.made-by.org/faq/#q1.

MADE-BY. 2015b. Who we work with [referenced 06/12/2015]. Available on: (<a href="http://www.made-by.org/consultancy/projects/">http://www.made-by.org/consultancy/projects/</a>.

MADE-BY. 2015c. How MODE Tracker works [referenced 06/12/2015]. Available on: <a href="http://www.made-by.org/partnership/scorecards/">http://www.made-by.org/partnership/scorecards/</a>.

National Achieves. 2015. Teaching With Documents: Eli Whitney's Patent for the Cotton Gin [referenced 06/12/2015]. Available on: https://www.archives.gov/education/lessons/cotton-gin-patent/.

Nudie Jeans. 2015. Production Guide [referenced 06/12/2015]. Available on: <a href="http://www.nudiejeans.com/#productionguide">http://www.nudiejeans.com/#productionguide</a>.

OEKO-TEX Association. 2015a. OEKO-TEX® Standard 100 - What is that? [referenced 06/12/2015]. Available on: <a href="https://www.oeko-tex.com/en/retailers/basics\_1/basics\_html">https://www.oeko-tex.com/en/retailers/basics\_1/basics\_html</a>.

OEKO-TEX Association. 2015b. OEKO-TEX® Standard 100 [referenced 06/12/2015]. Available on: <a href="https://www.oeko-tex.com/en/manufacturers/concept/oeko">https://www.oeko-tex.com/en/manufacturers/concept/oeko</a> tex standard 100/oeko tex standard 100.xhtml.

Organic Consumer Association. 2010. Media Investigation Finds
Contaminated Organic Cotton Clothing [referenced 06/12/2015]. Available
on: <a href="http://www.organicconsumers.org/articles/article\_20117.cfm">http://www.organicconsumers.org/articles/article\_20117.cfm</a>.

OXFAM UK. 2015. Brand engagement [referenced 06/12/2015]. Available on: <a href="http://www.oxfam.org.uk/get-involved/how-your-company-can-partner-with-us/brand-engagement">http://www.oxfam.org.uk/get-involved/how-your-company-can-partner-with-us/brand-engagement</a>.

OXFAM International. 2015. History of OXFAM International [referenced

06/12/2015]. Available on: <a href="https://www.oxfam.org/en/countries/history-oxfam-international">https://www.oxfam.org/en/countries/history-oxfam-international</a>.

Oxford University Press. 2015a. Green [referenced 06/12/2015]. Available on Oxford English Dictionary Online: <a href="http://www.oed.com/">http://www.oed.com/</a>.

Oxford University Press. 2015b. Credentials [referenced 06/12/2015]. Available on Oxford English Dictionary Online: <a href="http://www.oed.com/">http://www.oed.com/</a>.

Oxford University Press. 2015c. Greenwash [referenced 06/12/2015]. Available on Oxford English Dictionary Online: <a href="http://www.oed.com/">http://www.oed.com/</a>.

Oxford University Press. 2015d. Code of Conduct [referenced 06/12/2015]. Available on Oxford English Dictionary Online: http://www.oed.com/.

Oxford University Press. 2015e. High-street [referenced 06/12/2015]. Available on Oxford English Dictionary Online: <a href="http://www.oed.com/">http://www.oed.com/</a>

Oxford University Press. 2015f. Localism [referenced 06/12/2015]. Available on Oxford English Dictionary Online: <a href="http://www.oed.com/">http://www.oed.com/</a>.

Oxford University Press. 2015g. Sourcing [referenced 06/12/2015]. Available on Oxford English Dictionary Online: <a href="http://www.oed.com/">http://www.oed.com/</a>.

Oxford University Press. 2015h. Sweatshops [referenced 06/12/2015]. Available on Oxford English Dictionary Online: <a href="http://www.oed.com/">http://www.oed.com/</a>.

Patagonia. 2015. Footprint Chronicles [referenced 06/12/2015]. Available on: <a href="http://www.patagonia.com/eu/enGB/footprint">http://www.patagonia.com/eu/enGB/footprint</a>.

People Tree. 2015. Our Credentials [referenced 06/12/2015]. Available on: <a href="http://www.peopletree.co.uk/about-us/our-credentials">http://www.peopletree.co.uk/about-us/our-credentials</a>.

Pesticide Action Network International. 2015. What is PAN? [referenced 06/12/2015]. Available on: <a href="http://pan-international.org/">http://pan-international.org/</a>.

Pesticide Action Network North America. 2015. The DDT Story [referenced 06/12/2015]. Available on: <a href="http://www.panna.org/resources/ddt-story">http://www.panna.org/resources/ddt-story</a>.

Pesticide Action Network UK. 2015. FAQ [referenced 06/12/2015]. Available on: http://www.pan-uk.org/cotton/faq.

PETA Blog. 2015. Inditex Pulls Angora: Donates Almost \$1 Million of Clothing to Refugees [referenced 06/12/2015]. Available on: <a href="http://www.peta.org/blog/victory-inditex-pulls-angora-wool-donates-syrian-refugees/">http://www.peta.org/blog/victory-inditex-pulls-angora-wool-donates-syrian-refugees/</a>.

PETA. 2015a. Silk [referenced 06/12/2015]. Available on: <a href="http://www.peta.org.uk/issues/animals-not-wear/silk/">http://www.peta.org.uk/issues/animals-not-wear/silk/</a>.

PETA. 2015b. Milestones [referenced 06/12/2015]. Available on: http://www.peta.org/about-peta/milestones/.

PETA. 2015c. 'PETA-Approved Vegan' Logo [referenced 06/12/2015]. Available on: <a href="http://www.peta.org/living/fashion/peta-approved-vegan-logo/">http://www.peta.org/living/fashion/peta-approved-vegan-logo/</a>.

Pink Ribbon international. 2015. History [referenced 06/12/2015]. Available on: http://pinkribbon.org/about/history/.

Puma. 2014. Bluesign approved materials [referenced 06/12/2015]. Available on: <a href="http://about.puma.com/en/sustainability/products/bluesign-approved-materials">http://about.puma.com/en/sustainability/products/bluesign-approved-materials</a>.

Stella McCartney. 2015. PETA [referenced 06/12/2015]. Available on: http://www.stellamccartney.com/experience/us/charity/peta-5/.

Soil Association. 2015. Our history [referenced 06/12/2015]. Available on: <a href="http://www.soilassociation.org/Aboutus/Ourhistory">http://www.soilassociation.org/Aboutus/Ourhistory</a>.

Sustainable Apparel Coalition. 2015a. The Higg Index [referenced 06/12/2015]. Available on: <a href="http://apparelcoalition.org/the-higg-index/">http://apparelcoalition.org/the-higg-index/</a>.

Sustainable Apparel Coalition. 2015b. Member Spotlight: LEVI STRAUSS & Co [referenced 06/12/2015]. Available on: http://sacoalition.wpengine.com/member\_spotlight/levis/.

The British Red Cross. 2015a. H&M [referenced 06/12/2015]. Available on: <a href="http://www.redcross.org.uk/Get-involved/Corporate-support/Corporate-partners/H-and-M">http://www.redcross.org.uk/Get-involved/Corporate-support/Corporate-partners/H-and-M</a>.

The British Red Cross. 2015b. The founding of the British Red Cross [referenced 06/12/2015]. Available on: <a href="http://www.redcross.org.uk/About-us/Who-we-are/Museum-and-archives/Historical-factsheets/The-founding-of-the-British-Red-Cross">http://www.redcross.org.uk/About-us/Who-we-are/Museum-and-archives/Historical-factsheets/The-founding-of-the-British-Red-Cross</a>.

The Carbon Neutral Company. 2015a. Our history [referenced 06/12/2015]. Available on: <a href="http://www.carbonneutral.com/about-us/our-history">http://www.carbonneutral.com/about-us/our-history</a>.

The Carbon Neutral Company. 2015b. CarbonNeutral® certifications [referenced 06/12/2015]. Available on: <a href="http://www.carbonneutral.com/our-services/carbonneutral-certifications">http://www.carbonneutral.com/our-services/carbonneutral-certifications</a>.

The Guardian. 2013. Fashion: do we care more about animal rights than the environment? [referenced 06/12/2015]. Available on: <a href="http://www.theguardian.com/sustainable-business/sustainable-fashion-blog/fashion-animal-rights-care-environment">http://www.theguardian.com/sustainable-business/sustainable-fashion-blog/fashion-animal-rights-care-environment</a>.

The Textile Exchange. 2013. Organic Content Standard 2013 [referenced 06/12/2015]. Available on:

https://www.textileexchange.org/upload/Integrity/Standards/OCS/Organic %20Content%20Standard%20v1.pdf.

The Vegan Society. 2015a. History [referenced 06/12/2015]. Available on: <a href="https://www.vegansociety.com/about-us/history">https://www.vegansociety.com/about-us/history</a>.

The Vegan Society. 2015b. What is the Trademark? [referenced 06/12/2015]. Available on: <a href="https://www.vegansociety.com/your-business/are-you-registered">https://www.vegansociety.com/your-business/are-you-registered</a>.

USDA. 2014. Acreage, p. 26 [referenced 06/12/2015]. Available on Cornell University:

http://usda.mannlib.cornell.edu/usda/nass/Acre/2010s/2014/Acre-06-30-2014.pdf.

World Fair Trade Organization, Fairtrade International & FLO-CERT. 2011. Fair Trade Glossary [referenced 06/12/2015]. Available on:

http://www.fairtrade.net/fileadmin/user\_upload/content/2009/about\_fairtradee/2011-06-28\_fair-trade-glossary\_WFTO-FLO-FLOCERT.pdf.

#### **APPENDIX**

#### 7.1 Questionnaire

Thesis Questionnaire - Mila Mikkonen

Lahti University of Applied Sciences / Finland

Bachelor's Degree Programme in Process and Materials Engineering

Textile and Clothing Technology

Hello, my name is Mila Mikkonen and I study Textile and Clothing Technology at Lahti University of Applied Sciences based in Finland.

Thank you for taking the time to contribute to my thesis, titled Beyond Greenwash - Increasing Green Credentials without Breaking the Bank. All entries will be anonymous and only used as research for this thesis.

If you have any questions or comments, please email me at mila.p.mikkonen@gmail.com or leave a message in the open section at the end of the form.

Your reward at the end of the questioner: 5 Sustainable online shopping you need know about

- 1) Please choose the most appropriate gender to describe yourself:
- Female
- Male
- I prefer not to disclose
- Other
- 2) Where are you based?

Choose from a dropdown menu of 202 countries.

- 3) How old are you?
- 0-18 years old
- 18-24 years old
- 25-35 years old

- 36-45 years old
- 46-55 years old
- 56-65 years old
- Over 66 years old
- 4) Describe where you are most likely to shop for clothing:

  If you shop mostly online please choose one that most closely matches your shopping habits.
- None to spend on clothing
- Charity shops / Supermarkets (OXFAM, Sainsburys, Primark)
- High street brands (H&M, Zara, Mango)
- Mid range (Urban Outfitters, Marimekko, Paul Smith)
- High end / Luxury (Luis Vuitton, Harrods, Dior)
- 5) How many garments have you bought during the last month?
- 0-4pcs
- 5-10pcs
- 11-20pcs
- 21-30pcs
- 31-40pcs
- Over 41pcs
- 6) Do you buy clothing for someone else than yourself?
- Children 0-6 years
- Children 7-13 years
- Children 14-18 years
- Spouse
- Relatives
- Work
- No
- Other
- 7) When buying garments for other than yourself, which of these points do you look at?

Origin of the garment - (Yes/No)

What the garment is made of - (Yes/No)

How much the garment costs - (Yes/No)

How to wash the garment - (Yes/No)

How fashionable the garment is - (Yes/No)

How well the garment fits them - (Yes/No)

How the garment can be recycled - (Yes/No)

How durable the garment is - (Yes/No)

8) When buying for others would you pay premium for garments that were:

Organic - (Yes/No)

Fair Trade - (Yes/No)

Recycled - (Yes/No)

Biodegradable - (Yes/No)

Made in Europe - (Yes/No)

- 9) How much dies the person or persons you show for have a say in what is bought?
- None
- Somewhat
- They participate in the choice making
- They decide on the purchase
- Other\_
- 10) When buying garments for yourself, which of these points do you look at?

Origin of the garment - (Yes/No)

What the garment is made of - (Yes/No)

How much the garment costs - (Yes/No)

How to wash the garment - (Yes/No)

How fashionable the garment is - (Yes/No)

How well the garment fits you - (Yes/No)

How the garment can be recycled - (Yes/No)

How durable the garment is - (Yes/No)

11) Would you pay premium for garments that were:

Organic - (Yes/No)

Fair Trade - (Yes/No)

Recycled - (Yes/No)

Biodegradable - (Yes/No)

Made in Europe - (Yes/No)

12) Do you know these organisations:

All organisations work in sustainability and/or ethics.

Bluesign - (I know it/I don't know it)

The Vegan Society - (I know it/I don't know it)

WFTO (World Fair Trade Organisation) - (I know it/I don't know it)

PETA (People for the Ethical Treatment of Animals) - (I know it/I don't know it)

GOTS (Global Organic Textile Standard) - (I know it/I don't know it)

OEKO-TEX - (I know it/I don't know it)

Climate Neutral Certification - (I know it/I don't know it)

Sustainable Apparel Coalition - (I know it/I don't know it)

MADE-BY - (I know it/I don't know it)

Red Cross - (I know it/I don't know it)

PAN (Pesticide Action Network) - (I know it/I don't know it)

Fair Wear Foundation - (I know it/I don't know it)

Pink Ribbon - (I know it/I don't know it)

ILO (International Labour Organization) - (I know it/I don't know it)

- 13) If you know the organisation how likely would you be to buy a garment?
- More likely
- Doesn't affect
- Less likely
- 14) If you don't know the organisation how likely would you be to buy a garment?
- More likely

- Doesn't affect
- Less likely
- 15) If you know the organisation how much more are you willing to pay for a garment?
- No more
- Slightly more
- Substantially more
- 16) If you don't know the organisation how much more are you willing to pay for a garment?
- No more
- Slightly more
- Substantially more
- 17) Please leave a comment:
- 18) Do you want to take part in a further interview via Skype? Please leave email address below and I will be in touch.

Thank you for your participation in the questionnaire!

If you have any questions or comments, please email me at mila.p.mikkonen@gmail.com. Please share the questioner with friends and family!

Your reward: 5 Sustainable online shopping you need know about

The Reformation

Killer clothes that don't kill the environment.

https://www.thereformation.com/

**Vestiaire Collective** 

Buy authentic second-hand designer Items up to 70% off RRP.

http://www.vestiairecollective.com

### Etsy

Shop outside the big box, with unique items for upcycled clothing from thousands of independent designers and vintage collectors on Etsy. <a href="https://www.etsy.com/market/upcycled\_clothing">https://www.etsy.com/market/upcycled\_clothing</a>

# Wool and The Gang

Part tech start-up, part cottage industry, Wool and the Gang has pulled off the feat of making knitting cool among the Facebook generation.

www.woolandthegang.com

### **OXFAM**

Retailer charity shop aims to raise money to help people around the world rebuild their lives.

http://www.oxfam.org.uk/shop

# 7.2 Statistics of responses

Table 1. 1) Please choose the most appropriate gender to describe yourself:

Gender	Responses	Percentage
Female	182	73%
I prefer not to disclose	2	1%
Male	64	26%
Transmasculine	1	0%
Grand Total	249	100%

Table 2. 2) Where are you based?

Country	Responses	Percentage
Canada	2	1%
Denmark	2	1%
Finland	132	53%
Germany	6	2%
Iran	1	0%
Italy	1	0%
Japan	1	0%
New Zealand	9	4%
Nigeria	1	0%
Norway	2	1%
Sweden	3	1%
Switzerland	1	0%
United Arab Emirates	2	1%
United Kingdom	77	31%
United States of America	9	4%
Grand Total	249	100%

Table 3. 3) How old are you?

Age groups	Responses	Percentage
0-18 years old	3	1%
18-24 years old	72	29%
25-35 years old	99	40%
36-45 years old	38	15%
46-55 years old	20	8%
56-65 years old	12	5%
Over 66 years old	5	2%
Grand Total	249	100%

Table 4. 4) Describe where you are most likely to shop for clothing:

Describe where you are most likely to shop for clothing:	Responses	Percentage
Charity shops / Supermarkets (OXFAM, Sainsburys,		
Primark)	37	15%
High end / Luxury (Luis Vuitton, Harrods, Dior)	4	2%
High street brands (H&M, Zara, Mango)	121	49%
Mid-range (Urban Outfitters, Marimekko, Paul Smith)	71	29%
None to spend on clothing	16	6%
Grand Total	249	100%

Table 5. 5) How many garments have you bought during the last month?

How many garments have you bought during the last month?	Responses	Percentage
0-4pcs	191	77%
11-20pcs	9	4%
21-30pcs	1	0%
5-10pcs	47	19%
Over 41pcs	1	0%
Grand Total	249	100%

Table 6. 6) Do you buy clothing for someone else than yourself?

Do you buy clothing for someone else than yourself?	Responses	Percentage
Children 0-6 years	30	12%
Children 14-18 years	6	2%
Children 7-13 years	19	8%
Relatives	23	9%
Relatives, 0	1	0%
Spouse	50	20%
Work	6	2%
No	114	46%
Grand Total	249	100%

# Responses in Other:

-As a gift 2-4 times a year / boyfriend/girlfriends/friend / my old mother / for performances

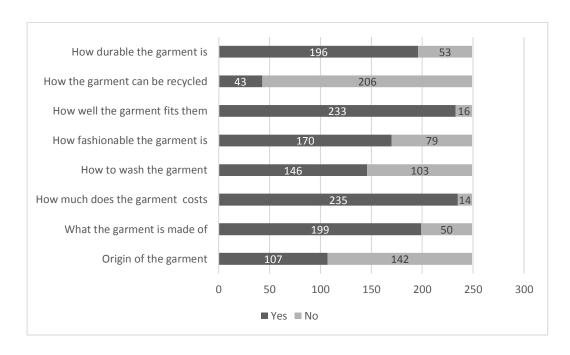


Figure 14. 7) When buying garments for other than yourself, which of these points do you look at?

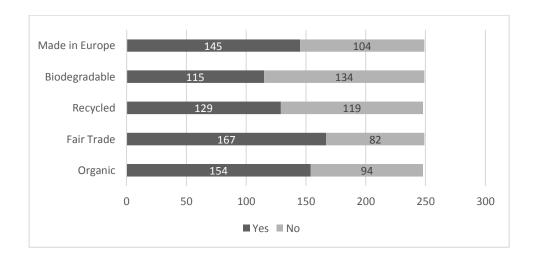


Figure 15. 8) When buying for others would you pay premium for garments that were:

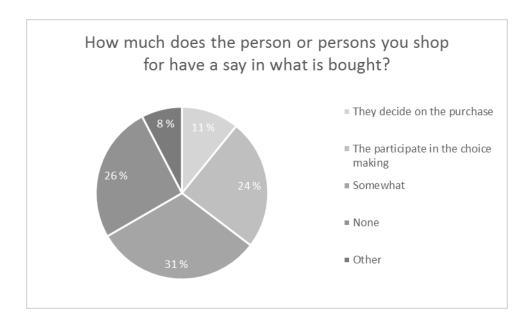


Figure 16. How much does the person or persons you shop for have a say in what is bought?

Most common responses in Other: I don't buy clothes to anyone else Comments worth mentioning: Depends if it is a gift

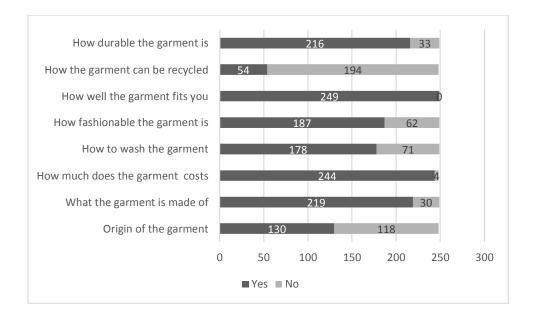


Figure 17. 10) When buying garments for yourself, which of these points do you look at?

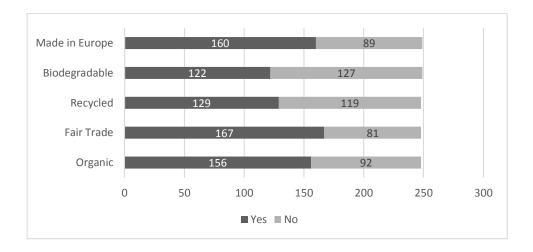


Figure 18. 11) Would you pay premium for garments that were?

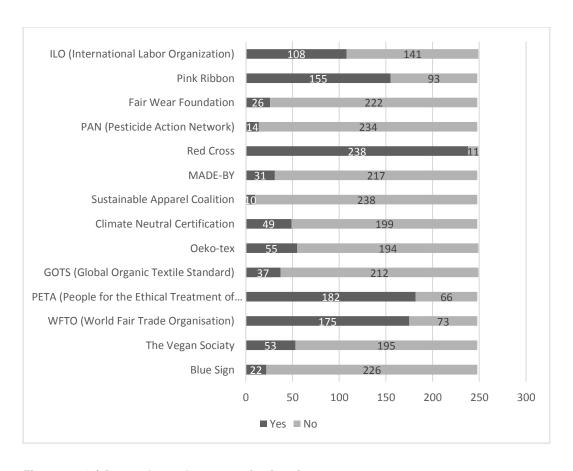


Figure 19. 12) Do you know these organisations?

Table 7. 13) If you know the organisation how likely would you be to buy a garment?

If you know the organisation how likely would you be to	_	_
buy a garment?	Responses	Percentage
0-18 years old	3	1%
Doesn't affect	2	67%
More likely	1	33%
18-24 years old	72	29%
Doesn't affect	33	46%
Less likely	2	3%
More likely	37	51%
25-35 years old	99	40%
Doesn't affect	43	43%
Less likely	2	2%
More likely	54	55%
36-45 years old	38	15%
Doesn't affect	15	39%
More likely	23	61%
46-55 years old	20	8%
Doesn't affect	10	50%
More likely	10	50%
56-65 years old	12	5%
Doesn't affect	9	75%
More likely	3	25%
Over 66 years old	5	2%
Doesn't affect	2	40%
More likely	3	60%
Grand Total	249	100%

Table 8. 14) If you don't know the organisation how likely would you be to buy a garment?

If you don't know the organisation how likely would you be		Б .
to buy a garment?	Responses	Percentage
0-18 years old	3	1%
Doesn't affect	2	67%
Less likely	1	33%
18-24 years old	72	29%
Doesn't affect	58	81%
Less likely	13	18%
More likely	1	1%
25-35 years old	99	40%
Doesn't affect	73	74%
Less likely	21	21%
More likely	5	5%
36-45 years old	38	15%
Doesn't affect	28	74%
Less likely	6	16%
More likely	4	11%
46-55 years old	20	8%
Doesn't affect	15	75%
Less likely	5	25%
56-65 years old	12	5%
Doesn't affect	10	83%
Less likely	2	17%
Over 66 years old	5	2%
Doesn't affect	5	100%
Grand Total	249	100%

Table 9. 15) If you know the organisation how much more are you willing to pay for a garment?

If you know the organisation how much more are you willing to pay for a garment?	Responses	Percentage
0-18 years old	3	1%
No more	2	67%
Slightly more	1	33%
18-24 years old	72	29%
No more	18	25%
Slightly more	53	74%
Substantially more	1	1%
25-35 years old	99	40%
No more	36	36%
Slightly more	59	60%
Substantially more	4	4%
36-45 years old	38	15%
No more	13	34%
Slightly more	23	61%
Substantially more	2	5%
46-55 years old	20	8%
No more	5	25%
Slightly more	15	75%
56-65 years old	12	5%
No more	6	50%
Slightly more	6	50%
Over 66 years old	5	2%
No more	2	40%
Slightly more	3	60%
Grand Total	249	100%

Table 10. 16) If you don't know the organisation how much more are you willing to pay for a garment?

If you don't know the organisation how much more are		
you willing to pay for a garment?	Responses	Percentage
0-18 years old	3	1%
No more	2	67%
Slightly more	1	33%
18-24 years old	72	29%
No more	59	82%
Slightly more	12	17%
Substantially more	1	1%
25-35 years old	99	40%
No more	86	87%
Slightly more	12	12%
Substantially more	1	1%
36-45 years old	38	15%
No more	30	79%
Slightly more	8	21%
46-55 years old	20	8%
No more	19	95%
Slightly more	1	5%
56-65 years old	12	5%
No more	12	100%
Over 66 years old	5	2%
No more	3	60%
Slightly more	2	40%
Grand Total	249	100%