

COMMUNICATING SUSTAINABILITY IN FASHION

Finding opportunities for Kuyichi to differentiate in stores



Graduation report
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This report shows the results of my graduation project at Kuyichi for the master Strategic Product Design. During my master, I became very interested in (un)sustainable consumer behaviour and in retail design. Last summer I approached Kuyichi because of their interesting philosophy and good looking jeans. Together we managed to combine our interests in one project.

The fashion industry was totally new to me, so I had to learn a lot. And I did! Most of all about the need for sustainable fashion and consumer perceptions, but also on the production process and supply chain management. Sometimes it was shocking to read about unethical practices in the industry, but it also strengthened my motivation for this project.

First of all I would like to thank Maria and Pinar for guiding me during the past seven months. I very much appreciated the collaboration and your advice. You were always there to help me if needed, even when you were abroad.

I am thankful that Kuyichi gave me the opportunity to conduct this project. Hester, thank you for your time, inspiration and enthusiasm. It was nice to work at Kuyichi in Haarlem. The colleagues are nice and the office has a positive vibe.

Furthermore my gratitude goes towards the people from Nukuhiva with whom I spent many afternoons interviewing their customers. And Milou, thank you so much for being my personal assistant during the lab-setting experiment. Great that you could take the time to help me with my research. I also want to thank all students that participated with this experiment. For your upcoming (graduation) projects, I would like to recommend something I could really practice: to prepare yourself well before the actual data collection, to avoid a panic attack once you have all the data and need to make sense of it.

I would like to thank my friends and family as well, and especially my mother. Bol, you were always interested in my project and willing to help, even when you were in need for help the most. And finally Nick. Thank you for being my critic, but most of all for supporting me throughout the whole project.

I hope you will enjoy reading this report.

Hella

EXECUTIVE SUMMARY

Since 2001 Kuyichi, a conscious fashion brand, has been on a journey to market sustainable denim. Kuyichi sources progressive materials and strives towards socially responsible production.

The priority of Kuyichi to become more transparent on their supply chain and to create more brand awareness among its target group. Therefore, Kuyichi is interested in adding a Track & Trace (T&T) feature to their jeans. With a T&T feature the consumer can trace back important production steps and characteristics of the jeans, while being in a store. The purpose of this graduation project was to examine how Kuyichi can highlight sustainability in stores to create competitive advantage, with the use of Track & Trace.

Research shows that sustainability is needed in fashion, yet consumers seldom buy clothes from sustainable brands. Previous studies on consumer segments were analysed to understand the complexity of sustainable consumption. These studies demonstrate although consumers are concerned about sustainability and try to make conscious purchase decisions, their concerns rarely translate into actual behaviour.

A part of this non-action might be the consumers' negligence, though sustainable brands such as Kuyichi could also do more to get noticed and trigger consumers to act. What seems to be missing are specific triggers that would prompt consumers to pay more attention to sustainability and to notice Kuyichi's sustainable characteristics in the store. Product labels can serve as such triggers, given that they are important as eye-catcher, to assess the quality of the jeans and for branding.

In this report different approaches to highlight sustainability were compared, through the design of a new hangtag - a product label attached to clothes with a cord. Kuyichi's current hangtag emphasises sustainability by using textual information. This is the typical approach used by sustainable brands: providing text about sustainability and its importance.

Based on existing literature four alternative approaches were identified for highlighting sustainability: by asking a provocative question about sustainability; through the use of a sustainable material; by evoking self-reflection; and by storytelling. For each approach a concept was designed and tested to see if they showed significant differences in Action-orientation, Attention, and Uniqueness. This was first done in a 1 x 5 between-subjects experimental design conducted in a lab environment (N=107). After data analysis two concepts were selected. A second experiment was conducted in a real store (N=61). Kuyichi's current hangtag was used as benchmark in both experiments.

Results of both studies show that communicating sustainability through text triggers consumers the least. Highlighting sustainability through self-reflection has the greatest impact on the target group's call to action. This self-reflection concept consists of a square cardboard with a mirror-silhouette on one side and a production worker on the other side. In this way, a one to one connection is made with 'the maker' of the jeans. Previous studies found that when consumers believe their choices have an impact they are more likely to engage in sustainable consumption. The idea behind the mirror is that it gives a sense of self-reflection.

The in-store experiment suggests that Kuyichi's target group is partly interested in sustainability-related information about the jeans, but a digital Track & Trace feature is not the best way to provide this. Consumers prefer to look at the hangtag or to visit Kuyichi's website at home for more detailed information.

Even though a digital T&T feature will be appreciated by a very small group of consumers, the effect on consumers' behaviour will probably be low. Therefore the advice for Kuyichi is to drop the digital Track & Trace feature, and instead introduce the selected hangtag to highlight sustainability in stores. Furthermore Kuyichi should improve the content and lay-out related to sustainability

on its corporate website, so it shows a complete overview of Kuyichi's corporate social responsibility practices.

Qualitative feedback from the experiments was used to improve the design of the self-reflection hangtag. The final design includes the topics the target group is most concerned about. According to this thesis, these are: labour conditions in factories, the suppliers' location and sustainable materials.

With a new hangtag that enhances self-reflection, consumers are triggered to pay more attention to sustainability and to trust Kuyichi. The unique design can help Kuyichi to differentiate itself from competitors in stores.



Final design: a new hangtag for Kuyichi (front and back side for men).

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AW = autumn/winter (AW14 means the autumn/winter collection for 2014)

B2B = Business-to-Business

B2C = Business-to-Consumer

CMT = cut make trim (important stage of the supply chain where fabrics are made into garments)

CSR = Corporate Social Responsibility

Fast fashion = a strategy with an efficient supply chain, merchandising fashion that follow the latest trends just weeks after they appear on the catwalk. Fast fashion is linked to textile waste, because consumers are encouraged to frequently buy large quantities of cheap clothes.

FWF = Fair Wear Foundation

GOTS = the Global Organic Textile Standard (certifications for organic cotton)

I-B gap = Intention behaviour gap (referring to the gap between consumer intentions that are not translated into action)

MAW = Men at Work (chain fashion store in the Netherlands)

Mill = factory with spinning and weaving machines, where cotton is cleaned, spun into yarn and made into fabric

NOS = never out of stock (products that are kept for more collections)

NGO = non-governmental organisation

OS = Open Source

POS = Point of Sale (POS materials are used for in-store branding, advertising campaigns, exhibitions and presentations)

SS = spring/summer (SS14 means the spring/summer collection for 2014)

Slow fashion = the philosophy of slow fashion is to create timeless pieces, with the focus on the quality of a garment and the practices with which it was made.

Supplier = any party or person that adds something to the production of goods (material and/or labour)

T&T = Track & Trace

Track & Trace feature = generic term for systems that can trace back products' production steps. In this report it is also used to refer to the (physical and/or digital) tool to be designed for Kuyichi.

USP = unique selling point



1. INTRODUCTION

This chapter first of all discusses the problem definition and introduces Kuyichi, the commissioner of this graduation project. Thereafter the assignment is explained, its relevance for Kuyichi and the scope for this thesis. The chapter finishes with an outline on the structure of this report.

1.1. PROBLEM DEFINITION

Over the past decades the textile and clothing production has grown significantly and became highly globalised. Western companies have moved their production facilities to countries like China and Bangladesh in which they can minimise production costs (EU-27, 2013; Niinimäki & Hassi, 2011).

The textile industry creates – especially for women – numerous employment opportunities, but the industry can be considered fairly unsustainable. Large amounts of fresh water are required for production while chemicals used for dyeing and textile treatment cause water pollution. Working conditions on cotton farms and especially in factories can be miserable, examples are corruption and child- or forced labour (Arrigo, 2013). Another concern is the increasing textile waste. This is particularly the case in the fashion industry, in which product lifecycles are short, and consumers employ a “fast fashion” mentality to their clothing.

Fashion is used to express someone’s personality and serves as status symbol. It can be understood as a socially and culturally constructed phenomenon, characterised by change. The quest to keep up with the latest trends stimulates consumption (Kim, Choo & Yoon, 2013). Still, the divestment habits of fast fashion consumers triggers the question how many clothes one really needs. Current consumption patterns need to be altered towards a more sustainable way, both in production process and in consumer buying behaviour (Niinimäki & Hassi, 2011).

Part of this change is already happening by a number of ‘slow fashion’ brands. In literature, slow fashion does not have a strict definition but the concept focuses *“on the quality of a garment and the practices with which it was made”* (Pookulangara & Shephard, 2013, p. 201).

Furthermore a change in consumption patterns is needed. Previous studies show that consumers are becoming more conscious (intrinsic and extrinsic reasons) but their concerns rarely translate

in sustainable consumption (Prothero et al, 2011; Carrington, Neville & Whitwell, 2014). Although part of the responsibility of this non-action lies on the consumer, sustainable brands could also do more to get noticed and trigger consumers to act. Companies often use product appearance to achieve differentiation. This is usually the first contact point the consumer has with a product (Berkowitz, 1987). It might be difficult for sustainable brands to communicate differentiation in product appearance: sustainable products do not look that different from regular products.

The problem is that sustainability is not communicated in a way that convinces the consumer. For this graduation project, the brand Kuyichi was selected as commissioner.

1.1.1. KUYICHI

Kuyichi is a conscious denim brand based in Haarlem, the Netherlands. It was founded by the NGO Solidaridad in 2001, who wanted to market organic cotton but could not find clothing companies that wanted to collaborate. Thus they started their own fashion brand. Kuyichi was the first brand to introduce organic cotton jeans and is still a front-runner in innovation (MADE-BY, 2014; Kuyichi, 2014).

Kuyichi’s mission is to create qualitative fashion in a 100% sustainable and responsible way. Next to the environment, Kuyichi cares about the social circumstances of the people who grow the cotton and make the garments. According to Kuyichi *“Sustainability starts with being conscious, how is a garment made and by who?”*

The priority of Kuyichi is to become more transparent on their supply chain and to create more brand awareness. As a brand it wants to be recognised for its beautiful and timeless collections, creating clothes that are sustainable in material but also in style and functionality (Kuyichi, 2013).

1.2.1. CONTEXT

Kuyichi currently places some sustainability-related information on its product labels and corporate website. However, navigating to this website requires effort, especially when being in a busy clothing store, and it can be questioned whether this will convince consumers to buy the brand.

Kuyichi is interested to add a Track & Trace (T&T) feature to their clothes. With a T&T feature the consumer can trace back important production steps and characteristics of the jeans, while being in a store. This should trigger consumers' curiosity, build brand awareness and increase trust in the clothes they buy.



Figure 1: Interface of Kuyichi's previous T&T tool, facilitated by MADE-BY.

In the past Kuyichi already used to have a Track & Trace feature from the non-profit organisation MADE-BY. It ran on a website and mapped Kuyichi's supply chain (among other brands collaborating with MADE-BY). A unique tracking code was placed inside each garment that consumers could enter on the T&T website. Figure 1 gives an impression of the interface.

Kuyichi was in favour of the system and regularly received positive feedback from consumers. However, MADE-BY ceased their T&T operation in 2012 and a new system has not been implemented afterwards (MADE-BY, 2013).

The aim of this graduation project is to come up with a concept for a new Track & Trace feature and advice on how to implement it. The main research question is as follows:

How can Kuyichi highlight sustainability in stores to create a competitive advantage over other brands with the use of Track & Trace?

1.2.2. SCOPE

Not all consumers that belong to Kuyichi's target group (see paragraph 2.2.1.) will be interested in detailed information about the journey of the jeans, or they lack the knowledge to understand it. Therefore, Kuyichi wants to establish an active- and passive component to communicate sustainability (explained in Table 1).

The Track & Trace feature will be the active part, meant to create brand differentiation in the store. The passive part, also called Open Source (OS), will be part of Kuyichi's website, and should be seen as an online library.

Although there is some overlap between these two parts, this graduation project looks at the active part, thus the Track & Trace feature. The assignment will be limited to jeans as this is Kuyichi's core business. The main research will focus on the Dutch market.

1.2.3. RESEARCH DIRECTION

First of all research on the context and target group is needed. What are their needs and constraints? As slow fashion brand, Kuyichi wants to appeal to consumers who are concerned about ethics. But who are these ethical consumers and why do they care? And what is the best option for materialising the Track & Trace feature, such as a booklet, product label, poster or perhaps something interactive in the dressing cubicle?

Secondly, research is needed what to include in the feature (content and the level of detail) and how to communicate the information in an appealing way (using text and visuals). Several concepts will be created for the Track & Trace feature, and tested with consumers.

Finally, research is needed on possible technologies for Track & Trace. Digitalisation is becoming increasingly important in empowering the consumer and their knowledge on brands' sustainable practices. Examples of digitalisation are apps, discussion forums, online fashion blogs and e-commerce (RILA, 2013). Research is needed to find out what kind of technology can be used for a digital T&T feature, and to assess consumer demand to make use of such a features while shopping.

1.3. STRUCTURE OF THIS REPORT

The structure of this report is visualised in Figure 2. It starts with a literature review on the context of the assignment. This is followed by the internal and external analysis to get familiar with Kuyichi as a company, the market it is competing in, the target group and the use of Track & Trace. Chapter 3 summarises findings from the analysis phase and refines the challenges and focus of the assignment. The fourth chapter deals with the idea generation process, selection and concept development. The testing of the selected concepts (the main study) will be described in Chapter 5.

The last part of this report gives recommendations for Kuyichi on the follow-up of this thesis. The link is made between all touch points, physical and digital. The report is concluded with recommendations for Kuyichi that do not fit within the scope of this project.

Table 1: Comparison between the Track & Trace system and the Open Source.

	Track & Trace (T&T)	Open Source (OS)
Goal	The T&T creates a connection with your jeans: to trigger consumers' curiosity, build brand awareness and increase trust	Become fully transparent on Kuyichi's supply chain and sustainable practices. The OS serves as a kind of online library with background information that anyone can access
For whom?	Consumers in the store	Consumers, retailers, press, NGOs, others
What?	Something physical and possibly digital (to be determined)	Digital: part of Kuyichi's website
Where?	Access in-store via the product & possibly smart phone/tablet	Access at home/work via tablet or pc
Content	Tracing the journey of the jeans (to be specified)	A complete overview Kuyichi's CSR activities and policy, certifications, etc.
Level of detail	Low/moderate	High
Interaction level	Fun, simple, inviting	Complete, reliable

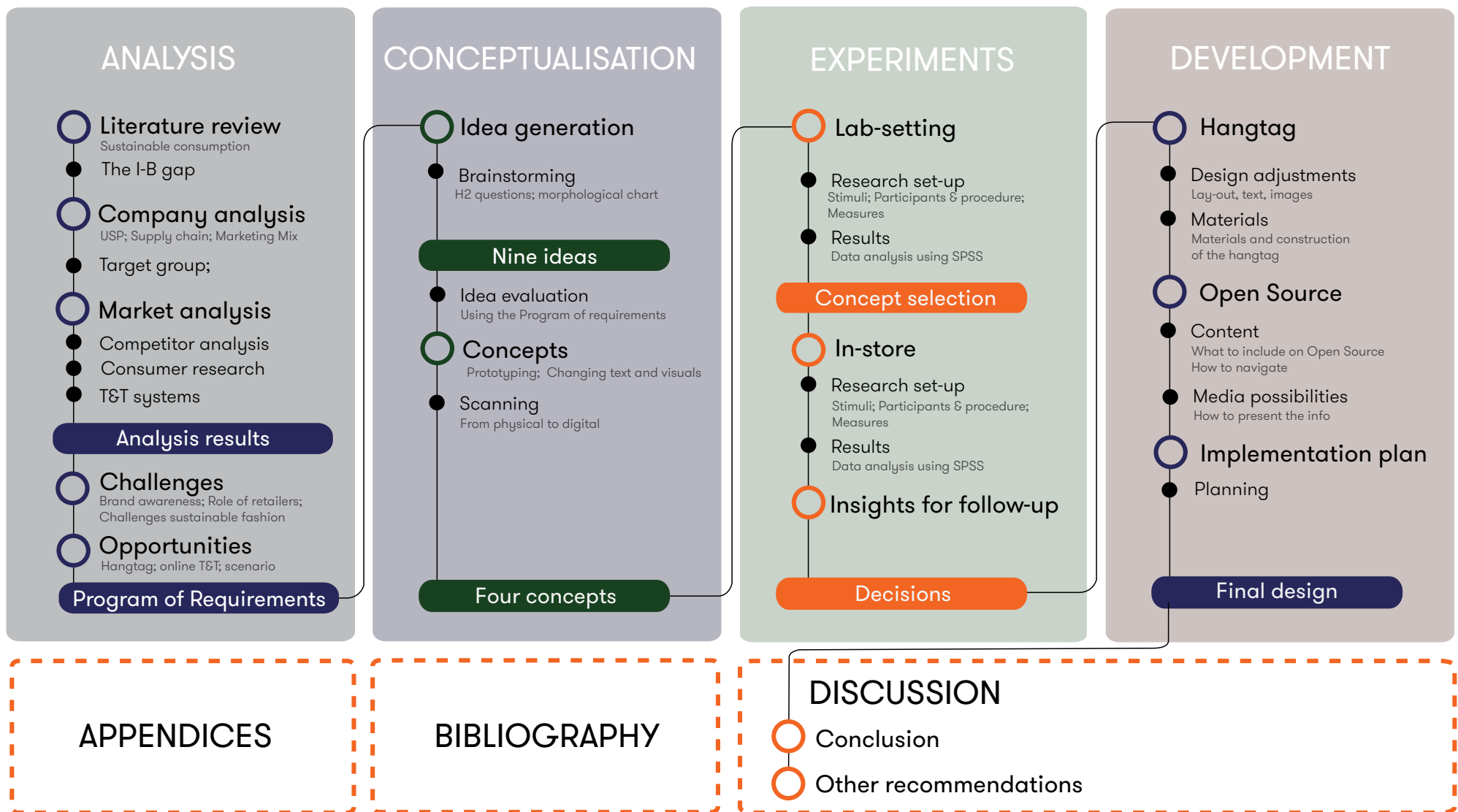


Figure 2: Structure of this report.



2. ANALYSIS

This chapter describes the first phase of the graduation project. It starts with the main insights from the literature review. Secondly Kuyichi's target group is analysed, after which it continues with the supply chain and the marketing mix. Then Kuyichi's main competitors and their CSR practices are discussed. The research set-up and results from interviews with store managers and consumers are described. The chapter ends with examples of existing Track & Trace systems.

2.1. LITERATURE REVIEW

This paragraph highlights important insights from the literature review on sustainable consumption, ethical consumers and the intention-behavior gap. These insights do not necessarily directly feed into the design of the T&T feature, but they are useful to better define Kuyichi's target group and understand the project's context.

2.1.1. SUSTAINABLE CONSUMPTION

Sustainable consumption is defined as:

“Consumption that supports the ability of current and future generations to meet their material and other needs, without causing irreversible damage to the environment or loss of function in natural systems.” (OCSC, 2000, cited in Morgan & Birtwistle, 2009).

The concept of sustainable consumption has been discussed in academic literature for at least half a century. Packard argued that America had become *“a force-fed society with a vested interest in prodigality and with no end in sight to the need for ever-greater and wasteful consumption.”* (Packard, 1960, cited in Robins, 1999, p. 7). In his book *The Waste Makers*, Packard proposed a framework for “developing enlightened consumption patterns”. Limited attention was paid to his warnings at the time (Robins, 1999).

Nowadays sustainable consumption has become the responsibility of multiple stakeholders, including policy makers, governments, companies and consumers. Besides initial purchase decisions, post-choice behaviour (e.g. product use and disposal) also impacts the sustainability of consumption (Prothero et al, 2011).

Yet the question remains: who is responsible for what and to which extent? Most companies aim to increase resource productivity but they do not take responsibility of total consumption (Mont & Plepys, 2008). Seyfang (2009, p. 3) argues that for most con-

sumers sustainable consumption implies *“the consumption of more efficiently produced goods”* rather than reducing consumption. Nonetheless there are reasons to believe that some ‘ethical consumers’ try to make conscious choices that are relevant to them:

“Ethical consumers are not ignoring price and quality but applying some additional (and sometimes superior) criteria in the decision-making progress.” (Harrison, Newholm & Shaw, 2005, p.2).

“They are concerned with the effects that a purchasing choice has, not only on themselves, but also on the external world around them.” (Harrison et al, 2005, p.2).

ETHICAL CONSUMER SEGMENTS

Numerous studies have attempted to identify ethical consumers segments, also for the fashion industry. Many of these studies focused on consumers' awareness and attitudes towards sustainable consumption and their willingness to purchase sustainable products or behave in a sustainable way.

In Table 2, some recent studies on ethical consumer segments are compared, and in particular the ethical fashion consumer. Three groups of variables seem to influence ethical consumer segments (Gilg et al, 2005):

- Environmental and social values;
- Socio-demographic variables, like gender, age, income, education;
- Psychological factors (personal attitudes).

Although the studies show some general characteristics, literature is inconsistent, especially on the socio-demographic variable.

Table 2: Previous studies on ethical consumer segmentation.

Study	Topic	Country	Results
Gilg et al. (2005)	Consumers' daily sustainable activities, such as recycling, energy saving and buying sustainable products	UK	<p>The authors identified four clusters, based on the frequency of sustainable actions. The so called committed environmentalists segment considered material wealth and personal influence less important, and they believe nature has critical limits. This group had the highest average age and income, small household sizes, vote Green/Liberal Democrat and were members of community groups. Price was considered less important for them and they believed that their actions would make a difference.</p> <p>The non-environmentalists group had significantly more males, the average age was lower, and so were education and income. They were less involved in the community and disinterested in politics. This segment felt that there were no limits to growth, and did not believe that environmental actions would have a positive outcome.</p>
Niinimäki & Hassi (2011)	Consumers' concerns and attitudes towards textile and clothing manufacturing	Finland	Their results showed that younger respondents were more worried about the environmental and ethical aspects in textiles and clothing, and women were more worried than men. Local and domestic production seemed to be more important for older female respondents.
Morgan & Bristwistle (2009)	Young female consumers' disposal of fashion products	UK	Young female consumers prefer to buy several cheaper fashion items than one more expensive piece; they are highly influenced by media and celebrities. Young female consumers are disinterested in recycling and unaware of the importance due to textile waste problem.
Hustvedt & Dickson (2009)	Gain better understanding of the 'organic apparel consumer'	USA	For 38% of respondents, organic cotton influenced their (virtual) purchase intention. Consumers in this segment considered themselves as socially responsible consumers. They favoured to "buy locally" and were positive on organic agriculture. This segment was also more concerned about the impact of clothing production on the environment than other consumers. No distinction was made in social-demographic variables, and the participants did not correspond to the general population (high average age).
Boonstoppel & Carabain (2013)	Gain insight in the willingness to pay more for a pair of jeans if safe working conditions would be guaranteed	the Netherlands	Willingness to pay more is proportional to the respondents' personal income: the higher the income the more likely to pay more. Especially younger and low educated consumers were not willing to pay more. 17% of respondents indicated they would be willing to pay at least 25% more. These "conscious" consumers were already motivated to buy fair-trade products. This group had statistically more women and consumers above 55 years old. Income seemed to be less influential for this group.
Kim et al. (2013)	Research motivational drivers of women to avoid fast fashion	South Korea	Slow fashion is not sole desired by consumers who are concerned about social and environmental conditions. Irresponsibility (e.g. unfair labour practices and environmental burden) contribute to fast fashion avoidance, but the effect was not significant. Instead, poor quality, de-individualization and foreignness (the local fashion and culture) were found to be significant factors.

ETHICAL CONSUMER MOTIVATIONS

There are different reasons why consumers pursue sustainable consumption. Concerns on social and environmental issues are certainly important. But other motives play a role as well:

“Is ethical consumption simply about aggregate outcomes – reduced pollution less exploitative work conditions, etc. – or is it also about actually changing the sense of self by ordinary people?” (Harrison et al, 2005, p. 15).

Sustainable consumption can indeed serve as a vehicle for morale self-realisation, so one can be satisfied about its own life and decisions. The context is important: people can be motivated to act in an ethical way because they are influenced by peers (Seyfang, 2009).

2.1.2. THE INTENTION-BEHAVIOUR GAP

One of the challenges with sustainable fashion is how to make it a primary priority in the minds of consumers, as they usually do not directly benefit from it. For example, organic cotton does not have direct benefits as compared with other sustainable product categories like energy-efficient housing (reducing the energy bill) or organic food (feeling healthy) (Harrison et al, 2005; Hustvedt and Dickson, 2009). Moreover, consumers find it hard to relate to the makers of their clothes, and are often not willing to sacrifice their self-interest for workers *“located in developing countries thousands of miles away”* (Harrison et al, 2005, p. 157).

A reoccurring theme is the gap between consumer intentions and behaviour, better known as the intention-behaviour gap (I-B gap) (Carrington et al, 2012). For example, of the 40% of consumers stating that they would be interested in buying green products, only 4% actually do so (Prothero et al, 2011, p.32). This gap is frustrating for sustainable brands, as consumers give the impression to

demand sustainable products yet they do not behave accordingly (Prothero et al, 2011).

Psychologists have tried to gain understanding what factors influence goal achievement, also in the context of ethical consumption. Research has shown that a strong goal intention - “I intend to achieve X” - does not ensure a successful outcome (Gollwitzer & Sheeran, 2006).

The relation between goal intention and attainment can be summarised in a 2x2 matrix, as shown in Table 3. The inclined abstainers are mainly responsible for the intention-behaviour gap (Gollwitzer & Sheeran, 2006). They have the willingness but somehow do not manage to succeed.

Table 3: Intention-behaviour matrix, based on Gollwitzer and Sheeran (2006).

	Intention to act (100 %)	Intention not to act (100 %)
Acted	Inclined actors (53 %)	Disinclined actors (7 %)
Did not act	Inclined abstainers (47 %)	Disinclined abstainers (93 %)

In a study by Carrington et al. (2014) on consumers’ daily shopping behaviour, four factors were found to influence the I-B gap. In addition ‘information failure’ can be considered to contribute to the I-B gap (Dickson, 2000; Wrinkle et al, 2012). The five factors are explained below:

1. People prioritise ethical issues according to their personal ethical values. Primary concerns guide consumers in their shopping behaviour. Secondary concerns on the other hand are easily obliterated or concessions are made due to price and convenience (Carrington et al, 2014).

2. Sustainable products should match consumers' criteria. When consumers feel that the choice of ethical products is too limited, too expensive or not aesthetically pleasing they will choose something else that is available. This sets their ethical values aside (Hume, 2010; Kim et al, 2013).
3. Sustainable consumption often requires extra effort and consideration from the consumer. The chance for a successful outcome can be influenced by so called 'implementation intentions', when someone plans beforehand how to act in potential occasions: "I intend to do Y when situation Z is encountered" (Gollwitzer & Brandstätter, 1997; Gollwitzer & Sheeran, 2006). Implementation intentions enable people to create a mind-set that prepares them for the task. They help people to get started with the goal attempt and prevent them to be distracted by external stimuli (Gollwitzer & Sheeran, 2006).
4. According to Carrington et al. (2014), a 'pre-meditated shopping mode' refers to a quick, effortless and voluntary way of purchasing. It saves the trouble of having to make decisions every time again. However, when consumers are faced with unexpected situations they tend to make spontaneous choices. These choices can be ethical or non-ethical, depending on the offering and situation.
5. The last factor influencing the I-B gap is information failure. Consumers are key stakeholders as they have the power to choose, yet they often lack knowledge about ethical practices of brands or products to make conscious decisions (Dickson, 2000; Pomeroy & Dolnicar, 2009). In a study of Auger et al. (2003) less than 10% of the participants knew ethical attributes of their athletic shoes and bath soap brands. In the same study it was found that providing consumers with such information would significantly impact the likelihood of consideration and purchase intentions.

2.1.3. IMPLICATIONS FOR THIS THESIS

The literature shows there is not one type of ethical consumer. Although there are some general characteristics, literature on ethical consumer segments is inconsistent. Nevertheless, the previous studies help to understand the complexity of ethical consumers. Thanks to the matrix of Gollwitzer and Sheeran, a basic division can be made for this thesis:

First of all, there is a small group of *critical consumers*, who are concerned on environmental and social issues. They try to reduce consumption and to make conscious purchase decisions. They do this for categories that are most relevant to them: for example on food and clothes, but rarely on all products and services.

Secondly, *somewhat critical consumers* are generally convinced of the importance of sustainability, but occasionally act upon it (the inclined abstainers). There are many reasons for this passive behaviour, as explained with the I-B gap. This gap was also observed in the consumer research (paragraph 2.2.2): although Kuyichi's target group considers sustainability to be important, only a few critical consumers actually pay attention to it when purchasing a new pair of jeans. They like it when the jeans are made under proper circumstances but this will not change their buying behaviour.

Finally there are also consumers that do not consider ethical practices very important, the *non-critical consumers*: they pay limited attention to ethics and are the least concerned on environmental issues. Non-critical consumers correspond to the group of disinclined abstainers from the matrix. Occasionally they practice sustainable consumption, but their motivation is different, e.g. because of costs or coincidence. In that case they belong to the group of disinclined actors.

2.2. COMPANY ANALYSIS

Kuyichi consists of around 25 professionals in design, sales, marketing and supply chain management. The team is guided by six core values (Kuyichi, 2013): Fair, Sustainable, Transparency, Fashion relevant, Innovative and Inspiring.

UNIQUE SELLING POINTS

Kuyichi's unique selling points (USPs) are the company's true commitment to sustainability and the high quality clothes that are designed to last. Kuyichi started the organic revolution and is still progressive today. The brand cares about the environmental impact and ethical trade. Kuyichi is very knowledgeable in sustainable production, and dares to experiment with innovative materials and recycling concepts (Kuyichi, 2013; MADE-BY, 2014).

Transparency is currently not a USP, as other brands are ahead (see paragraph 2.3.1.). Kuyichi is good at creating the image of a conscious fashion brand, but it could do better in communicating facts. For example on Rank a Brand¹, Kuyichi is ranked on a shared fourth place in the denim category (out of 28 brands). G-Star is ranked third, even though it only sources 10% organic cotton (Rank a Brand, 2014). However, this could be changed with a new Track & Trace feature and Open Source platform.

2.2.1. TARGET GROUP

According to Kuyichi, the target group are men and women between 25 and 50 years old, with or without children, living in European (sub) urban areas. In general, they are higher educated and have an above average income. They prefer quality over quantity and are willing to invest at least €100, - on a new pair of

jeans. They are style conscious but they do not wish to follow all latest trends.

Kuyichi's target group consists of critical consumers, who like the brand because of its ethical practices. This group is very small, thus Kuyichi also targets the somewhat critical and non-critical consumer. To better illustrate these ethical consumers types four persona were created, see the figure below. Two persona were made for the somewhat critical consumer, because this group is important for Kuyichi. The persona are based on the consumer types as found in literature. They are fictive and meant to be used for inspiration. The full persona can be found on the next pages (Figure 3b-3e).



Figure 3a: Overview of persona.

¹ Rank a Brand is Europe's largest brand-comparison website (and I-phone app) with over 800 brands in 6 sectors, including fashion, electronics, food & beverages and travel. Besides Rank a Brand there are a number of other (local) platforms that empower the consumer, like GoedeWaar.nl.

"Be realistic, dare dreaming!"



critical consumer

Carola Schagen
Psychologist
Utrecht

Personal info

Age: 27

Relationship: single

Home life: rents an apartment with two house-mates

Education: master in psychology

Income: below average (€1500 gross), depending on the type of job

Hobbies: visiting festivals, cooking, travelling, writing

Personality: idealistic, adventurous, ambitious, insecure

Favorite brands: Apple, Lush, de fietsfabriek, HEMA, de Wereldwinkel

Concerns: high recurring expenses, uncertain about finding a new job in her profession

Values and goals

Carola graduated three years ago and has been job-hopping ever since. In the beginning she enjoyed the flexibility but now she would prefer to build a career and to have more financial security.

She is very attached to her friends and they meet often. They like to try out new activities; last summer they joined bootcamp lessons! Carola regularly meets new people and easily adapts to a new environment. Carola grew up in Emmen and Zwolle, but the Randstad satisfies her best.

Ethical practices

Carola is quite knowledgeable on product labels. She chooses the fair trade alternative if money allows. However, she is sensitive to peer pressure and impulse buying, when she needs an outfit for an event or with a last minutes holiday. To save money and resources, Carola exchanges unwanted clothes with friends and resells goods via Marktplaats. She does not want to own everything herself: if she needs a car she borrows one.

Carola has been a vegetarian for ages, because she feels sorry for animals and due to the CO2 use. She actively supports Wakker Dier and writes blogs on "green" topics.



Figure 3b: Persona - Carola, the critical consumer.

“Living life is a creative process too”



somewhat critical consumer

Daniel van den Berg
Architect
Leusden

Personal info

Age: 41

Relationship: married to Stine (43), one daughter Laura (7)

Home life: own terraced house, with his own atelier in the patio.

Education: Master degree in architecture

Income: Three times the standard (together with Stine)

Hobbies: architecture, oldtimer, camping and walking

Personality: honest, somewhat nostalgic, practical, a busy lifestyle

Favorite brands: Renault, Rem Koolhaas, B&O

Concerns: lack of spare time

Values and goals

Architecture is Daniel's job and hobby. He works around 60 hours per week and spends most of his spare time with his wife and daughter. He often praises himself lucky with his life: money is not an issue and he loves his family, their house and his job. He has two close friends, so his social circle is small yet satisfactory.

Daniel wanted his daughter to grow up in a safe environment so they moved to Leusden, a small town near Amersfoort. He hates busy places like department stores. Sometimes Stine buys clothes for him.

Ethical practices

Daniel feels he's doing his bit by supporting a community project and regularly buying organic food (from Albert Heijn and a farm close-by). He uses his knowledge in housing technology to reduce the energy bill.

Daniel accepts that he cannot be sustainable in every aspect. Stine comes from Sweden and they visit her family at least twice a year. They always go by plane because it is more convenient. Daniel is very attached to his oldtimer, which they use as second car. He also tends to spoil his daughter with too many toys.



Figure 3c: Persona - Daniel, the somewhat critical consumer.

"Enjoy life and appreciate small things"



somewhat critical consumer

Eline Hovelynck
Marketeer at Lloyd Hotel
Leiden

Personal info

Age: 36

Relationship: in a relationship with Joris (44), one son Tim (1). Joris also has one son, Luuk (9) from his ex-wife.

Home life: own terraced house

Education: college degree in Hotel Management

Income: just above average, but together with Joris four times the standard

Hobbies: shopping, city trips, making jeweleries

Personality: enthusiastic, goal oriented, dominant, trendy, perfectionist

Favorite brands: Tommy Hilfiger, Lancôme, Bugaboo, Jamie Oliver, Vespa

Concerns: find a balance between work, motherhood and social life

Values and goals

Starting as receptionist, Eline pulled herself up by her own bootstraps. Nowadays she is responsible for PR, photography and interns. She is satisfied as the job is varied and the Lloyd hotel in Amsterdam has a good reputation.

Eline and Joris used to live a flamboyant lifestyle but this changed radically after Tim's birth. Taking care of the kids and working 32h/week is tough. She quit hockey and often skips evenings out with friends. She and Joris, a fulltime internist, are exhausted at 10 p.m. Still, Eline truly enjoys the motherhood and would like to have another child soon. Luckily her parents often baby-sit.

Ethical practices

Eline has an expensive taste and loves shopping. She is unaware of companies' CSR practices but she assumes luxury brands cannot go wrong. She takes good care of her products and keeps them long. Recently she has become nimble on health & safety aspects, especially when it may affect Tim and Luuk. For example she avoids pre-cooked meals and started her own vegetable garden.

She used to commute by train but bought her own car (Volvo) because it is faster and comfortable. She drops Tim at the crèche and continues her drive to work. Eline and Joris are aware of their comfortable incomes and they support various projects via the 1%Club. They also donate €1000,- to UNICEF annually.



Figure 3d: Persona - Eline, the somewhat critical consumer.

"The art is not to grow up but to keep the purity of a child"



non-critical consumer

Cris Arenas
Freelance model & actor
Amsterdam

Personal info

Age: 32

Relationship: in a relationship with Lea (34)

Home life: rents a 70m2 apartment with Lea

Education: college degree in accountancy

Income: around average, depends whether he is on tour and has modelling work

Hobbies: snowboarding, visiting festivals, movies and twitter

Personality: positive attitude, funny, confident, caring

Favorite brands: Apple, Brouwerij 't IJ, EYE, IDFA, Dakine, HUMÖR

Concerns: Lea wants to have kids but he feels not ready for it

Values and goals

Cris was born in Amsterdam and has always lived there. During college he joined the student theatre union, and after he finished his study he decided to pursue a career as actor. Cris works on freelance basis and does modelling work to earn extra money. He wants to look good and he is always dressed in style.

Cris performs in the evening and usually joins his colleagues in the bar afterwards. He and Lea are in the same group of friends, with whom they hang out every weekend and visit many festivals. Cris is happy with his lifestyle but it does not fit Lea's office job.

Ethical practices

Cris is good at supporting those in his close environment. He regularly helps friends or family members in need, like moving houses, or writing a business plan. His financial background is handy.

Environmental issues are rarely on his mind. Cris goes on vacation at least four times a year, including two weeks wintersport. He often buys new clothes and the latest electronics. He never repairs broken stuff and is a bit lazy with recycling. Food has to be convenient and always contain meat.



Figure 3e: Persona - Cris, the non-critical consumer.

2.2.2. SUPPLY CHAIN

The manufacturing process of jeans is complex and involves multiple steps (Wrinkle et al, 2013). Unlike many fashion firms, Kuyichi has a good understanding of its suppliers in every production step.

Presently, the firm works with suppliers located in China, India, Poland, Portugal, Turkey and Tunisia. Together with the Fair Wear Foundation (FWF) and other partners, Kuyichi tries to get all suppliers socially compliant, and to improve and verify its production process; an overview of these partners is shown in Appendix A. The denim route is shown in Figure 4.



Figure 4: The denim route - from design to finished jeans.

Kuyichi primarily sources certified sustainable materials; the main ingredient is organic cotton. Organic cotton fibres are 100% pesticide free and require less water for the plants to grow (Hustvedt & Dickson, 2009). Kuyichi also uses other sustainable materials like recycled polyester, hemp and Tencel®.

The raw materials are cleaned, spun into yarn, woven and dyed. Kuyichi's supply of sustainable and innovative fabrics is ensured, thanks to reliable relationships with mills and cotton suppliers.

Kuyichi's collaboration with cut-make-trim factories (CMT) – the most labour intensive phase – is more challenging. The past years Kuyichi often had to switch some CMT-suppliers. As Kuyichi is a relatively small brand, not all factories are willing to produce low order quantities or to invest in sustainable technologies (machinery, education etc.). Sometimes a step back is necessary to realise improvement in the long-term, and upcoming factory audits are crucial (Kuyichi, 2013).

DEPOSIT DENIM

In May 2013 Kuyichi launched the Deposit Denim concept, a closed loop system. The idea is that consumers return any old pair of jeans at participating retailers. The returned jeans are shipped to one of the mills in Turkey for reuse. Currently Kuyichi is still optimising the transformation of old fibers into new fabric.

2.2.3. MARKETING MIX

PRODUCT PORTFOLIO

Kuyichi is a denim brand with jeans as core business. Each collection is completed with several tops, such as T-shirts, knitted pullovers and jackets. All clothes are designed to last: made of high quality fabrics with a timeless appearance. An impression of Kuyichi's collection is shown in Figure 5.

Two seasonal collections are launched annually: autumn/winter (AW) and spring/summer (SS). Kuyichi is also working on a basic collection, with Never out of Stock (NOS) pieces. Occasionally there are limited edition items, such as T-shirts designed by the Ubuntu Academy, a training program for youth in Cape Town (Kuyichi, 2014).

PRICE

Kuyichi's jeans are usually sold between €99, - and €150, -. Kuyichi aims to sell the products at a price level that is acceptable for its retailers and customers. In case the total price is perceived to be 'too high' the margins for Kuyichi are somewhat reduced.

PROMOTION

Kuyichi tries to be visible in store with various Point of Sale (POS) materials. The clothes are equipped with hangtags, labels and other materials. In Appendix B, an overview of the branding for jeans in 2014 can be found.

Kuyichi promotes itself to retailers by attending fairs: the 'Mode-fabriek' in Amsterdam and 'Bread and Butter' in Berlin. Retailers and sales agents can also visit the showroom in Haarlem. Online presence is achieved via the corporate website, blog and social media. Kuyichi recently improved their social media strategy, by using different media platforms more efficiently.

PLACE

Kuyichi directly sells to consumers (B2C) through its own web shop, but the large majority of products are sold offline (B2B). As Kuyichi does not have its own stores, it relies mainly on multi-brand retailers. These include specialised ethical fashion stores; chain stores like Men at Work (MAW); and various independent retailers. Most retailers only sell a selection of Kuyichi's product portfolio. In total, the brand is sold in around 100 stores in the Netherlands and over 200 stores across ten countries in Europe (Kuyichi, 2014).



Figure 5 (on top): Impression of Kuyichi's collection for men and women (Image below): POS materials, also used on Kuyichi's website.

It is of utmost importance for Kuyichi to understand what their target group is interested in, and how Kuyichi as a brand can differentiate itself from its competitors; now and in the future. Therefore desk- and field research was conducted to gain insights for this graduation project.

2.3.1. COMPETITOR ANALYSIS

Kuyichi has many competitors, including famous brands with a long heritage as well as smaller, newer brands. These competitors are: Nudie jeans, Knowledge cotton and Kings of Indigo (K.O.I), Levi's, Denham, Tommy Hilfiger, Scotch & Soda, G-Star and Chasin', Diesel, gsus and Replay. Even though these brands differ in company size, product portfolio and sustainable practices, they all sell qualitative jeans in a similar price range (between €100,- and €160,-) and their target groups overlap.

Most competitors have their own private label shops, but their clothes are also sold in the same multi-brand stores where Kuyichi is present. Especially G-Star, Diesel, Levi's, Denham and Nudie jeans tend to be present in the same stores as Kuyichi (at least in the Netherlands). These brands are thus competing directly for shelf space and consumer attention.

CSR PRACTISES AND TRANSPARENCY

During the past decades, some competitors have made steps to become more sustainable. Key issues are responsible sourcing and improving social conditions in the CMT factories. The level of transparency among Kuyichi's competitors greatly differs. Most brands have included a Corporate Social Responsibility (CSR) section on their website, with basic information such as the Code of conduct.

Based on CSR information that is available - on corporate websites and from organisations like MADE-BY - Kuyichi's competitors were compared. Figure 6 maps Kuyichi and its competitors on two axes:

the brands' ethical practices and transparency level.

Four clusters are drawn. The two middle clusters include competitors that are somewhat involved in ethical practices. For example G-star, gsus and Levi's use organic cotton, but only for about 10% of their collection. Levi's publishes the names and addresses of over 200 CMT-suppliers, but without any further information. Tommy Hilfiger is known for its charity donations but in general their ethical practices are vague. Replay and Diesel seem to put very little effort in responsible sourcing or production.

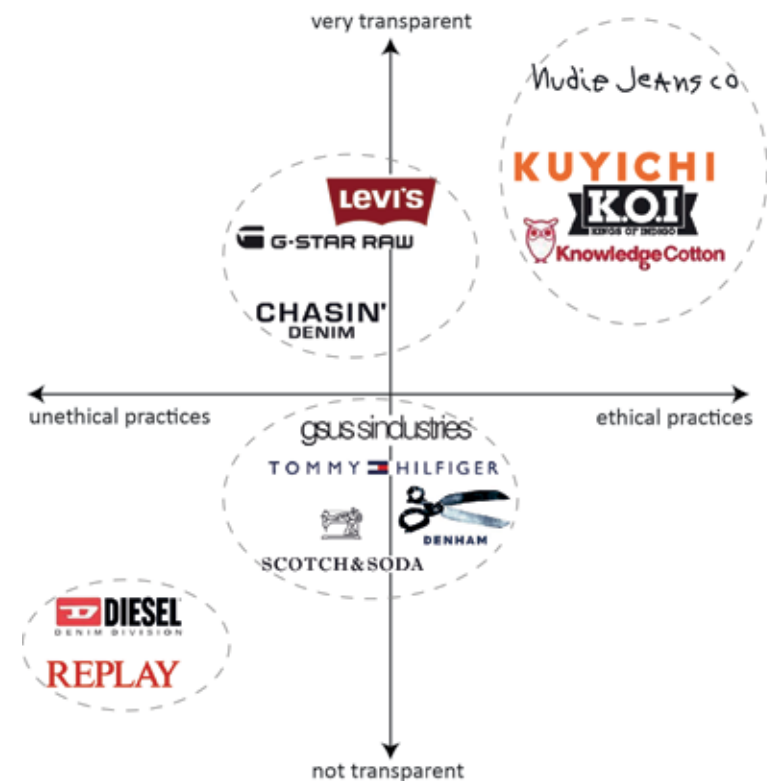


Figure 6: Kuyichi and its competitors mapped on two axes. It should be noted that ethical practices of the non-transparent competitors are hard to assess.

Top right in Figure 6 are the frontrunners in sustainability. These brands source organic cotton or sustainable alternatives for more than 95% of their collection. Nudie and K.O.I pay special attention to the product lifecycle: they encourage consumers to repair their jeans by offering a “repair kit”. Kuyichi is still the only brand with a closed loop concept (Deposit Denim, see paragraph 2.2.2).

Nudie Jeans has an interactive production guide on their website that maps CMT-suppliers for each type of cloth (jeans, tops, etc.), as illustrated in Figure 7. Audit reports are added for almost all suppliers, including sub-contractors.



Figure 7: The Nudie Jeans Production Guide. (top): The user can select between categories (right): Nudie's suppliers for jeans are shown including factory description and audit summary.

2.3.2. CONSUMER & RETAILER RESEARCH

Kuyichi gathers some feedback via its retailers, sales agents and social media, but the firm has not been able to conduct extensive consumer research during the past years. Therefore as part of this thesis a small qualitative consumer research was conducted in order to:

- Learn more about the type of stores where Kuyichi is being sold;
- Find out what product attributes the target group pays attention to when buying a new pair of jeans;
- Gain better understanding of the target group's attitude towards Kuyichi and ethical clothing.

RESEARCH SET-UP

The research was a combination of in-store observation and face-to-face interviews with consumers and retailers working in stores that sell Kuyichi. Six retailers (store managers or experienced sales staff) were interviewed about consumers' shopping behaviour, their role as salesmen, and their experience with Kuyichi. Table 4 briefly compares the stores that were visited for this research located in five different cities in the Netherlands. The stores represent Kuyichi's retailers in the Randstad.

Consumers who just exited one of the selected stores were approached. Those consumers who had bought or looked at jeans while being in the store were asked to take part in a short interview (those who did not were excluded). Participants were asked to reflect upon their recent experience, the process of buying jeans. Then they were questioned according to an interview script, which can be found in Appendix C.

RESULTS

In total, 38 face-to-face interviews were successfully conducted with consumers. The participants (21 male vs. 17 female) were aged between 23 and 54 years.

Table 4: Characteristics of stores visited for the consumer and retailer research.

	Scope	Kind of store	Type of customers	Kuyichi jeans available*
Holzhaus, Haarlem	2 stores in Haarlem	Large denim store “blue store”	Very loyal, diverse, age 16 - 70	Various models /gender
De Rode Winkel, Utrecht	5 stores in and around Utrecht	Large denim store “blue store”	Loyal, diverse, age 16 - 80	Various models /gender
Image wear, Utrecht	2 stores in Utrecht	Large denim/ fashion store	Loyal, more trendy (skinny jeans), age 20 - 65	Three models for women, not for men
Men at Work (MAW), Rotterdam	>30 stores in NL	Medium sized denim/ fashion store	Less loyal, more trendy (skinny jeans), more critical on price, age 15 - 35	± five different models /gender
If & Co, Leiden	1 store and 1 outlet next door	Large denim/ fashion store	Somewhat loyal, age 20 - 60	± five different models /gender
Sample, Leiderdorp	1 store	Small denim/ fashion store	Very loyal, age 20 - 60	± three different models / gender

*During the research, conducted in December 2013.

Participants' answers were compared with each other, and with statements from the retailers. The consumer- and retailer interviews resulted in some interesting insights for the continuation of this project and research focus.

The main insights are summarised below and illustrated with quotes (P = participant number; M = male; F = female). More pictures of the stores are placed in Appendix C.

IMPORTANT ATTRIBUTES WHEN BUYING JEANS

When looking for a new pair of jeans consumers already have some criteria in mind related to the model, colour and price. The fit and comfort are determining: if it does not feel good, consumers will not buy it.

P16, M: “There has to be some washing but not too much. No holes, and only small wrinkles.”

P17, F: “I don’t want the jeans to be too low, I really hate that! The pockets are also important, they should not be annoying or strange.”

In the past many people had their favourite brand but consumers have become less loyal to brands. Some customers ask for a particular brand when they like the image or have positive previous experience with it. The jeans should not be too expensive but Kuyichi does not have to be the cheapest among its competitors.

MAW: “Sometimes it fascinates me how much people are willing to spend. We sell skinnies for only €50, - and people easily buy them. But a Diesel of €160, - also sells great.”

MULTI-BRAND STORES

Many multi-brand stores have a large assortment of jeans, making it more difficult for consumers to find a good match. The salesmen strongly influence consumers' purchase decisions, as they make a selection for the consumer which jeans to try on (service-oriented).

The store managers also determine what POS materials they want to display in their stores. The brand has little influence on this. Only a few models are hung for demonstration.

de Rode Winkel: "We sell so many different brands and we don't want to become a collection of bill boards. We want to radiate de Rode Winkel vibe".

ATTITUDE AND AWARENESS TOWARDS KUYICHI

About half of the interviewees was familiar with Kuyichi. Of this group, most people associated the brand with sustainability. This is perceived as added value but not as a reason to buy.



Figure 8: Typical denim store. Most jeans are sorted by brand and placed in large piles with small brand tags on the shelves.

Holzhaus: "The story is important because from the outside it just looks like an ordinary jeans. I always ask whether people know the story and if not I will tell them. Some people like it, some people don't mind. But it never has a negative effect."

P6, F: "I know that Kuyichi does a lot with fair trade and organic materials. And how they got famous."

AWARENESS AND INTERESTS FOR ETHICAL ISSUES

Most consumers are aware of unethical practices in the fashion industry but they do not take this into account when buying jeans. It is not their priority or they are too busy finding the best fit for the right price.

P36, M: "I would appreciate if it comes from somewhere good, but once I like a pair of jeans then I will buy it. And then I don't pay attention to it anymore. I will not choose something else because it is not made in good labour circumstances."

P9, M: "You know what it is with clothes, everyone knows that they are not made in a good way. It is the same with buying 'Plofkip' (broiler chicken) at the Albert Heijn. People do know it is Plofkip but they still buy it."

Some consumers would like to have something simple indicating the product is made in good conditions.

P17, F: "You just don't know. I would like to have a label stating with or without child labour. But no such label exists."

Social issues seemed to be considered more important than environmental issues. Limited interest was found for materials or production steps, but this cannot be generalised. Ethics are usually secondary considerations. For a few consumers (the non-critical like Cris, see Figure 3e) sustainability really does not matter.

2.3.3. EXAMPLES OF TRACK & TRACE SYSTEMS

As explained in paragraph 2.2.2., Kuyichi understands and checks its own supply chain together with its partners. Kuyichi wants to become more transparent as it feels consumers have the right to know where their clothes are made and by whom. Transparency pays off because it influences the public opinion. Without transparency the guarantee of products cannot be assured, and there is no guarantee that audits are being fulfilled (RILA, 2013; Pomeroy & Dolnicar, 2009).



Figure 9: T&T system Icebreaker, tracing with the “Baa-code”.



Figure 10: T&T system Anvil.

Notwithstanding Kuyichi’s mission to become more transparent, it could do better in communicating this information to its stakeholders. Kuyichi regularly get critical sustainability-related questions from press, sales agents and consumers. These questions, which are mainly about suppliers’ social compliance and materials’ certifications, are answered by Kuyichi’s CSR department. The one-on-one contact is nice but also very time consuming. Moreover, the brand image can be improved when Kuyichi is more transparent.

A Track & Trace feature can be a good way to increase transparency, as it links the garment to the production process, like the factories, materials and distribution. It can share sustainability-related information to consumers in a fast and interactive way.

T&T TOOLS FROM OTHER BRANDS

Kuyichi is aware of solutions from other brands that use a Track & Trace system. There are different ways how T&T can be realised, which will briefly be discussed in this section with some examples from practice. Appendix D shows more detailed images of these Track & Trace systems.

For example the brand Icebreaker adds a unique code to each garment that can be filled in online, similar to Kuyichi’s previous T&T feature from MADE-BY (paragraph 1.2.). Icebreaker’s customers can trace back all sheep farms that produced wool for one particular garment (see Figure 9).

Anvil, a leading apparel brand for the private markets uses the same tracing technique. Their T&T tool, called “TrackMyT” is meant as educational tool for children to experience all production steps of a T-shirt, and to learn about the workers that make them (see Figure 10). It includes tips and tricks with care instructions for the T-shirt that help to reduce the carbon footprint. TrackMyT is designed for children but it is interesting for adults as well. Anvil publishes a detailed annual CSR report for business purposes.

A more basic example of a Track & Trace feature is used by Rapanui, a small eco-fashion brand from the U.K. Users can scan a QR code and trace the general production steps from seed to shop with the help of Google maps (see Figure 11).



Figure 11: (top) T&T system Rapanui. (right) Rapanui's labelling system. This label for clothes is not (yet) recognised by the U.K. government or any other institution.



Besides this, Rapanui ask consumers via their website to reduce purchases and to fix, re-use and recycle clothes. For the latter, consumers can get a small refund. In addition, Rapanui came up with a simple eco-labelling card inspired by the European energy rating label, to enable conscious shopping without confusing information.

OTHER EXAMPLES OF GOOD TRANSPARENCY PRACTICES

Some brands do not use a unique T&T code but manage to share more or less the same information via their website or with an annual (CSR) report. An interesting example of this is Patagonia, an American outdoor brand.

While Icebreaker highlights the sheep farms, Patagonia focuses on the factories. They do not have a track & trace feature that links the garment with its roots, but Patagonia's website maps all textile mills and CMT-factories. For most factories some facts are given, but for a number of factories the information is rather detailed and even includes a summary on audits and improvement points (see Figure 12). Besides the supplier map, Patagonia's website explains the use of sustainable materials, donations and initiatives. The firm has launched various campaigns related to sustainable consumption, the most recent asking consumers to buy fewer clothes.



Figure 12: Patagonia's supplier map.

Another interesting example is Honest by, a small luxury fashion brand founded in 2012. On the website [which is a webshop] for each piece of clothing the exact materials, manufacturing details as well as certificates are given. The information is highly detailed, and so is the full cost calculation that even includes the profit for the company per item sold. Special attention is paid to the designer who created the piece. Besides the images of the clothes only text is used.

Perhaps most examples of good transparency practices can be found in the food industry. As more consumers nowadays demand organic or in another way sustainable food, brands started to open up their supply chain, which is usually less complicated than with clothing.

One way to share information is to make smart use of the packaging. While product labels are placed on the outside, more detailed information on ethical practices is sometimes added on the inside. For example a calculation of the CO2 footprint and the brand's compensation efforts, while Tony's Chocoloney explains what 'slave-free' chocolate means to them. On their website Tony's also publishes a CSR report, in which they explain their sourcing policy, certifications and future plans (Tony's Chocoloney, 2013). Appendix D shows some images of this report.

The electronics industry may not be as transparent as food, yet nowadays some promising examples can be found. Fairphone is a social enterprise in the process of creating an ethical smart phone supported by crowdfunding. They opened up the supply chain and want to raise further awareness on conflict minerals. Like Honest by, Fairphone also shares the cost breakdown of the phone but then in a visual way (see Appendix D).

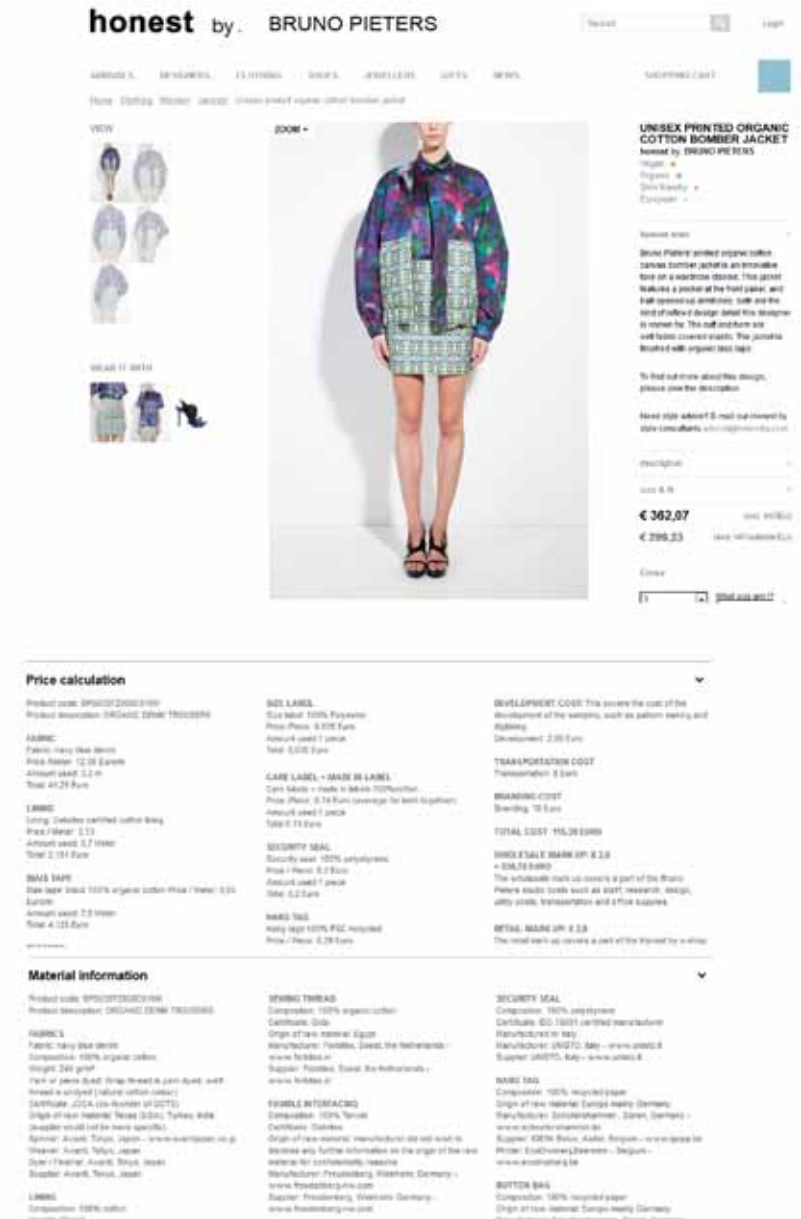


Figure 13: Webshop Honest by.



3. ANALYSIS SUMMARY

The in-depth research on Kuyichi as a company, the market it is competing in and the target group helped to generate better understanding in the problem definition. The assignment as formulated in the introduction needs to be better defined. This chapter summarises the challenges for Kuyichi. Furthermore the focus for the continuation of this project is discussed and design criteria for the Track & Trace feature are composed.

3.1. OPPORTUNITIES WITH T&T

3.1.1. CHALLENGES FOR KUYICHI

The fact that Kuyichi was the first to introduce organic cotton jeans is valuable but not really a competitive advantage anymore, since some competitors now also source organic cotton for their collections. Together with Kuyichi they compete for the critical consumer. Kuyichi needs to increase transparency to keep up with other competing brands such as Nudie jeans. New popular denim brands have emerged during the past decade, and a major concern is the low brand awareness among Kuyichi's target group. Compared to its competitors, Kuyichi has limited budget available for advertising.

Kuyichi does not have its own stores and is therefore dependent on their retailers. However in these stores it is hard to differentiate since limited POS material is used. Many retailers were not satisfied with the fit of Kuyichi's jeans collections, resulting in declining sales and profit. Luckily the SS14 collection (currently in-stores) and AW14 collection (to be launched around August 2014) receive positive feedback from retailers and sales agents.

Another challenge for Kuyichi is to reduce the consumer intention-behaviour gap (as explained in paragraph 2.1.2). Consumers can only pay attention to a number of aspects, and research showed that sustainability is not likely to be one of them (Dickson, 2000; Harrison et al, 2005). This means that although consumers are concerned about sustainability and try to make sustainable decisions, their ability to do so may be limited.

Previous studies mainly explored challenges for the fashion industry and consumer attitudes towards sustainable fashion but limited attention has been paid to feasible solutions. *How to make sustainable fashion a primary priority in the minds of Kuyichi's target group even when they do not directly benefit from it?* This will be researched in this thesis.

3.1.2. GOALS OF THE TRACK & TRACE FEATURE

A Track & Trace feature cannot compensate for the jeans' fit and appearance. However, it can serve as booster, to help consumers feel good about their jeans during and after purchase, as sustainability is perceived as added value by the majority of the target group (somewhat critical and critical consumers). The new T&T feature should build brand awareness, to share Kuyichi's story. It should guide consumers to pay more attention to sustainability when shopping. This can be done with active involvement.

ACTIVE INVOLVEMENT

Consumers can be involved passively or actively. Passive involvement means they just record the information, while active involvement requires action from the consumer to be successfully. This 'action' can be manifested in multiple ways: drawing a conclusion, providing an answer, making the consumer think, or filling in a gap (Connors, 2012). For the Track & Trace feature it is desirable that the tool requires active involvement of the consumer.

To make sure consumers become aware of it the Track & Trace feature needs to be eye-catching in stores where Kuyichi's jeans are being sold. It is important to realise that not Kuyichi but the retailers decide what POS materials are displayed in their store. With labels that are attached to jeans this is not a barrier.

Product labels can contain much more than simple product information. Previous studies have shown that product labels can be used to communicate a brand message, catch attention and can prompt consumers to take action (Diller, 1999; Harrison et al, 2005). Hainmuller and Hiscox (2012) found that "green labels" - about a reduced water pollution program used in jeans' washing facilities - prompted consumers to take action to a greater extent than labels featuring general product characteristics.

Based on these findings the best option seems to design a new product label that is attached to the jeans. In addition, Kuyichi could create a digital Track & Trace feature, such as a T&T app, short movie or as part of the corporate website. The tools should compliment each other, see Figure 14.

If Kuyichi wants to create a competitive advantage consumers should be able to easily access the Track & Trace environment on the spot. Existing T&T systems as described in paragraph 2.3.3. require quite some effort from the consumer: to locate the tracking code, visit the relevant webpage, type in a code, open a report, etc. These methods are not very suitable in-store.

With a smart phone or tablet consumers can already scan labels while being in the store to trace the suppliers. During the past decade the rise of smart phones has seen an increase in different scanning technologies. The QR code is used mostly, but many other apps exist these days. This will be discussed in detail in paragraph 4.2.2.

The proposed interaction between the consumer and Kuyichi's new Track & Trace feature is visualised with a scenario (see Figure 15, on the next page).

TARGET GROUP

Product labels can be seen by any consumer shopping in a store where Kuyichi is sold, thus a broad audience. The new Track & Trace feature can be targeted to a more specific group.

The somewhat critical consumers are the most interesting group for Kuyichi. This relatively large group currently overlooks ethics while shopping for jeans, but they have some awareness and concerns on ethical issues in the fashion industry. Taking into account latest trends, consumer awareness is expected to increase in the future. Kuyichi should jump on this development with the T&T feature.

Critical consumers are more likely to already know and support Kuyichi, because they may visit ethical fashion stores and read certain magazines, or they have heard about Kuyichi from friends. Although small, this group is valuable and Kuyichi should make the feature interesting for these consumers as well.

The non-critical consumers are less likely to be interested in sustainability related info and thus not the target group for the new Track & Trace feature.

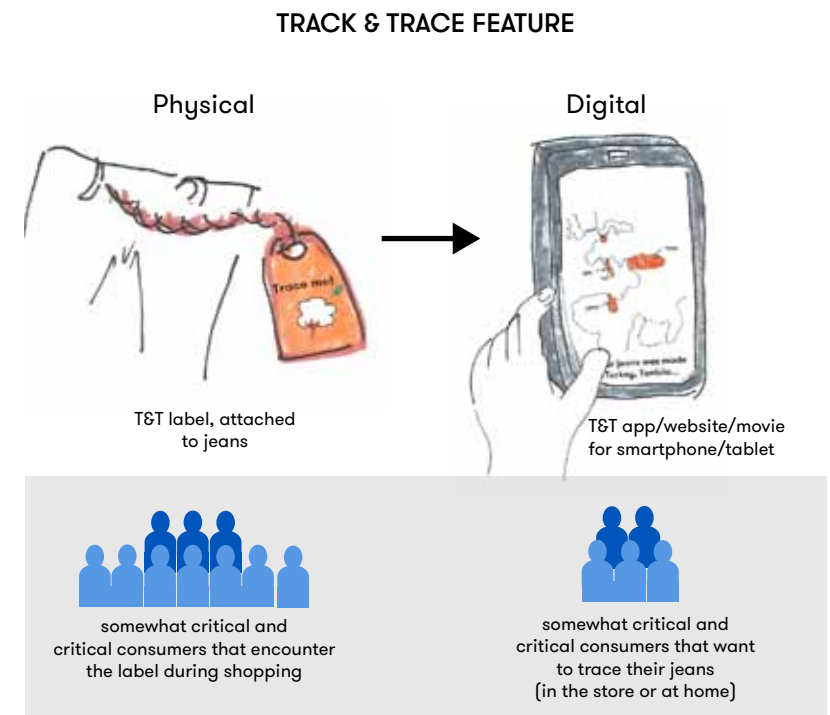


Figure 14: The physical and digital Track & Trace feature and its target group.

SCENARIO: USING A TRACK & TRACE FEATURE IN A STORE



Figure 15: This scenario shows the intended use of a new T&T system.

Step 2 - 4 show the typical process how a consumer selects jeans based on their appearance, as observed during the research in stores (discussed in paragraph 2.3.2.). In step 5-6 the product label is discovered and looked at. Step 7 and 8 show the possible use of a scanning feature for smart phones. These steps depend on the final choice for a digital Track & Trace feature.

While existing Track & Trace features of other brands (paragraph 2.3.3.) show that a lot is possible technology-wise, Kuyichi must not underestimate the costs to design and maintain such a system (Icebreaker, 2014).

Since consumers will not just stumble upon an app or website, it takes effort to draw consumers to any online environment. Therefore it was decided to first focus this thesis on the design of a new product label. This label should trigger consumers' interest and stimulate to learn more about the brand.

The possibilities and demands for a digital T&T feature will be discussed in paragraph 4.2.2. and 5.3.

3.1.3 PROGRAM OF REQUIREMENTS AND WISHES

This list contains requirements (must-haves) and wishes (nice to have) for the product label, based on results from the analysis phase. The criteria are divided in four categories: Use, Engagement, Feasibility, and Other.

USE

- The label is a physical product that can be attached to the jeans
- Consumers take it (partly) home when buying the jeans
- The label does not damage, hamper or fall off while trying on a pair of jeans
- [wish] The label has a second purpose, can be used afterwards

ENGAGEMENT

- The label should be eye-catching and visually attractive
- The information told is understandable for a broad target group
- The label stimulates active involvement rather than educating

FEASIBILITY

- The label can be launched in 2015 (the SS15 collection)
- The development costs and variable costs per item should be low
- The label is suitable for stores in different countries
- [wish] The label can be attached to jeans at the sewing factory

OTHER

- Kuyichi's logo is displayed on the label
- The look should fit Kuyichi's other POS materials
- [wish] The label's materials are recycled and/or left-over from production
- [wish] The label stimulates consumers to do something on social media or talk about it with peers



4. CONCEPTUALISATION

Labels exist in all sorts, shapes and materials. This chapter describes the creative process from design criteria to concepts. It starts with the brainstorm phase, followed by visualisation of ideas. Thereafter, the ideas are selected and further developed. Finally, possibilities for scanning the label with a smart phone are explored.

4.1. IDEA GENERATION

4.1.1. BRAINSTORM TECHNIQUES

The goal of this phase was to come up with as many divergent ideas for the label as possible, striving for quantity over quality (van Boeijen & Daalhuizen, 2010).

Several brainstorm techniques were used to generate ideas. How-to questions were formulated as input for brainstorming. Mindmaps were created upon thoughts and notions related to these questions. One example is shown in Figure 16, and more in Appendix E.

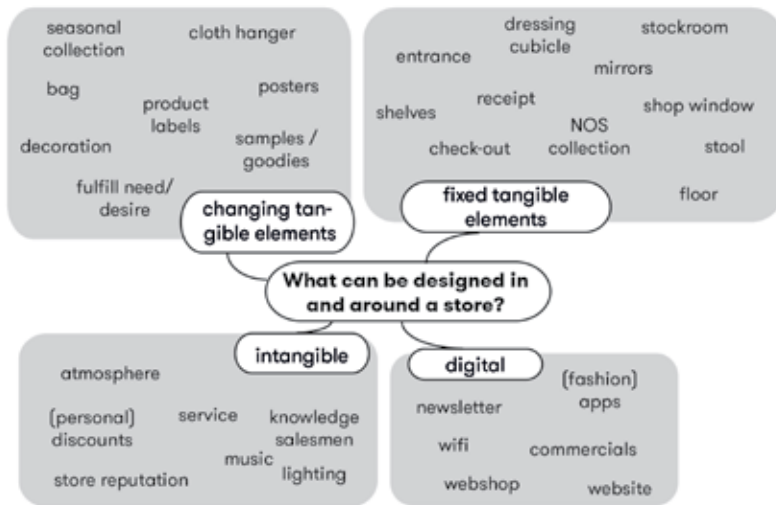


Figure 16: Mindmap used in the brainstorm phase. The starting point of this mindmap was the question: What can be designed in and around stores?

A more systematic method used for this project is the morphological chart. With this brainstorm technique numerous solutions are generated for various sub-problems (van Boeijen & Daalhuizen, 2010), like: 'What to place in the content?' or 'What material can be used?' a small part is shown in Figure 17, the complete morphological chart is displayed in Appendix E.

During this phase, special attention was paid to visual communication. Using visuals in communication is very valuable, as people are captured by pictures and remember them better compared to plain text (Sekeroğlu, 2012). Other important functions of visuals are communicating complexity, making things recognisable, provide proof, enable comparison, and involvement (van den Broek et al., 2010).

4.1.2. IDEAS

By combining sub-solutions from the morphological chart nine ideas were created (Figure 18, next page). Each idea used a different approach, lay-out and material. Explanation per idea can be found in Figure 19a-19i.

	1	2	3
What to add in content? (focus area)	 fair trade	 certifications	 sustainable materials
How to present the content?	 story telling	 pictures & text (quote)	 infographic
What kind of hangtags are possible?	 simple hangtag	 origami 2D > 3D	 booklet

Figure 17: Small part of the morphological chart, with different solutions generated for one sub-problem.

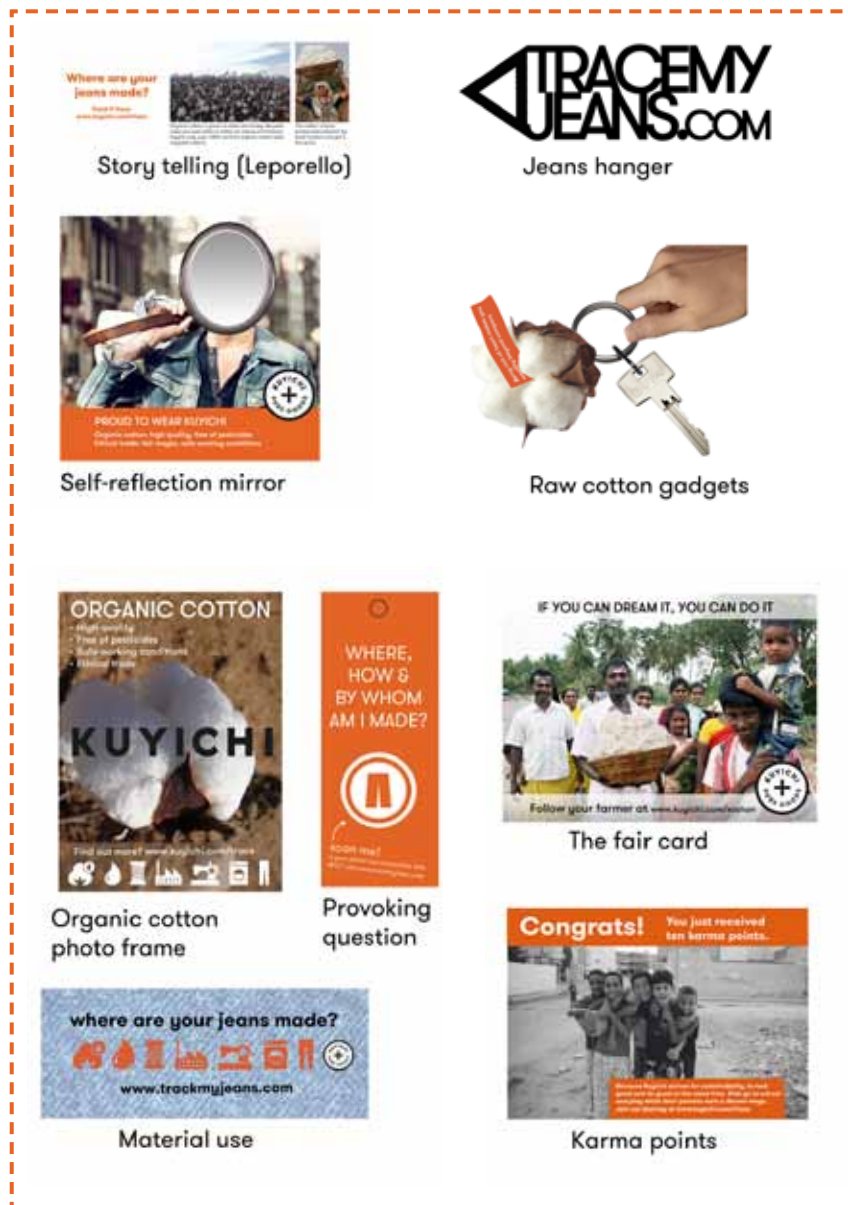


Figure 18: Overview of ideas.

Story telling (leprello)

A small foldable booklet explaining the production steps with real images. To show the journey of the jeans and invite the consumer to learn more about the production steps.



The cotton is hand picked and collected by local farmers who get a fair price.

It undergoes a couple of procedures. The clean cotton fibres are spun in yarn. The yarn is made into fabrics, which is coloured with natural indigo.

Where are your jeans made?



Benefits

- + immediately tells a story
- + intuitively to use
- + matches the '3-30-300 seconds' design rule

Cons

- provides many answers but does not evoke questions
- too detailed
- how to attach to the jeans?

Based on:



production steps cartoon style hanging folding booklet paper

Figure 19a: Storytelling. (Leporello is the Dutch word for a zigzag folding booklet).

The jeans hanger

A jeans hanger featuring a few words like 'organic' or a website made from cardboard or wood. The letters are neatly cut (with no back-ground material).

TRACEMY
JEANS.COM

Benefits

- + unique shape
- + eye catching
- + simple
- + easy to hang at the jeans

FAIRTRADE
ORGANIC

ETHICAL
FASHION

Cons

- expensive (lasercutting needed)
- can easily be damaged or get loose
- does not trigger online activity

Based on:



wording

hanging

cardboard/wood

hanger

Figure 19b: Jeans hanger.

Self-reflection mirror

A label showing (one of) the jeans makers on one side and the consumer on the other side, using a small mirror. Hereby an imaginary 1:1 relationship is created. A male and female version is needed.



Benefits

- + fun and original
- + stimulates self-reflection
- + consumers are more likely to talk about it

Cons

- concerns on the cost price due to the mirror
- using a mirror is not sustainable
- does not fit to Kuyichi's POS material

Based on:



self-reflection with mirror

you vs. them relationship

hanging/back pocket

basic tag

cardboard & mirror

Figure 19c: Self-reflection mirror.

Raw cotton gadgets

Using raw cotton as basic material for several gadgets. A small message can congratulate the consumer and refer to a Track & Trace website. The gadget can be attached to the jeans or given by the retailer.



Benefits

- + eye catching
- + raw cotton is a beautiful material
- + consumer is more likely to keep it

Disadvantages

- can be stolen or easily damaged
- dependent on retailer whether they want to display it in their store
- does not tell a story

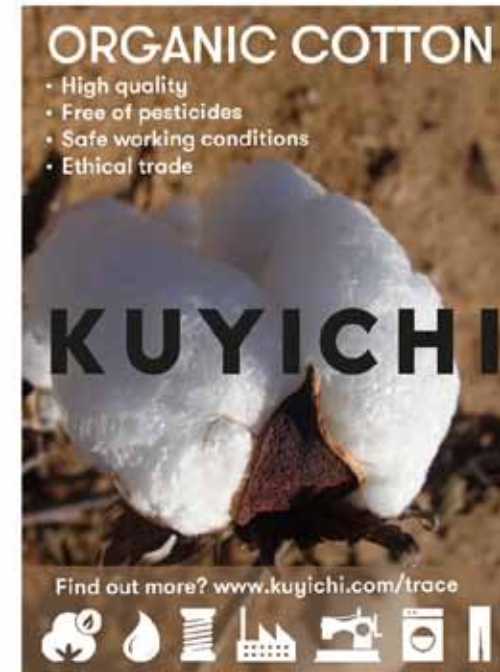
Based on:



Figure 19d: Raw cotton gadgets.

Organic cotton photo frame

A standing photo frame with a close-up of organic cotton and the benefits of this material. A miniature version can be attached to the jeans.



Benefits

- + clearly communicates benefits of organic cotton
- + beautiful picture

Cons

- Boring
- Not innovative
- Does not tell a story, only facts
- Dependent on retailer for placement

Based on:



Figure 19e: Organic cotton photo frame.

Provoking question tag

A question is posed to trigger curiosity, placed on a small orange cardboard similar to Kuyichi's current hangtag. The question is answered in the online Track & Trace feature.



Benefits

- + fits to Kuyichi's POS materials
- + the question is likely to trigger interest
- + simple

Disadvantages

- shape and style is not innovative
- currently the material is quite expensive (soft cardboard)
- does not tell a story

Based on:



Figure 19f: Provoking question.

The fair card

A postcard featuring farmers or factory workers with an inspiring slogan. To show that the people making the jeans are real. The card has a stamp so the consumer can send it and spread the message.



Benefits

- + affordable
- + many variations possible
- + can be spread in consumer's network

Cons

- not innovative
- can be associated with foundations like UNICEF
- does not fit to Kuyichi's POS materials

Based on:



Figure 19g: The fair card.

Material use

The production steps can be showed with simple icons. The icons are easy to recognize and create a clean look. The icons can be printed on fabric, which guides the consumer to the jeans itself.

LOOK GOOD & FEEL GOOD



www.trackmyjeans.com



Benefits

- + connection with the jeans through material
- + icons for production steps are clear
- + using left-over material

Cons

- The fabric label may not be visible in the shelves
- How to attach it to jeans?
- Does not invite to go online

Based on:



Figure 19h: Material use.

Karma points

A simple hangtag that congratulates the consumer with his/her new jeans. It aims to give a feel-good moment by showing the maker(s) and/or its context.



Benefits

- + Idea of karma points is fun and inviting
- + affordable
- + many variations possible

Cons

- There has to be more behind it. What do you want to do with the karma points, what is the follow-up?
- the word 'karma' may evoke unintended responses (e.g. religion)

Based on:



Figure 19i: Karma points.

4.2. IDEA EVALUATION & SELECTION

4.2.1. EXPLANATION SELECTED IDEAS

All ideas were evaluated by listing benefits and disadvantages. The design requirements (see paragraph 3.2.2.) were used to make a selection between ideas. It was important how the ideas scored across all categories (use, engagement, and feasibility). Furthermore a choice had to be made for the type of label: since there is little space space on the overrider it was decided to use a separate hangtag, see Figure 20.



Figure 20: Placement of the hangtag and the overrider.

Four ideas were selected: Provocative question, Material use, Self-reflection and Storytelling. For each idea multiple variants were designed and prototyped. For example Self-reflection and Storytelling were made smaller and the pictures were changed into black and white, to better match Kuyichi's style and POS materials.

Different coloured jeans patches were printed for Material use, to test readability and appearance. Some changes were made to the text and questions used on the hangtags. With the input of five fellow students, one variant was chosen per idea.

PROVOCATIVE QUESTION

Based on the fact that consumers have little knowledge on brands' practices (Auger et al, 2003), a provocative question can help to attend consumer on sustainability. Instead of detailed text, this concept featured one provocative question:

"How many hands have touched your jeans?"

This hangtag looks similar to Kuyichi's current hangtag. The bright colour stands out and fits to Kuyichi's other POS materials.



Figure 21: Prototype for testing - Provocative question (concept B).

MATERIAL USE

Since product appearance is usually the first contact point (Berkowitz, 1987), the look of the label is important. An unusual material for the label can guide consumers to the material of the clothing itself, in this case organic cotton. This concept makes of jeans fabric, printed with text and icons showing the production steps. Ideally it saves resources, if the fabric hangtag can be made from rest material after cutting (since every extra hangtag means extra material use). By printing these patches the material is re-used efficiently.



Figure 22: Prototype for testing - Material use (concept C).



Figure 23: Prototype for testing - Self-reflection for men and women (concept D).

STORYTELLING

As pointed out by Harrison et al. (2005), consumers find it hard to relate to the makers of their clothes. By showing the production process in chronological order, the journey of the jeans and its makers behind it can be told with text and visuals. For this concept real pictures of workers and their context were used with supporting text and questions. The story was designed in a small booklet that unfolds intuitively, illustrated in Figure 24.

SELF-REFLECTION

When consumers believe their choices have an impact they are more likely to engage in sustainable consumption (Gilg et al, 2005). People's self-reflection can be triggered by showing people a mirror that reflects their self-image.

This concept consists of a square cardboard with a picture of a jeans maker on one side and a man/woman with a mirror-head on the other side (see Figure 23). In this way, a one to one connection was made with 'the maker'. The idea behind the mirror is that it gives a sense of self-reflection. It shows that the people behind the jeans are real, and that Kuyichi is good for both the wearer and maker.



Figure 24: Prototype for testing - Storytelling (concept E).

4.2.2. TECHNOLOGY USE HANGTAG

In the previous chapters the idea of using a scanning feature was proposed. However, the effectiveness of scanning features can be questioned. In a study of Forrester Research it was found that only 5% of American mobile phones owners actually scanned a QR code in three months (Patel, 2012). The large majority of smart phone owners withhold from scanning QR codes because:

- People are unaware how to scan the codes
- They have bad experiences with scanning QR codes. This withholds people from scanning new codes.
- QR-codes are positioned unlucky, e.g. on a moving object or in a store with poor internet reception.

Besides QR codes newer scanning applications are developed. An overview of these features with benefits and disadvantages is shown in Appendix F. Currently there is not one scanning application that stands out. All technologies have a low usage rate, because consumers are unwilling or unaware how to scan it with their phone. On top there is a lack of uniformity between different smartphone software systems. The adoption of newer scanning applications seems promising but there are many barriers to cross. For example if Kuyichi chooses to use NFC, it excludes I-phone users. Furthermore NFC textiles are costly and unsustainable when thrown away after purchase.



5. EXPERIMENTS

To measure consumer reactions towards the four selected concepts the hangtags had to be tested and compared with a benchmark. This was first done in a lab-setting. After data analysis a second experiment was conducted in a real store. Both studies are described in this chapter. Finally, results are compared and interpreted, and decisions are made for the continuation of this graduation project.

5.1. LAB-SETTING EXPERIMENT

The goal of the lab-setting experiment was to see which design approach would be most persuasive for promoting consumer action. This study was a 1 x 5 between-subjects experimental design conducted at Delft University of Technology.

5.1.1. RESEARCH METHOD

STIMULI

Kuyichi's current hangtag (see Figure 25) was used as benchmark. This hangtag emphasises sustainability with the use of textual information, typically used by Kuyichi and other sustainable brands. Sustainability is only visible with a small icon of organic cotton.

In total five concepts were tested: the benchmark (concept A), asking a provocative question about sustainability (concept B); through the use of sustainable material (concept C); by evoking self-reflection (concept D); and by storytelling (concept E). For the experiment, twenty prototypes were made per concept. Kuyichi's current hangtag was remade, so all concepts would have the same quality (not from a professional printing agency).

For the experiment it was decided to measure consumers' interest for scanning, but to exclude a scanning feature on the design of the hangtag itself. Instead, the imaginary website "www.trackmyjeans.com" was placed on all designed hangtags. This name suggests something special compared to www.kuyichi.com.

PRE-TEST

A pre-test was done with sixteen students, who were asked to circle a maximum of seven emotions that fit their feelings towards one of the hangtags. The emotions mentioned most often were included for the questionnaire. The complete questionnaire was then tested with three students. Since students are not very familiar with the term hangtag, the word label was used during the study. No other bottlenecks were observed.

PARTICIPANTS AND PROCEDURE

A shopping experience was simulated with a shelf and some accompanying POS materials. Twenty pairs of Kuyichi jeans with various fits and washings were folded and piled on the shelf, for men and women (see Figure 26). The hangtags were connected to the jeans with a small orange and white cord.

In total 107 students from the TU Delft participated in the experiment ($M_{age} = 24$ years). They were randomly assigned to one of the five groups, each containing 21 or 22 participants. The experiment was done individually. Participants were asked to take a look at the jeans and the labels, and to select a pair of jeans they liked. Afterwards, the participants completed a questionnaire on the hangtag and jeans. The experiment took fifteen minutes on average per person. They were compensated with snacks and drinks.



Figure 25:
Prototype for testing
- Benchmark (concept A).



Figure 26: Lab-setting with a participant filling in the questionnaire (left) and the shelf (right).

MEASURES

The questionnaire consisted of open questions and seven-point Likert scales (see Appendix G), divided in four categories:

- (1) Participants' first impression on the jeans and the hangtag; and the importance of the hangtag;
- (2) Attitudes and feelings towards the hangtag;
- (3) Call to action;
- (4) Control questions like knowledge, age, gender, and familiarity with the brand.

The third category was most important for this study, measuring the following:

Action-orientation was measured with three items (Q8a-c):

- *"With this label, I want to find out more about the brand."*;
- *"With this label, I want to find out more about the journey of my jeans."*; *"With this label, I want to go to the website to track my jeans."*; (Strongly disagree/Strongly agree).

Attention was measured with two items (Q7a-b):

- *"When being in a store I would check this label."*
- *"This label is eye-catching."* (Strongly disagree/Strongly agree).

Uniqueness was measured with one item (Q7c):

- *"This label is unique."* (Strongly disagree/Strongly agree).

Willingness to scan was measured with one item (Q9a):

- *"Imagine this label has a scanning feature for your smart phone. Would you make use of this scanning feature?"* (Yes/No/I don't know).

5.1.2. RESULTS LAB-SETTING EXPERIMENT

The data were transcribed and analysed in SPSS. Reverse questions were recoded, so higher scores corresponded with a positive evaluation. Each open question was interpreted and coded into several categories. A factor analysis was done for all clustered variables. As expected, all items had factor loadings $> .7$ and Cronbach's alpha $> .7$. The mean values and standard deviations of the scale and nominal questions are provided in Table 5. One-way ANOVA showed all control measures were equally distributed across the five conditions.

GENERAL FINDINGS

Participants commented mainly on the jeans' fit, colour, washing and quality (Q1). Participants' first impression on the hangtags most frequently covered the colour: *"Nice colour that stands out"* [...] *"The orange colour in the label compliments the blue."*

The size and shape of the hangtags was also mentioned often. About half of the participants stated something about the content. Occasionally comments were made about the brand: *"Sounds like Japanese, is it a Japanese brand?"*

The perceived importance of the hangtag strongly differed. Some people stated they usually ignore it (they only look at the overrider), but the majority perceived the hangtag as somewhat important: *"It certainly adds a 'likeability' factor if the label looks nice or beautiful."*

A few people found the hangtag highly important: *"to be able to estimate quality"* [...] *"in experiencing the style of the jeans. Does the label fit your image?"*

Table 5: Summary of study - Lab-setting experiment (M = mean value; SD = Standard Deviation).

	Benchmark concept A (N=21)	Provoking question concept B (N=21)	Material-use concept C (N=22)	Self-reflection concept D (N=21)	Storytelling concept E (N=22)
Q2 Attractiveness jeans	M = 5.38; SD = .63	M = 5.57; SD = .57	M = 5.50; SD = .70	M = 5.41; SD = 1.13	M = 4.95; SD = 1.22
Q3 Attractiveness label	M = 5.02; SD = 1.19	M = 5.06; SD = 1.28	M = 5.15; SD = 1.06	M = 5.48; SD = 1.22	M = 5.12; SD = 1.04
Q5 Importance factor	M = 4.00; SD = 1.19	M = 4.64; SD = 1.03	M = 4.10; SD = .99	M = 4.66; SD = .89	M = 3.98; SD = 1.25
Q5 Interest factor	M = 4.74; SD = 1.01	M = 5.02; SD = .73	M = 4.62; SD = 1.19	M = 5.17; SD = .85	M = 5.03; SD = .86
Q6 Positive factor	M = 4.19; SD = 1.22	M = 4.57; SD = .90	M = 4.19; SD = .66	M = 4.87; SD = .87	M = 4.04; SD = .97
Q6d Guilty	M = 2.38; SD = 1.60	M = 2.65; SD = 1.31	M = 2.95; SD = 1.81	M = 2.81; SD = 1.40	M = 2.82; SD = 1.62
Q6f Confused	M = 2.24; SD = 1.41	M = 2.33; SD = 1.59	M = 3.59; SD = 1.76	M = 2.81; SD = 1.30	M = 2.91; SD = 1.48
Q6h Irritable	M = 2.00; SD = 1.10	M = 2.52; SD = 1.54	M = 2.73; SD = 1.58	M = 2.48; SD = 1.40	M = 2.82; SD = 1.76
Q7ab Attention	M = 5.24; SD = 1.12	M = 5.31; SD = 1.12	M = 5.10; SD = 1.12	M = 5.74; SD = .78	M = 4.57; SD = 1.02
Q7c Uniqueness	M = 3.43; SD = 1.72	M = 4.19; SD = 1.25	M = 3.95; SD = 1.68	M = 4.95; SD = 1.43	M = 4.05; SD = 1.56
Q7d Fit to conscious brand	M = 4.76; SD = 1.45	M = 5.48; SD = 1.08	M = 5.95; SD = 1.16	M = 5.90; SD = .94	M = 5.32; SD = 1.39
Q8a-d Action orientation	M = 3.40; SD = 1.44	M = 4.89; SD = 1.42	M = 5.00; SD = 1.26	M = 5.10; SD = 1.02	M = 4.38; SD = 1.40
Q9a Willingness to scan	4,8% yes; 52,4% no; 42,9% I don't know	23,8% yes; 38,1% no; 38,1% I don't know	27,3% yes; 36,4% no; 36,4% I don't know	28,6% yes; 52,4% no; 19,0% I don't know	27,3% yes; 36,4% no; 36,4% I don't know
Q10 Willingness to pay	M = € 67, - SD = 24	M = € 61, - SD = 21	M = € 66, - SD = 21	M = € 69, - SD = 18	€ 68, - SD = 21

This table gives an overview of the results from the lab-setting experiment. The numbers correspond with the questions that are shown in Appendix H. Higher values in the table correspond with a more positive consumer evaluation. From left to right are the five different conditions A-E displayed. From top to bottom are the mean scores and standard deviation for the main variables from the questionnaire. The scores of the control questions (Q11 - Q16) are shown in Appendix H.

Participants' answers to the open questions were interpreted and generalised. These findings are added throughout this chapter and illustrated with quotes.

It can be observed from Table 5 that the scores on some variables are really close to each other. There was no significant difference between the perceived attractiveness of the jeans (Q2) nor the attractiveness of the hangtag (Q3). Overall, participants felt quite positive towards the concepts (Q6). The hangtags made participants feel slightly guilty, but there was no significant difference between the five concepts.

However, there significant differences were found in the most important measures for this study (Action-orientation, Attention and Uniqueness). This is shown in Table 6.

FINDINGS PER CONCEPT

One-way ANOVA showed a significant effect of type of label on action-orientation, eye-catching and uniqueness. The scores of these measures are displayed in Table 6. Appendix H presents the values of the One -Way ANOVA analysis.

Specific feedback per hangtag is summarised below. For the ease of documenting the following terms are used (out of 21 or 22 participants per concept): a few = 2 - 4 participants; some = 5 - 8 participants; many > 10 participants; most > 15 participants.

Benchmark (concept A):

Participants liked the clean design and the colour combination of Kuyichi's current hangtag. Some people complained about the amount of text (too much) and font size (too small). This hangtag scored the lowest on Action-orientation, Uniqueness, and fit to conscious fashion brand (Q7d). Only one person indicated to be interested in scanning this hangtag.

Provoking question (concept B): This concept scored around average on most measurements. Overall participants liked the simplicity of this hangtag and felt motivated to read it. Many students were interested by the question *"How many hands have touched*

your jeans?" A few students interpreted this question wrongly (as in how many consumers have touched the jeans before you?).

A few participants stated the hangtag did not provide enough information.

Material use (concept C):

In general participants liked the fabric material, and thought it fit well to a conscious fashion brand. However, some disliked the mismatch between the colour and washing of the jeans and the hangtag (light blue). Many participants thought the hangtag provided too little information, and the icons of production steps were considered confusing. Apparently for people with less knowledge on clothing production it is difficult to recognise what the icons mean.

Self-reflection (concept D):

As can be seen from Table 5 and 6, this concept was evaluated more favourably than the other conditions and scored best on Action orientation, Uniqueness and Eye-catching. Although some people said they would like the mirror to be sharper and bigger, many people liked the idea and saw it as a funny addition. The intended 1:1 connection with "the maker" was well understood. A few people commented that the pictures helped to see whether the pair of jeans was for men or women. One participant indicated the conceot made him feel guilty.

Storytelling (concept E):

This concept was received with mixed opinions. Most participants liked the idea of a story, but not everyone felt like reading it while being in a store. The majority felt motivated to read the questions, although some people expected to get an answer on the hangtag itself: *"Why should I look online when the label offers enough to explain?"* Storytelling had the highest score on the emotion "irritable" (Q6). Many participants complaint the booklet unfolded too easily. This might have changed their overall perception.

Table 6: Main results, lab-setting experiment.

	Benchmark (concept A)	Provoking question (concept B)	Material use (concept C)	Self-reflection (concept D)	Storytelling (concept E)
Action-orientation	M = 3.40 SD = 1.44	M = 4.89 SD = 1.42	M = 5.00 SD = 1.26	M = 5.10*** SD = 1.02	M = 4.38 SD = 1.40
Attention	M = 5.24 SD = 1.12	M = 5.31 SD = 1.12	M = 5.10 SD = 1.12	M = 5.74* SD = 0.78	M = 4.57 SD = 1.02
Uniqueness	M = 3.43 SD = 1.72	M = 4.19 SD = 1.25	M = 3.95 SD = 1.68	M = 4.95** SD = 1.43	M = 4.05 SD = 1.56

Planned contrasts results for the self-reflection condition (concept D) versus the benchmark (concept A): * for $p \leq .05$, ** for $p \leq .01$, and *** for $p \leq .001$.

WILLINGNESS TO SCAN

In total 22.4% of the participants said they would be interested to scan the hangtag with their smart phone, 34.6% was not sure and the remaining 43% had no interest in scanning. The most important reasons mentioned for willingness to scan the label were related to time, interest in the topic, and technical aspects, as illustrated with quotes in Table 7. Many participants associated the word ‘scanning’ directly with QR codes.

With the Benchmark condition only one participant (4.8%) was interested to scan the hangtag, while the other concepts all rated higher (between 23.8% and 28.6%). Perhaps participants were not triggered to scan the Benchmark because it communicates sustainability with text, but the small sample size cannot prove this.

Table 7: Quotes on reasons for (not) scanning the label.

	Interested	Not interested	In doubt
Time & effort	<i>“If it’s easy and at the point of purchase I would definitely use it”</i>	<i>“When I am shopping I don’t have time for that. I want to buy and go.”</i>	<i>“Depends on the situation, but I wouldn’t use it in a store (takes a lot of time?), maybe at home.”</i>
Interest in the topic	<i>“Your jeans have a ‘history’. I’d be curious about what ‘trading’ is in this case”</i>	<i>“If the cotton is labelled as organic, then that it’s all I need to know.”</i>	<i>“I would need a bit more information. I am not curious enough now.”</i>
Technical aspects	<i>“It’s easy, I would probably want to go to the website but I would forget about it.”</i>	<i>“I have never scanned anything with my phone so I won’t use it now.”</i>	<i>“My phone cannot handle the apps. But if I have another phone I might do it.”</i>

5.1.3. DISCUSSION

The lab-setting experiment was appropriate to compare between the five concepts. The samples were equal and external factors like competing brands could be excluded as much as possible. Still, this experiment had some limitations. First of all students with a technical background are not representative for Kuyichi’s target group. Their age ($M_{age} = 24$ years) and willingness to pay ($M_{pay} = €66,-$) is considerably lower. Secondly, the shopping experience was simulated, which can have affected participants’ mood, behaviour and time pressure.

Repeating a similar experiment in a real store was necessary to validate the results. Previous studies are usually limited to a lab environment (Harrison et al., 2005), making this experiment unique and more realistic.

The conscious fashion store Nukuhiva was selected for the in-store experiment, because Kuyichi has a strong relationship with this store. Furthermore Nukuhiva has an interesting target group (mainly critical- and somewhat critical consumers).

Nukuhiva sells Kuyichi’s complete product portfolio among other sustainable brands. It does not sell clothes of Kuyichi’s competitors². In fact all jeans at Nukuhiva are from Kuyichi. Although the absence of competing brands is a limitation for generalising the results, it is beneficial for this experiment since the influence of competing brands and participants personal preferences towards these are minimised.

² with the exception of the competitor Knowledge Cotton, but Nukuhiva does not sell jeans of this brand.

5.2.1. RESEARCH METHOD

STIMULI

Kuyichi's current hangtag (concept A) was again used as benchmark. The concepts Provocative question (concept B) and Material use (concept C) were eliminated, since they were considered confusing and communicated too little information. Self-reflection (concept D) was selected, as it scored best on most variables, especially on action-orientation. Storytelling (concept E) was kept but slightly altered due to remarks from the lab-setting experiment: the cord was attached differently and the questions in the booklet were removed, see Figure 27.



Figure 27: Improved version of Storytelling (concept E).

PARTICIPANTS AND PROCEDURE

The hangtags, one concept at the time, were attached to jeans hanging in the store³, see Figure 28. Consumers that spent some time in the store were approached and asked to join the experiment⁴. After a short introduction, the participant was asked to take a look at the jeans and the hangtags and then interviewed according to a fixed questionnaire. On average the experiment took ten minutes per person.

³ The initial plan was to only approach consumers that were looking at jeans, but unfortunately not enough people could be found. Therefore all consumers shopping at Nukuhiva were approached for the study.

⁴ In the lab-setting experiment the jeans were piled, while at Nukuhiva only the jeans that were hanging were used and not the jeans that were piled. This was done since the latter would require >100 hangtags.

MEASURES

The complete questionnaire can be found in Appendix I. It measured participants' first impression on the jeans and the hangtag, and Call to action (using the same variables as during the lab-setting experiment).

Interest in sustainability-related information was also measured, to gather relevant insights for the content of the (online) Track & Trace feature. The questionnaire was completed with control questions.

5.2.2. RESULTS IN-STORE TESTING

In total 61 consumers were interviewed ($M_{age} = 38$ years; $SD = 11.84$). Among them some true 'Kuyichi-fans' were present, who regularly buy their clothes.

The results of this study are displayed in Table 8 (next page).



Figure 28: The in-store experiment at Nukuhiva (concept E attached to women jeans).

Table 8: Summary of study - in-store experiment (M = mean value; SD = Standard Deviation).

	Benchmark concept A (N=20)	Self-reflection concept D (N=21)	Storytelling concept E (N=20)
Q1 Attractiveness jeans	M = 4.80; SD = 1.21	M = 5.49; SD = .91	M = 5.00; SD = 1.27
Q2 Attractiveness hangtag	M = 4.37; SD = 1.27	M = 4.78; SD = 1.39	M = 5.00; SD = 1.12
Q4ab Attention	M = 3.90; SD = 1.15	M = 4.98; SD = 1.18	M = 4.73; SD = .94
Q4c Uniqueness	M = 3.60; SD = 1.00	M = 5.57; SD = 1.25	M = 4.20; SD = 1.06
Q4d-f Action orientation	M = 2.77; SD = 1.08	M = 4.05; SD = 1.32	M = 4.02; SD = 1.38
Q5 Interest in sustainability-related info	12x no; 8x yes	10x no; 11x yes	11x no; 9x yes
Q6 Presentation type*	Total (concept A+D+E) 8x with real images; 6x Infographics; 5x with short movies; 4x the salesman; 3x on factsheets with tables; 3x other; 3x no preference		
Q7 Where to access the info*	4x at home; 3x in-store; 1x other	7x at home; 4x in-store	5x at home; 4x in-store
Q8a Willingness to scan	10% yes; 85% no; 5% I don't know	9,5% yes; 90,5% no	5% yes; 80% no; 15% I don't know

* Answered by the 28 participants that stated to be interested to get more sustainability-related information.

This table gives an overview of the results from the in-store experiment. The numbers correspond with the questions that are shown in Appendix J. Higher values in the table correspond with a more positive consumer evaluation. From left to right are the three different conditions A, D and E displayed. From top to bottom are the mean scores and standard deviation for the scale variables from the questionnaire.

The answers of question 6 are combined in one column. The scores of the control questions (q9 - q13) are shown in Appendix J.

There was no significant difference between the perceived attractiveness of the jeans (Q1) nor the attractiveness of the hangtag (Q2) across conditions. So attractiveness does not influence the other variables.

Significant differences were found in the most important measures for this study (Action-orientation, Attention and Uniqueness), which was also the case with the lab-setting experiment. These scores are explained in Table 9.

FINDINGS PER CONCEPT

The most important findings per concept are briefly discussed.

Benchmark (concept A):

Despite the fact that many consumers perceived this hangtag to be stylish and expensive this concept had the lowest score on the three important measures, see Table 9. The amount of text and font size was a major irritation point:

“Nice colour; I don’t have my glasses with me, the font is too small.”

A few participants considered the blue tag (about organic cotton) more useful than the orange tag (about Kuyichi’s story):

“I like the blue tag better than the orange tag, it is more readable; I would not read the orange one; the font is a bit too fancy and too small.”

Self-reflection (concept D):

As can be seen from Table 9, this concept scored significantly better on the measures Action orientation, Attention and Uniqueness compared to the Benchmark. Self-reflection also scored significantly higher than Storytelling on the measures Attention and Uniqueness. The test values are displayed in Appendix J.

Table 9: Planned contrasts in-store experiment.

	Benchmark (concept A)	Self-reflection (concept D)	Storytelling (concept E)
Action-orientation	M=2.77 SD=1.08	M=4.05** SD=1.32	M=4.02 SD=1.38
Attention	M=3.90 SD=1.15	M=4.98** SD=1.18	M=4.73 SD=.94
Uniqueness	M=3.60 SD=1.00	M=5.57*** SD=1.25	M=4.20 SD=1.06

Planned contrasts results for the Self-reflection condition versus the benchmark (A):

* for $p \leq .05$, ** for $p \leq .01$, and *** for $p \leq .001$.

Most people liked the text “Proud to work / Proud to wear” and the pictures. The mirror was considered funny but it became clear that the quality was not good enough: *“Nice, but you can’t really see yourself.”*

A few participants indicated they could not identify themselves with the male or female model on the front side, they considered themselves too old. Three participants wanted to see more about the ‘environmental’ part:

“I miss the story about organic, I know Kuyichi does this; the size is too big, which is inconvenient when fitting the jeans; I like the back-side (with workers), strong text.”

Story-telling (concept E):

The improvements made to Story-telling seemed to work well: no comments were made regarding folding inconvenience or the back-side. It also scored much better on the important measures than during the lab-setting experiment.

“You assume it is a good brand; to me the information is not new, but I do think it is good that the info is there.”

In general people liked the pictures and lay-out of the booklet, and the story-telling goal was clear. A few people mentioned it would be a nice after purchase experience, rather than during shopping. Some participants complained the information was too general and not innovative:

“I like the combination of text & pictures; it shows the process; makes it more vivid; a picture of a washing machine does not really say much.”

INTEREST FOR SUSTAINABILITY-RELATED INFORMATION

54% of the interviewees (33 participants) was not interested in more sustainability-related information about the jeans or Kuyichi. This group includes non-critical and somewhat critical consumers that are not really interested in information on sustainable fashion. Interestingly, this group also contained many critical consumers. Many of them are either already familiar with Kuyichi, or they feel that all brands within this store can be trusted. These people do not want any extra information as they already trust Nukuhiva and Kuyichi.

“If I know the brand and you know it is sustainable than I remember it and don’t look it up”

(..) “I know this store of Floortje Dessing, so I already know I can trust it. In this case I don’t have to check it anymore”.

The remaining 46% expressed interest to get more sustainability-related information. Most of them stated they would appreciate it when this information is available, while a few participants really demand this information. For the latter, the main reason is to verify Kuyichi’s sustainable credentials.

Table 10 displays the topics and consumer interest (Q5). Overall, the target group was mostly concerned about: labour conditions, name and location of suppliers, and sustainable materials:

“Sometimes I look up some things on the internet beforehand, no child labour is a priority to me.”

(..) “If it is made in Bangladesh I do not want to buy it”.

(..) “I think organic is important to avoid pesticides.”

HOW AND WHERE SHOULD THE INFORMATION BE PRESENTED?

Regarding the type of presentation there seems to be a small preference for real images, followed by infographics (see Table 8). A few participants favoured short movies, but others did not share this opinion.

Table 10: Sustainability-related topics consumers’ indicated to be interested in.

Q5 Interest in sustainability-related topic	total*
Labour conditions in factories	15x
Name and location suppliers	13x
Material (organic cotton, etc.)	13x
Production process (how it’s made)	6x
Certifications & partner organisations	4x
Carbon footprint of the jeans	1x
Full cost structure of the jeans	1x
Water use & treatment	0x
Summary of factory audit	0x

*Mentioned by the 28 participants that were interested to get more sustainability-related information. Multiple answers were possible. The remaining 33 participants that stated to have no interest did not answer this question.

Those who wanted more info sometimes referred to the hangtag:
“I prefer to have it physically, so you can check it out at ease.”

Table 8 shows where consumers want to access sustainability-related information (Q7). Of the 28 participants interested to get sustainability-related information, a slight majority wanted to access this information at home.

WILLINGNESS TO SCAN

Participants’ willingness to scan the hangtag was really low: only three participants answered yes, six were in doubt and the remaining 50 participants answered no. The main reasons were identical to the lab-setting experiment: (technical) issues with the smart phone and scanning; and lack of interest in the content of such a feature. Some people mentioned a website as a good solution.

5.3.1. MAIN INSIGHTS

The main insights of the two experiments are presented in Figure 29. The mean scores of some control questions are added below.

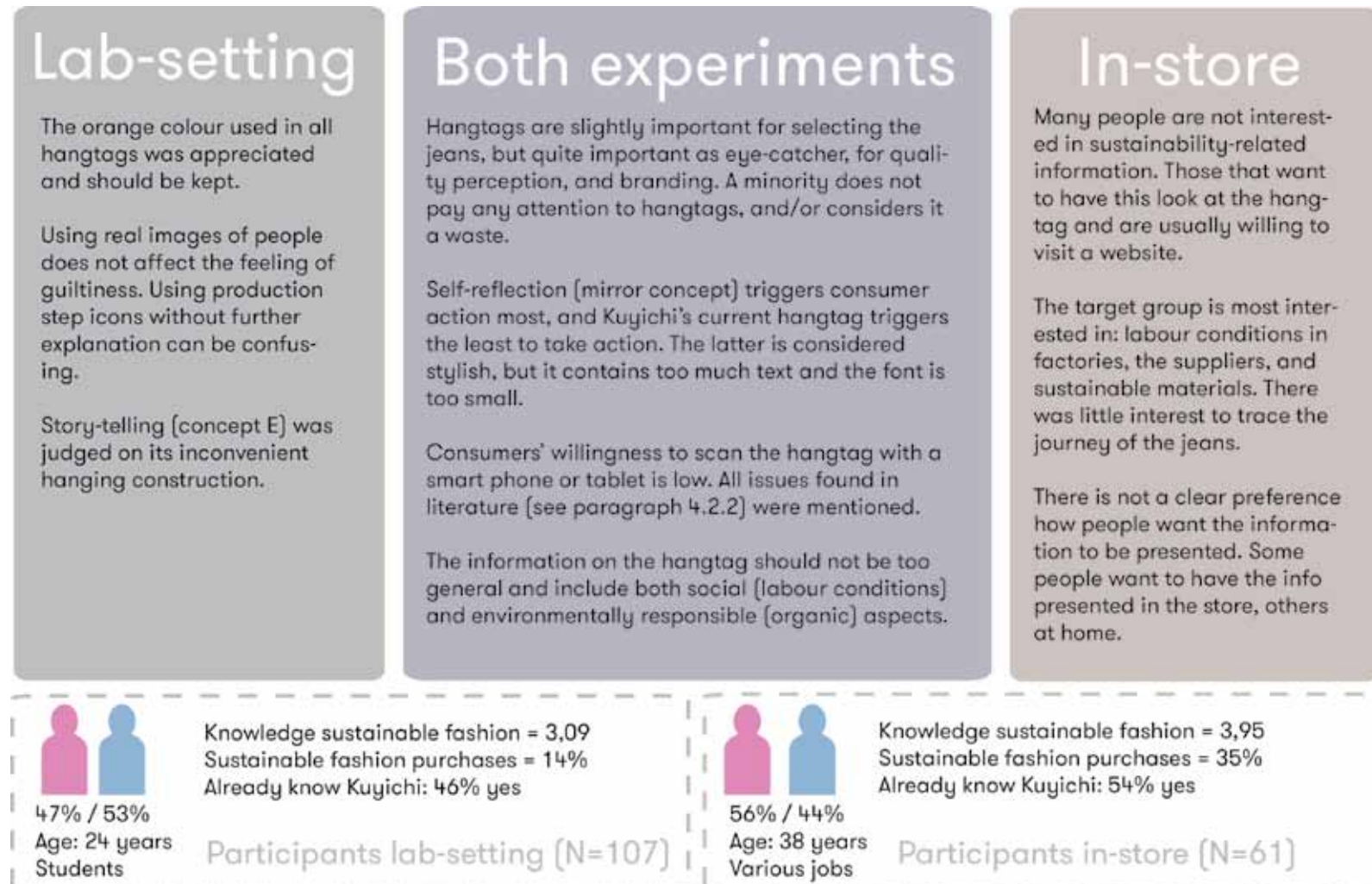
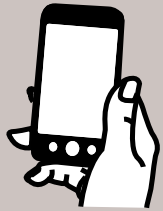


Figure 29: Most important insights from the experiments.

When taking a closer look at the lab-setting and in-store experiments it is possible to assess the validity of the results.

There were some small differences between the results of the two experiments (see Figure 30). These differences seem to be influenced by the participants' age and knowledge, and the context of the experiment. On average the in-store participants were older, had better knowledge on sustainable fashion and more often purchased clothes from sustainable brands.

Overall, action orientation scored lower in-store than at the lab-setting, possibly due to the fact that many consumers already trusted the store.



Participants' willingness to scan the hangtag was much lower in-store compared to the lab-setting. Students' smart phone usage is higher while many in-store participants lacked the skills to scan. Another explanation is that people are less in the mood to scan when shopping.

The orange colour (or combination of orange with other colours) was mentioned more often in the lab-setting. This was because many students had a background in design.

The benchmark's font size and amount of text was criticised more often in-store, probably due to participants' higher age and shopping mind-set (not in the mood to read a lot while shopping).



Figure 30: Differences observed between the two experiments.

Overall the results from both experiments are rather similar and thus support the insights.

5.3.2. DECISIONS

In this paragraph the insights are interpreted and decisions are made for the continuation of this thesis.

THE HANGTAG

The experiments show that hangtags can greatly trigger consumers' interest in sustainability and willingness to learn more about Kuyichi. It is apparent that there is no 'one size fits all' design that can satisfy the needs of Kuyichi's entire target group. Most people perceived the hangtag (either concept A, D or E) as a good and useful addition, but a few people disagreed:

"Good that it is there. I would like to read it."

"The info is the same for every jeans so a bit too general but overall it looks nice and I think it is good; these days people do not know where their clothes come from."

"I think there are already too many hangtags and labels, I don't need it."

The dilemma between using extra material for a hangtag versus the benefit of communicating sustainability-related information is difficult, even more for a sustainable brand as Kuyichi that aims to reduce resources. Apparently this was also a dilemma for some consumers:

"I don't really want extra material and beautiful cords, but on the other hand I do like the info where it is made."

Since the hangtag serves as important first touch point that can draw the attention and highlight sustainability, it will be wise for Kuyichi to keep it. Although hangtags may not be a sexy feature, one should realise that there are limited alternatives that can be added in the store, due to retailers' constraints and consumers' rejection of scanning.

Self-reflection (concept D) evoked positive reactions and gained the highest score on the most important measures (attention, action-orientation and uniqueness). Thus it was decided to choose this design. In the next chapter this concept is optimised with feedback from the experiments.

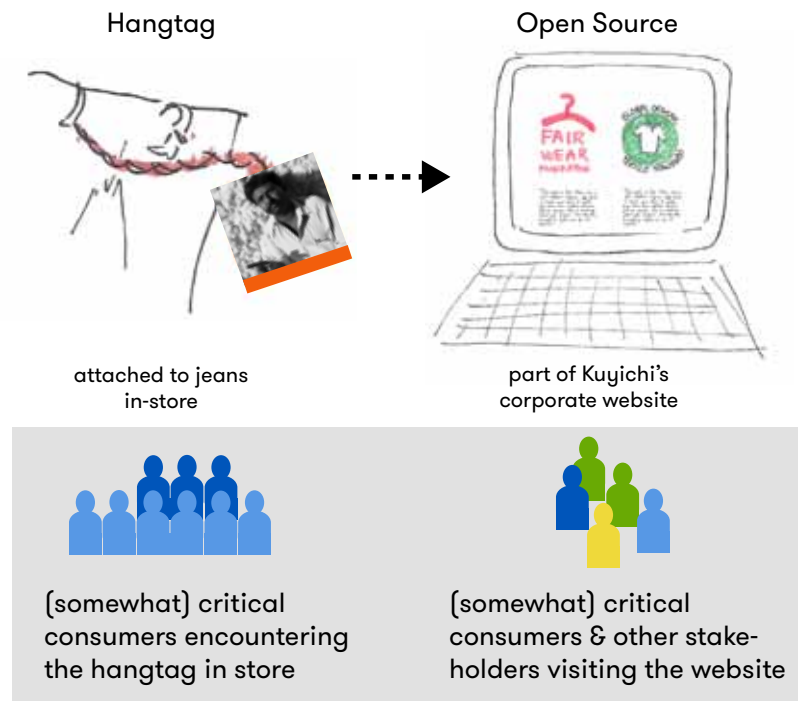


Figure 31: The selected communication tools and their target group.

DIGITAL TRACK & TRACE FEATURE

The assumption was that especially critical consumers often have certain sustainability-related questions that they want to have answered. When this information can be presented in-store with a T&T feature, it can serve as purchase tool.

The two experiments suggest that the interest in an online feature is rather small. For the majority of Kuyichi's target group the label is sufficient: they are less interested to see the journey of the jeans and they do not have any more questions:

"I know other brands who have this kind of info, like that you can trace back the sheeps [Icebreaker]. It is nice but not for me."

And those participants that want to have this type of information stated they would take the effort to search for it themselves:

"If I want it I will ask it in store or check it out at home. I already know Kuyichi uses organic cotton."

The research showed that people do not want to scan the hangtag or download an app to access this information.

A digital Track & Trace feature can always be a nice addition but that is outweighed by the necessary investments. Therefore, it is advised not to create an online Track & Trace feature (see Figure 31). Instead, Kuyichi should pay more attention to the Open Source (OS), part of Kuyichi's website.

The Open Source falls outside the scope of this graduation project, but it will be briefly discussed in the next chapter.



6. CONCEPT DEVELOPMENT

In this chapter the design of the selected hangtag is optimised using feedback from the experiments. Afterwards some thoughts on the Open Source are given. This chapter is finished with an implementation plan, discussing next steps that are required for the further development of the hangtag and Open Source.

6.1. HANGTAG OPTIMISATION

6.1.1. DESIGN ADJUSTMENTS

Based on the experiments' results the choice was made to continue with Self-reflection, concept D. Basic prototypes were used for the two experiments. Based on feedback from participants the design can be improved, which is discussed in this paragraph.

SIZE & SHAPE

The Self-reflection prototype was 10 x 10 cm, but the final design will be 8,5 x 8,5 cm.

Retailers want to have the option to place hangtags out of sight, but the prototype did not fit in the back pockets of all jeans (see Figure 32). Besides a few participants in the experiments considered the prototype a bit too large.

A rectangular shape would better fit the back pocket. However, Kuyichi's competitors mainly use rectangular hangtags. Some examples are given in Figure 33. The square shape of Self-reflection stands out.



Figure 32: The 10 x 10 cm prototype of Self-reflection did not fit this back pocket.



Figure 33: Examples of hangtags from competing brands. From left to right: Denham, Diesel, Nudie Jeans, Levi's and K.O.I.

THE MIRROR

The front side should immediately evoke a "Hey that's me effect". Through the back side the connection with 'the jeans maker' needs to be made. The experiments showed that most participants liked the mirror and that they understood the idea behind it, although the prototypes' mirrors were of too poor quality and too small to really see oneself.

Some participants struggled to identify themselves with the male and female model on the front side. For example they were considered a bit too young and trendy. The target group is hard to illustrate with one person, due to the age, ranging from about 25 til 50 years old, and differences in style.

When leaving out the picture of the model and using a better quality and bigger mirror self-reflection effect is more likely to be enhanced. So only an outer silhouettes and background image are placed on the front side of the final design (see Figure 34a on the next page).

IMAGES

The pictures on the back side need to be changed. The prototype for females displayed two workers, but it will be better to show only one worker for the 1:1 connection. The prototype for males displayed an Indian cotton farmer, while organic cotton for jeans fabric is sourced from Turkey. The images should match the actual suppliers.

The prototypes had one version for men and one for women. To surprise consumers, it would be great to use different images for the back side that show the most important production steps. Each step can be represented with a male and a female worker, thus farmers and mill workers from Turkey, and the sewing and laundry workers from Tunisia.

SUSTAINABILITY-RELATED INFORMATION

The in-store experiment showed that not all participants were satisfied with the information on the hangtag. Some people were missing the link with organic materials.

Another insight gained during the consumer interviews (paragraph 2.3.2.) and both experiments is that the target group tends to be concerned on the manufacturing location. Recent factory accidents and media attention play an important role. Even though not all factories in Bangladesh are bad, some participants indicated they did not want to buy clothes produced in Bangladesh.

Kuyichi can communicate through the hangtag that their *organic cotton jeans* are made in *Turkey and Tunisia* (see Figure 35, next pages). In this way consumers' attention is captivated a little bit longer, and they are more likely to spot something that interests them.

OPEN SOURCE WEBSITE

The hangtag should link to the Open Source website, but the name of this website is not yet determined. The prototype referred to the imaginary website “www.trackmyjeans.com”. This website sounds catchy but it gives consumers the impression that they can trace that particular pair of jeans, while the advice was not to develop a digital Track & Trace feature (discussed in paragraph 5.3.2.).

A short and easy to spell name is preferred for the OS website. The address “www.puregoods.com” was placed on the final design of the hangtag.

LOGO KUYICHI

Some participants expressed difficulties with remembering the brand name and pronunciation. Kuyichi's sublogo, the circle with the + symbol, is more striking and easier to recognise. This round logo is added to the final design, see Figure 34.



Figure 34: Final design for the front side for men and women.

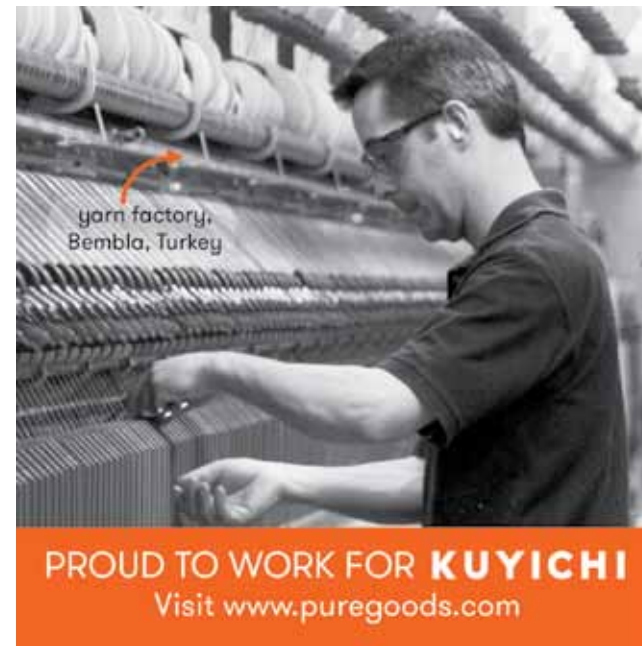
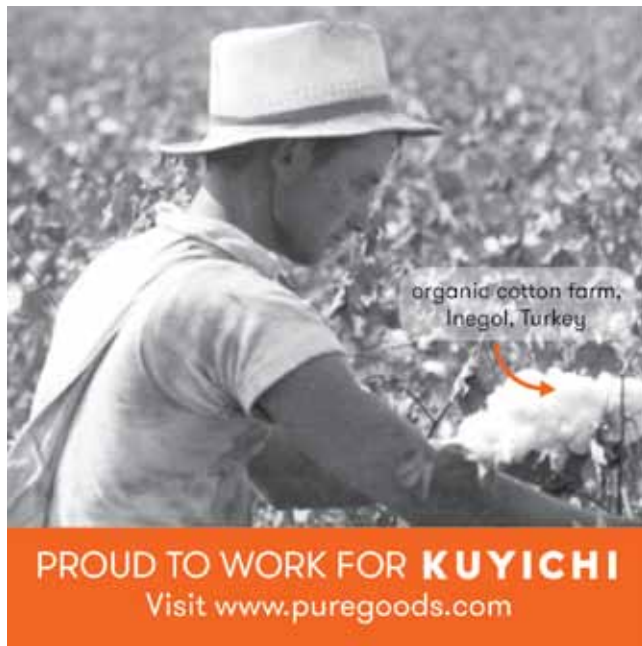


Figure 35a: Final design of the back side for men, showing a male worker for the most important production steps: organic cotton production, making yarn and fabric, sewing at the CMT factory (an image of the jeans laundry is missing).

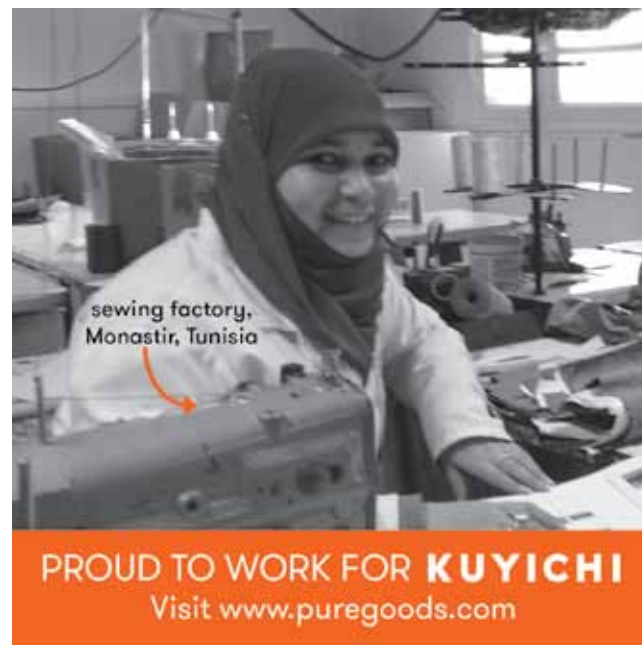
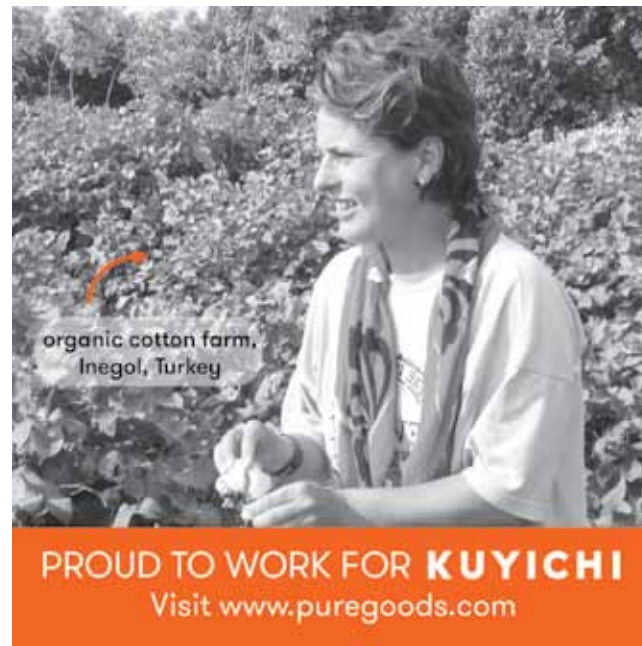


Figure 35b: Final design of the back side for women, showing a worker for the most important production steps: organic cotton production, making yarn and fabric, sewing at the CMT factory and after treatment at the laundry.

6.1.2. HANGTAG PRODUCTION

This paragraph briefly explains possibilities for the production of the hangtag. As already stated in the program of requirements (paragraph 3.2.2.), the hangtag has to be feasible in terms of production, costs and environmental impact.

MATERIALS AND ASSEMBLY

The number of parts and assembly of the hangtag depend on price, environmental impact and availability of materials. The hangtag should be rigid so it does not damage when fitting the jeans. The basis is a (85 mm x 85 mm) square from paper or cardboard (between 0.5 - 1 mm thick). The hangtag can be assembled with simple tools. Three options are explained in Figure 36.

Assembly option 1 is preferred because it requires the least materials and fewer production steps. This assembly uses special mirror stickers. These stickers, normally used as decoration, look like ordinary mirrors but they are thinner and adhesive.

When mirror stickers are blurry or too expensive, ordinary mirrors can be used with Assembly option 2 or 3. With the second option the hangtag has a smooth surface but it will be more difficult to punch a hole through the mirror.

COST ESTIMATION

Appendix K shows a cost calculation for the hangtag. The minimum production costs for the hangtag are estimated at €0,59 per piece.

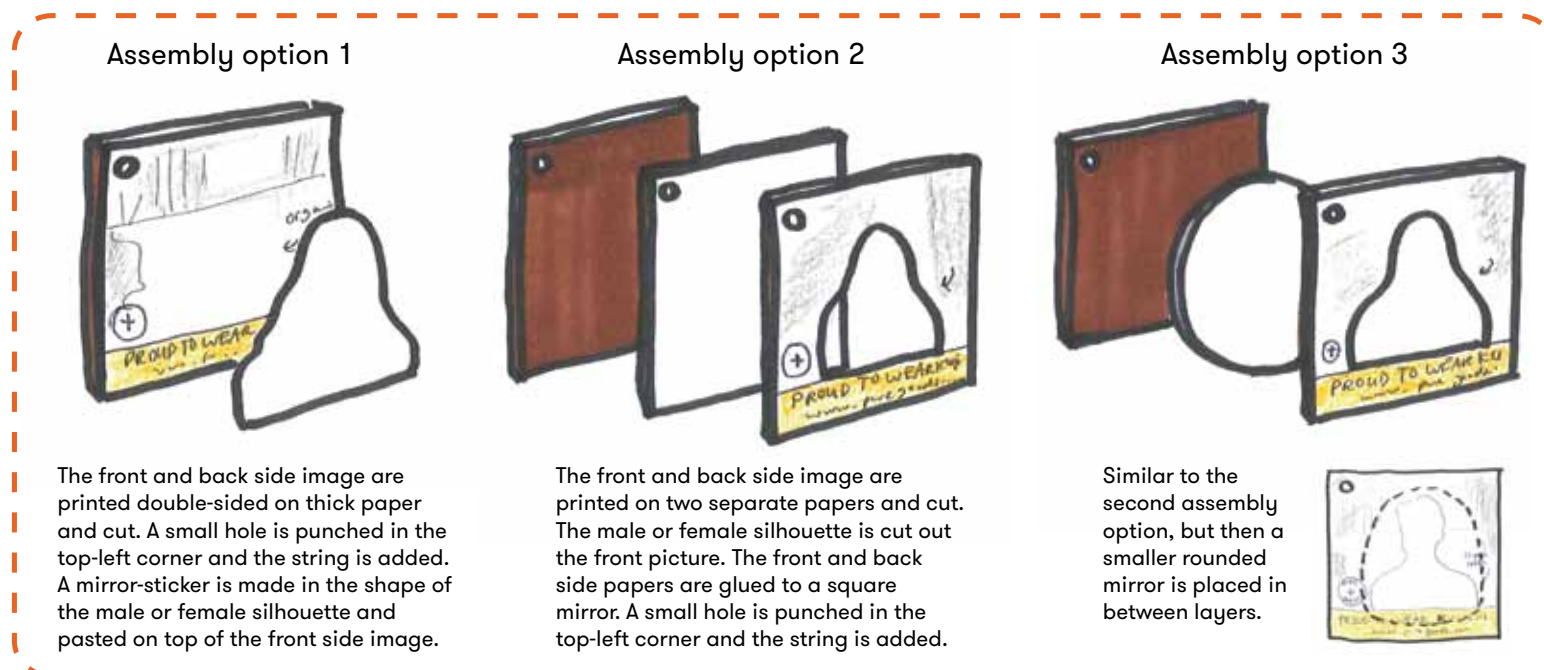


Figure 36: Three ways to assemble the hangtag.

ENVIRONMENTAL IMPACT

The hangtag communicates sustainability but the label itself is not very sustainable. It brings extra materials and extra costs for Kuyichi. However, the added benefits of the hangtags are considered more important.

The following actions can be to reduce the impact of the hangtag:

- Extend the lifecycle
- Print double-sided
- Reduce the thickness of parts
- Assemble different parts without adhesives or use environmentally friendly glue.
- Choose FSC certificated or recycled cardboard and paper.
- Collaborate with a hangtag supplier that meets Kuyichi social compliant standards
- Print the pictures with a matte rather than shiny finish

Interestingly, the first action has already been taken care of in the final design. Thanks to the bigger silhouette shaped mirror the hangtag gets a new function: as little pocket mirror. This can encourage consumers to keep the hangtag and reuse it after purchase. This does not decrease the carbon footprint of the hangtag itself but at least it extends the lifecycle.

An additional benefit for Kuyichi is that consumers are reminded of the brand and the jeans when using the little mirror. Even for those consumers that prefer not to have any labels at all (see paragraph 5.3.2.) the hangtag can turn into something useful. This may be more relevant for women but also men might want to use it afterwards or give it away.

6.2. THE OPEN SOURCE

6.2.1. OBJECTIVES

The aim of the Open Source is to become fully transparent: a kind of 'online library' that shows a complete overview of Kuyichi's corporate social responsibility practices.

The Open Source will replace the existing sustainability webpage which is part of Kuyichi's corporate website. Currently this page tells the brand's vision on sustainability, it lists what Kuyichi does with sustainable materials and it gives the code of labour practices. Furthermore the page shows the latest score-card from MADE-BY and a questions and answers (Q&A) section.

The existing sustainability webpage leaves room for improvement. Some important information is missing, for example the suppliers are not mentioned. Moreover, the page contains mainly text and visitors have to scroll a long way down. Except the scorecard there are not many facts or references that can validate the information.

ACCESSIBILITY

The Open Source will be accessible to anyone at any time through the internet, there is no subscription or log-in needed. Although most visitors are expected to access the Open Source via a laptop or computer, it is advised to build the OS as mobile website (created in HTML5 or newer). More explanation on mobile websites can be found in Appendix L.

TARGET GROUP

The OS will have different type of visitors. First of all, consumers that want to verify their choice for Kuyichi or that are just curious. Other stakeholders like sales agents or press may have specific questions or looking for background information. Kuyichi should try to satisfy all types.

6.2.2. CONTENT

The Open Source should provide a complete overview of Kuyichi's present sustainability practices (see Appendix M). Although the entire supply chain should be taken into account, it will be smart to highlight the topics the target group is most interested in. According to the results of this thesis, these are: working conditions in factories, the name and location of suppliers, and use of sustainable materials.

The OS can explain the role of partner organisations (see Figure 37). It will also be good to include carbon footprint on the Open Source. Even though this was not found to be a priority for consumers, it is an important criteria on Rank a Brand. However, this part can also be added when the OS is already launched.

The content has to include measurable facts (e.g. on material use, suppliers) as well as explanation on social and environmental policies, to provide the reader with facts. Kuyichi does not have to sketch a 100% positive message: besides success stories it should dare to communicate its challenges and goals for the future.



Figure 37: The most important partner organisations for Kuyichi can be mentioned on the Open Source. Their relevance for Kuyichi can be explained and links to their websites added.

NAVIGATION

Once consumer have gone online the challenge is how to satisfy their needs and keep their attention. The navigation needs to be clear: visitors of the Open Source should be able to quickly select the categories they are interested in. An intuitive and interactive interface will guide the reader to identify and navigate. Some basic rules need to be followed: avoid too much scrolling, the text is readable, and there is sufficient white space [Kats, 2013]. Frames can help to split the screen, with each area presenting different, but usually related, information. Each frame should have descriptive headings.

tMEDIA POSSIBILITIES

There are multiple ways to design a website and how to transfer information. Examples are using real images, with movies, infographics, plain text, etc. During the in-store experiment real images were mentioned most often as the preferred presentation type. Still there was not a strong preference for real images. Each media type has its benefits and disadvantages, which are discussed in Appendix N. Figure 38 and 39 give an impression how Kuyichi can make use of real images and infographics.



Figure 38: Example how infographics can be used for the Open Source.



Figure 39: Kuyichi can add images in a little timeline, similar to Storytelling (concept E) but then online. Kuyichi make the timeline more interactive, for example when visitors want to get more information on one step they can click on that block and there can be a pop up with a movie or infographic that shows more images or background information.

6.3. IMPLEMENTATION PLAN

6.3.1. PLANNING

If Kuyichi decides to continue with the Self-reflection hangtag it has to take some steps before the new hangtag can be produced. Since the hangtag refers to the Open Source website, the latter has to be finished first.

Figure 40 shows a timeline for the most important steps for development of the hangtag and Open Source. When Kuyichi starts the

Open Source halfway 2014, the site can be launched at the beginning of 2015. The new hangtags could then be introduced with the jeans of the SS15 collection.

Some final adjustments need to be made to the design of the hangtag. Better quality pictures of the farm, mill- and factory workers are needed for the hangtag. Kuyichi need to contact hangtag suppliers to acquire samples of the new design. Also the cost price and production lead time need to be discussed.

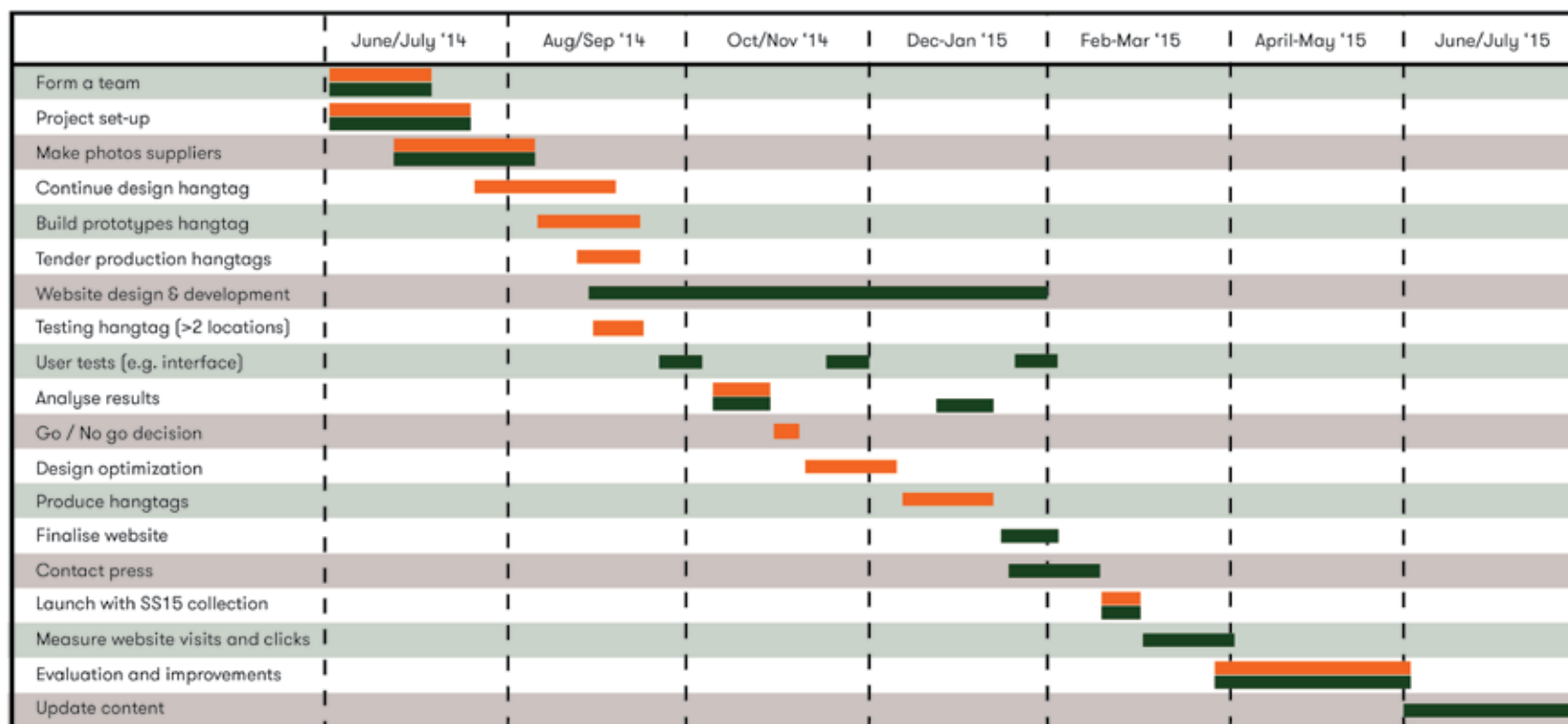
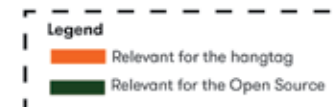


Figure 40: Implementation plan for developing the hangtag and the Open Source.



Afterwards the Go/No go decision for the hangtag can be made.

Kuyichi's CSR department already has most information for the Open Source, such as the supplier list, but it needs to be structured and visualised.

The Open Source should work well with the most popular operating systems (> 95% of all users). A website developer need to test whether the OS is indeed compatible with different operating systems. Furthermore it is recommended to conduct user tests before launching the OS. Participants can be given a specific task that they need to complete. The website has to be checked on readability and whether the navigation is clear.

Kuyichi could inform press and organise a small event with when the Open Source is launched. Both projects do not finish after launch. Kuyichi needs to gather feedback on the hangtags and monitor the performance of the website. (website statistics, consumer feedback). The Open Source should be updated regularly but not weekly or daily like social media. The desired frequency also depends on the topic. For example the suppliers need to be updated with every new collection, while explanations on certifications hardly change.

Further testing is suggested after the introduction of the hangtag. Kuyichi could do observation and interviews with consumers and retailers. It will be interesting to measure consumers' reaction to the hangtag, especially when this is done in typical jeans stores at different locations, so results can be compared and generalised. It will also be useful to repeat a consumer test after the hangtag has been in stores for a few months, to analyse whether the desired effect lasts. If so, the hangtags can be used for the next jeans collections as well.

6.3.2. COST ESTIMATION

At this stage it is hard to estimate the costs for the development of the hangtag and the Open Source. If Kuyichi wants to continue with both projects it needs to save budget to complete the design of the hangtag and facilitate the development of the Open Source. The Open Source can be an interesting internship for a multi-media design student. In this way, the development does not have to cost much, other than internship reimbursement and coaching. Kuyichi need to invest in a photoshoot of factories and workers. The costs for a professional photographer should not be underestimated. However, good photos are worth the investments as they can be used for both the hangtag and the Open Source, and social media.

Then there are costs for user testing, mainly labour costs for execution, reimbursement of participants and representative samples of the hangtag.

There can be small costs for the launch. As promotion takes place via the hangtag, it will cost nothing extra. Still, Kuyichi could make a booklet version and send it to its sales agents and retailers.

Finally there are ongoing operational costs for the Open Source website, which are maintenance costs (server and security), and labour costs for updates in the content.

Narrow double needle
and long bartack
at fly

V Stitch at
front closure

Back pocket
1/2 Rivet

Reinforcement
stitch



Busted open
side seam

7. DISCUSSION

This chapter summarises the most important insights of this thesis and discusses the relevance for Kuyichi.

Secondly some thoughts on possible improvement points for Kuyichi are given. These tips do not fit within the scope of the assignment but came across during this project.

7.1. CONCLUSION

This project started with the problem definition and explanation of the assignment. The research question of this graduation project was formulated as follows:

How can Kuyichi highlight sustainability in-store to create a competitive advantage over other brands with the use of Track & Trace?

Kuyichi's motivation for a new Track & Trace feature is clear. They have many competitors targeting the same consumers. Kuyichi aims to become more transparent on their supply chain and to gain brand awareness among the target group. Track & Trace is considered a good mechanism to increase transparency as it maps the supply chain, and Kuyichi already has a positive experience with it. Existing T&T features of other brands show that a lot is possible technology wise.

Previous studies helped to understand the complexity of ethical consumers and a basic division could be made for this thesis. For each consumer type a persona was made. Together they represent Kuyichi's target group. The somewhat critical consumers were found to be most interesting for Kuyichi, as this group is concerned about sustainability but does not act upon it. This intention-behaviour gap, a reoccurring theme in literature was also observed in the consumer interviews executed for this thesis.

In this report different approaches to highlight sustainability were compared, through the design of the hangtag. These approaches were based on findings from literature. Results of the lab-setting and in-store experiment show that communicating sustainability through text triggers consumers the least. Highlighting sustainability through self-reflection has the greatest impact on the target group's call to action.

For Kuyichi it is extremely important that their jeans are appealing in fit, comfort and looks. Most consumers perceive sustainability

as an added benefit but not a reason to buy the brand. They easily forget about sustainability when shopping. When self-reflection can be enhanced in stores through the new hangtag, Kuyichi can differentiate itself from competitors. This hangtag enables consumers to pay attention to sustainability while shopping. Furthermore the use of real images makes this concept different to competitors' hangtags.

The experiments suggest that Kuyichi's target group is partly interested in sustainability-related information about the jeans. However, the insights gained during this graduation project did not support the need for a Track & Trace system. People prefer to look at a hangtag or to visit Kuyichi's website at home. The use of smart phones have opened up possibilities for scanning labels in stores, but there is a lack of uniformity across different operation systems.

A digital T&T feature will be appreciated by a very small group of consumers, but the effect on consumers' behaviour will probably be low. Therefore the advice to Kuyichi is not to develop a Track & Trace feature. This may feel somewhat strange and unsatisfying for Kuyichi, even more because they used to have a T&T feature in the past. It would be a shame to invest a lot of money and resources to create a beautiful T&T feature that will hardly ever be used. The benefit of not pursuing the T&T is that it will give room to other projects that have more potential.

One such a project is the Open Source. At the start of this graduation assignment Kuyichi was already interested in the Open Source, and they are looking for someone with web- and graphic design skills to follow up this graduation project with the actual development of the website. The Open Source should provide a complete overview of Kuyichi's corporate social responsibility practices.

The thesis has given new valuable results and insights for Kuyichi. The findings in literature provided a strong foundation for this

project, while the experiments showed consistent outcomes. This research is innovative in many ways. Numerous studies have attempted to identify ethical consumers segments, also for the fashion industry. These studies mainly explored challenges for the fashion industry and consumer attitudes towards sustainable fashion but limited attention has been paid to solutions. In thesis different design approaches were studied, and the combination of a lab-environment and in-store experiment makes this research unique.

Figure 41 illustrates how the final concept will work in practice. This graduation project ends with a design for a hangtag that Kuyichi can implement in the short term. Together with a well-designed Open Source website, Kuyichi can succeed in its own mission to become fully transparent, differentiate itself from competitors in stores, and meet consumer demands in the near future.



Figure 41: Scenario illustrating the use of the final design.

7.2. ADDITIONAL TIPS FOR KUYICHI

Besides the recommendations for a Track & Trace system for Kuyichi there are some other topics that deserve attention. The following paragraph can be considered as tips for Kuyichi to improve its sustainable branding.

BRAND AWARENESS

During the past months, Kuyichi has improved its social media strategy. So far this has been very fruitful, and they should keep up the good work. Still, Kuyichi could try to gain more brand awareness. Especially when the Open Source is launched it will be good to generate more traffic to the website, and ultimately to the web shop.

Consumers and other stakeholders browsing for sustainable fashion should easily spot Kuyichi through online search machines. It is important that Kuyichi figures out what these people are actually searching for online. For example what words do they type, like “sustainable jeans” or “good-labour conditions”. Kuyichi should embed the popular search words on its website, and name images so they can easily be found online. Besides, it is good to provide multiple links on its website to the Open Source page and to link to other websites, and vice versa.

Kuyichi can also make use of online story-telling to gain more brand recognition. This could be done with reviews on the website or social media, just like someone looks up a review for a hotel when booking a vacation. These reviews can be looked up but also in the store. This can build trust and convinces to buy the brand.

TABLET

A few consumers expressed their interest to look up sustainability-related information while being in the store. If they want to access the Open Source, they will need internet to access the mobile website.

Ideally consumers can access the website in-store, but not all consumers own a smart phone with internet. Moreover the screen of a smart phone is rather small. The introduction of a tablet (stand) in-store could be a solution. However, it is unclear whether retailers want to facilitate this in their stores. Moreover this is a costly solution. When a new device is introduced, it has to be placed in all stores where Kuyichi is being sold, which means a large investment. Alternatively Kuyichi could develop a couple of mobile stands that are temporarily placed in different stores.

Taking into account digitalisation trends, all stores might be using tablets in the future. Especially with the Open Source as upcoming investment, a tablet may be lucrative to create synergy. Kuyichi could discuss the use of tablets with some of its retailers.

SUPPLIERS

Kuyichi’s CSR department has worked hard to better understand and simplify its supply chain. The Fashion Company Sahel in Tunisia (CMT factory) has become the major jeans supplier, and Kuyichi’s relationships with suppliers for tops and other clothes also seem to be more stable. A long-term collaboration with mills and CMT-factories can never be ensured, but obviously it does not look professional when new suppliers are added and removed every month on the Open Source. Among other benefits this makes it even more important to strive for long-term relationships with suppliers.

Currently the supplier register is kept in an excel sheet. This register can be shared in a more appealing way among Kuyichi’s team, for example with a large world map in the office. On this map all suppliers can be illustrated, and Kuyichi’s employees can leave comments if they have visited a place or have something else to say.

ORGANIC COTTON

Kuyichi was the first brand to market organic cotton and likes to communicate this through POS materials, on the website, on its current hangtags and even prints of tops. Back in 2001, Kuyichi was the first and only brand to do this indeed. Nonetheless, the analysis phase showed more competitors and even fast fashion brands like H&M⁵ are now sourcing organic cotton. In this thesis it was found that Kuyichi's target group is most interested in labour conditions. It might be wise to research whether 'being the first' is still considered a USP by the target group, or whether it would be better to find a new favourite topic, perhaps something that puts more emphasis on the human-aspects.

SUSTAINABLE CONSUMPTION

This thesis focused on the in-store experience, but sustainable consumption is not limited to purchasing sustainable products: it is also about reducing overall consumption levels. Kuyichi could profile itself as a brand that takes care of the entire lifecycle. Partly Kuyichi already does this with its Deposit Denim concept, but it could also stimulate consumers to buy clothes they really need, wear them for a longer period of time and treat them with care. This fits to the slow fashion philosophy, as Kuyichi's clothes are timeless and of high quality.

Jeans hardly need any washing, as the fabric already rinses itself. Thus water and detergents can be saved on the washing machine. Kuyichi already explains this on the jeans' inside care label, but only in tiny letters. When using visuals, or perhaps short movies that evoke more emotions Kuyichi can help their consumers to take part and join their journey!

⁵ Although some brands seem to use organic cotton mainly as marketing tool, since they only have organic for a small part of the total collection and if they have they mainly use blends (which need to contain >5% organic ingredients). However, most consumers are unaware of this difference.



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FIGURES

The images between chapters belong to Kuyichi. Figures that are not mentioned in the list below were created for this thesis.

All images for the figures that are mentioned below were accessed between November and May 2014.

Figure 1: MADE-BY (2010). Track & Trace supplier package (Unpublished document).

Figure 7: [Online] Available from: www.nudiejeans.com

Figure 9: [Online] Available from: www.icebreaker.com

Figure 10: [Online] Available from: www.trackmyt.com

Figure 11: [Online] Available from: www.rapanuiclothing.com

Figure 12: [Online] Available from: www.patagonia.com

Figure 13: [Online] Available from: www.honestby.com

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APPENDIX A: PARTNERS SUPPLY CHAIN

This table shows (previous, present, and future) partner organisations of Kuyichi supply chain.

Name	What?	Which part?
Solidaridad	Solidaridad founded Kuyichi in 2001 and still gives strategic advice and is small shareholder. They also help to find new suppliers.	on the entire supply chain
Fair Wear Foundation (FWF)	Kuyichi and the FWF made a short- and long term strategy to improve the CMT factories. The FWF conducts factory audits, except those with a SA8000 certification.	labour conditions in CMT factories
Business Social Compliance Initiative (BSCI)	BSCI used to be Kuyichi's partner in factory audits until 2012, but is now replaced by the FWF.	labour conditions in CMT factories
MADE-BY	MADE-BY gives advice and verifies Kuyichi's performance. Results are presented in an annual scorecard, which can be found on the website of Kuyichi and MADE-BY. Until 2012 they facilitated a track& trace system for Kuyichi and other brands.	on the entire supply chain
SA8000	SA8000 is the document of the NGO Social Accountability International (SAI), one of the world's first auditable social certification standards for decent workplaces, across all industrial sectors	labour conditions in CMT factories
Global Organic Textile Standard (GOTS)	Kuyichi sources GOTS certified cotton, which has to meet strict criteria on environmentally and socially responsible manufacturing. They are not directly in contact with GOTS	Material level
Climate Neutral Group (CNG)	Together with the CNG Kuyichi is in the process of calculating their CO ₂ footprint. Ultimately, the goal is to reduce as well as compensate CO ₂ emissions by investing in energy projects.	Total CO ₂ footprint
bluesign®	Kuyichi would like to become a bluesign® system partner, but the high membership fee is currently a threshold.	Wet-processes (dyeing, rinsing, etc.)

Hangtags, labels and other branding for the collections in 2014



Hang tags with cord (blue for denim, green for tops)



Leather patch (back)



Label (inside jeans)



Care label (inside jeans)



Brand manifesto (inside pocket)

Concept print in Off White plastisol, at inside waistband centered between CF and sideseam at wearer's right

Inside of overrider, with barcode sticker

Branded button

Main label

Branded shank button

Care label at inside of wearer's left

Name label

Branded rivet

Inside pocket print on wearer's right pocket

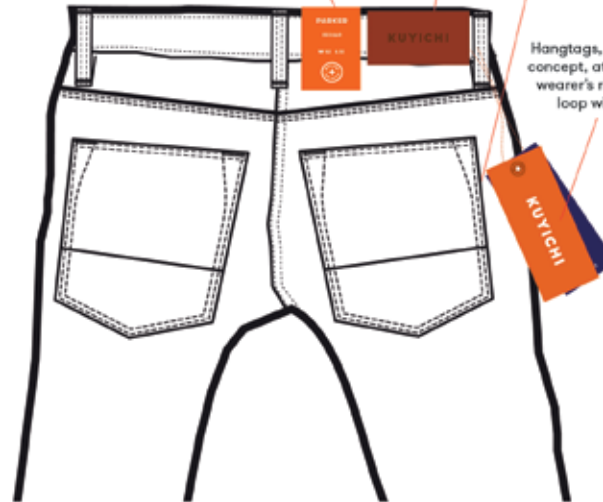


Leather patch, position 1cm from side belt loop

Overrider, position 1,5cm from leather patch

Hidden rivet

Hangtags, main plus concept, attached at wearer's right side-loop with pin



Jeans label placement 2014



Point of Sale Materials

This appendix shows the interview script for the interviews with retailers and consumers. Also some pictures are displayed from two stores, the Man at Work (MAW) and Holzhaus.

SCRIPT FOR IN-STORE CONSUMER RESEARCH

RETAILER (STORE MANAGER OR EXPERIENCED SALES STAFF)

1. What do you think are the most important aspects for your customers when purchasing a new pair of jeans? (Price, brand, fit, fabric, colour, washing, model, ethics etc.)
2. How many different models do people try before they buy one, on average?
3. How long does it take, on average, before a decision is made?
4. Do you think your customers are brand loyal? If so, how do you notice? Which brands?
5. Do people pay attention to product labels during shopping? How?
6. Are customers already prepared when entering the store?
 - a. Intended vs. impulse buying?
7. What, if any, are the differences between men and women in this process?
8. How do you help/advice your customers searching for a new pair of jeans?
 - a. Can their choice easily be influenced? If so, how?
 - b. What kind of questions do customers ask you/the sales team?
9. What do you know about the brands you sell?
 - a. How do you share this information with your customers?
10. What kind of POS materials do you use?
 - a. Do you also take back old clothes? (e.g. Deposit Denim concept Kuyichi)
11. Is there a certain type of people that buy Kuyichi jeans? If so, what kind of people?
12. Do you think your customers would be interested to have more information about the production steps?

- a. And where the jeans are made? Why?
- b. Do you think that providing this information can be used as a sales tool? Why?

SCRIPT FOR INTERVIEW WITH CONSUMERS

Approach consumers that are looking at jeans, not necessarily Kuyichi. Estimate the age and characteristics of the person. Start a chat after someone has had the chance to look around:

H: Hi there!

C: Oh hi

H: My name is Hella, I'm a student from the TU Delft doing research about buying new jeans. May I ask you a few questions?

C: Yes / OK / No (thank person and leave)

H: Is it ok for you if I record the conversation?

C: Yes / No (then make notes)

H: I see you just visited the (name of the store). May I ask what you were looking for?

C: ...

H: Did you also look at jeans?

C:

H: If no: Then I don't have any more questions (thank person and leave)

H: If yes: Did you also buy jeans?

C: Yes / No

H: If yes: What do you like about these jeans/clothes?

C: ...

H: What do you think of the quality?

C: ...

Do you already have jeans/clothes from this brand?

C: Yes / No /

H: If no: What kind of jeans were you looking for?

C: ...

H: What aspects do you pay attention to when looking for new jeans?

C:

H: How important is the quality of the jeans?

C: ...

H: From which brands do you usually buy jeans? Why those?

C: ...

H: Do you have a certain price range that you want to spend for a new

pair of jeans? Why?

C: ...

H: Do you know Kuyichi?

C: Yes / No /

H: If no: Let me tell you a bit about Kuyichi. They are a sustainable brand, making high quality jeans and tops from mainly using organic cotton. How does this brand sound to you?

C:

H: If yes: what do you know about the brand?

C: not much / sustainable /

H: How do you feel towards the brand?

C: ...

H: Do you already have clothes from Kuyichi?

C: Yes / No /

H: If yes: what do you like about the clothes?

C: ...

H: Kuyichi introduced a recycling concept called deposit denim. If you return your old jeans you get €10, - discount on a new one. And the old fabric is used for new jeans! Have you heard of it?

C: Yes / No /

H: What do you think of this concept?

C: ...

H: Would you be interested to make use of it?

C: ...

H: How important is it for you that the clothing that you buy is sustainably produced/ethically made?

C: ...

H: Would you be interested to know where the jeans are made? Why?

C:

H: Are you curious to find out more about the production process?

C: ...

H: And what about the material?

C: ...

H: Last question! Can I make a picture of you? I won't publish it or post it anywhere...

C: Yes / No / If yes: Make picture.

H: Thank you very much for your time! And good luck with finding a new pair of jeans! (give a Kuyichi post card)

PICTURES

MEN AT WORK (MAW)



Although the MAW differ in size and assortment they all have the same interior. Hardly any POS material is used, the brands are only visible from the hangtag and product label.

In the MAW it is relatively easy for consumers to find a new pair of jeans as the collection is a bit smaller and most jeans models are hung for demonstration. The salesmen help to find the right size and if needed the right model.

Kuyichi's jeans are both hung on the rack and placed in small piles, next to Maison Scotch and other brands.



Holzhaus has a large assortment of especially jeans. Only a few models are hung for demonstration. The jeans are placed in piles, sorted per brand, with small tags on the shelves with the brand name. Kuyichi is placed on the side, directly at the entrance (women) and at the end (men), next to Nudie jeans and Jack & Jones.

Throughout the store some POS materials can be found. PME has a separate corner where the jeans are hung, accompanied with posters.

Kuyichi vase with cotton (old POS material) can be found at the tops (see picture above), although Kuyichi's tops are not sold at Holzhaus.

The interior of Holzhaus is a bit similar to de Rode Winkel.

APPENDIX D: EXAMPLES OF T&T AND TRANSPARENT BRANDS



Besides the Track & Trace feature Icebreaker also shows some other information on sustainability on their website.



Different steps from Icebreaker's T&T feature using the Baacode (www.icebreaker.com)





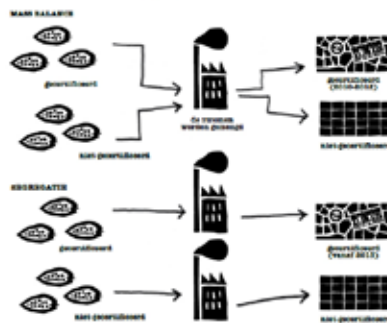
- Slechts minder dan 10% van de chocolade op de wereldmarkt is gecertificeerd.
- Het aantal van gecertificeerde cacao is groter dan de vraag naar gecertificeerde cacao.
- Certificatie is een middel op weg naar een betere werksituatie, geen doel op zich maar niet het oplossing.
- De impact die certificering heeft op de leefomstandigheden van de consument blijft uitsluitend beperkt.
- Er wordt door chocoladebedrijven veel gesproken over verduurzaming, echter de duurzame impact (milieu) is minder dan 10 jaar is minder dan 0,001% van de winsten van deze bedrijven.
- Voornaamste motieven van chocolade multinationals om in verduurzaming van cacao te investeren is niet het menswaardigheidsgevoel om de leefomstandigheden van de cacaoheesters te verbeteren, maar omdat zij zich sociale status of verhoogde afgevoerde vraag naar chocolade niet tot grote schaalrechten van cacao wil leiden. In die moet de productiviteitsaanpak van cacao naar omhoog, zodat prijzen naar (de veel) zullen gaan stijgen.
- De kosten genoemd met de diverse certificeringen (Fairtrade, UPE, Rainforest Alliance, biologisch) verschillen sterk. Fairtrade is vele malen duurder voor producenten dan UPE.

Wat multinationals en chocolade organisaties hebben mislukt volgens de auteurs is het gebrek aan betrouwbare gegevens om in de conclusies te investeren. De Nederlandse chocoladeconsument is internationaal gezien een vooropgevoerde door de bedrijven die in 2008 al een nieuw duurzaam geproduceerd wil worden. Of deze naar zichzelf toe heeft geleid om in 2010 wel zo geproduceerd te worden van gecertificeerde cacao. Alleen het positieve wijzen era, echter betrouwen en samenwerking alleen zijn onvoldoende. Immers het Black's Impact Protocol (Chocolonely) hoe weinig zullen betrouwen waard kunnen zijn.

Bedenking om niet schrikken te gaan leunen en op de volgende werking van certificatie alleen te vertrouwen.



Verstelt massaliteit en geïmpact



Tony's Chocolonely & Fairtrade
Tony's Chocolonely was het eerste initiatief Fairtrade gecertificeerde chocolade in Nederland. Al onze producten zijn altijd Fairtrade gecertificeerd. Fairtrade en Tony's Chocolonely hebben een soortgelijk doel: een betere positie voor boeren en de verduurzaming. Het is een samenwerking tussen Tony's Chocolonely, Tony's en de 2000 andere ethische chocoladebedrijven. Het is een samenwerking die de boeren van Tony's Chocolonely gecertificeerde chocolade onder Fairtrade in 2008 het eerste initiatief was.

Cost Breakdown of the First Fairphone

At Fairphone, we want to start a movement to change the way products are made. But just as importantly, we want to make a change through the way we do business. That means being open and transparent about what we do and where we expect our money (and yours) will go. So, here's what happens to the €325 for every Fairphone sold.

Interventions

€ 22

Fairphone puts social values first in our decision-making process, which affects the entire production of this phone. We also actively seek ways to drive sustainable change in the supply chain and life cycle of our smartphone. We call these our "interventions". Our interventions follow the action areas of our long-term road map to a fairer economy, from sourcing conflict-free minerals from DR Congo to facilitating better e-waste solutions.



PRECIOUS MATERIALS

€ 3.75 Stakeholder meetings, participation Conflict-Free Tin Initiative (CFTI) and Solutions for Hope, and monitoring initiatives for responsible sourcing



MADE WITH CARE

€ 7.50 Made with Care Program
€ 1.93 Worker welfare fund (\$2.50)



SMART DESIGN

€ 4 Open source development, community support, Fairphone operating system



LASTING VALUE

€ 3 Initiatives to recycle existing e-waste
€ 2 Coordination for Fairphone e-waste



Each cube represents one euro of Fairphone's consumer price and is based on the production of 25,000 phones. Figures are for 2013 and have been rounded for ease of reading. Visit fairphone.com/2013/09/12/costbreakdown where you can download a Key for a detailed explanation.

Consumer price €325

Average Value Added Tax	- € 56.50
Levies/tax (private copying, WEEE)	- € 6.75
Retailers' margin	- € 4.25

Average Sales Price € 257.50

Product € 185

€ 129.75	Design, engineering, components, manufacturing and assembly costs
€ 9	Certifications (eg. CE, GCF, RoHS, FCC, REACH) and testing
€ 1	Packaging and (repair) manuals
€ 2	Inbound logistics
€ 25	Royalties to patent holders, IP licenses
€ 18.25	Estimated warranty costs (including spare parts, labor and transport)

Operations € 45

€ 4.75	Project development, prototyping
€ 17.75	Personnel costs, office space, IT, travel
€ 11.25	Legal, accounting, other outside service providers
€ 6	Events, communications and public engagement
€ 5.25	Webshop hosting, payment facilities, customer support






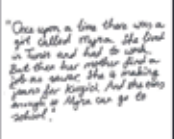

























Initial Operating Result € 5

€ 5	Reserve (for unexpected stuff), investments and financing costs
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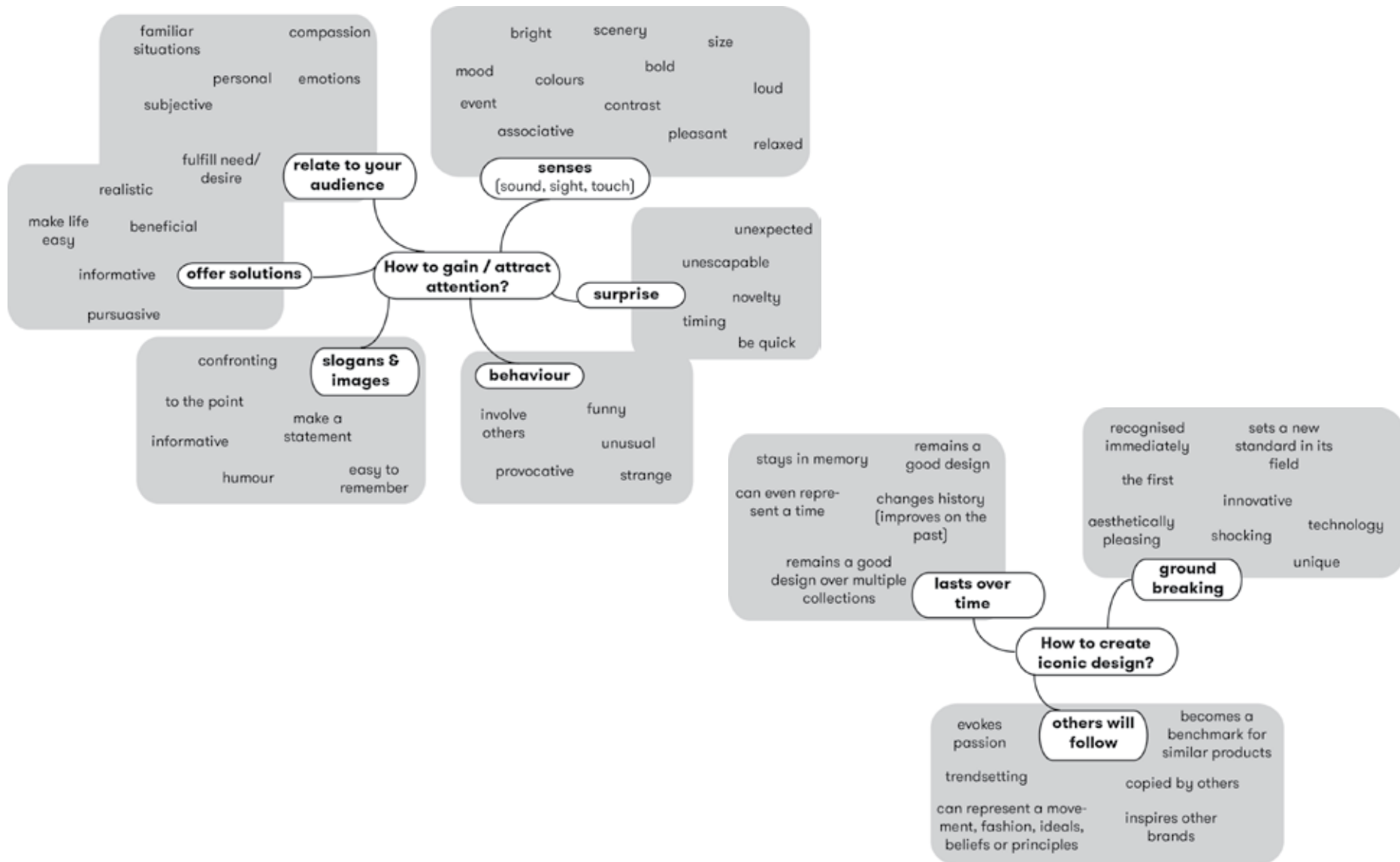
FAIRPHONE.com

APPENDIX E: BRAINSTORM PHASE





This appendix shows two mindmaps and the morphological chart. The mindmaps (page A13) were used as starting point, to gather inspiration and to formulate how to (H2) questions. The morphological chart displays the problems on the left and the sub-solutions are organised on the right.

	1	2	3	4	5	7	8	9	10
What to add in content? (focus area)	 fair trade	 certifications	 sustainable materials	 the life of makers & family	 production steps	 recycling			
How to present the content?	 story telling	 pictures & text (quote)	 infographic	 cartoon/scenario style	 world map	 using icons	 video		
What kind of hangtags are possible?	 simple hangtag	 origami 2D > 3D	 booklet	 pin/booklet	 letters hangtag	 leporello	 turning wheel	 envelope shape	
What material to use?	 paper	 cardboard	 semi-transparent	 jeans fabric	 raw cotton	 wood	 organic cotton (T-shirt fabric)		
How is it attached? (when do consumers see it?)	 overhanger	 cord	 attach to leg	 back pocket	 retailer gives at payment	 available at desk	 attached to shelves		

	1	2	3	4	5	7	8	9	10
How to avoid it is thrown away? (secondary purposes)	 bag	 bracelet	 coaster	 door hanger	 postcard	 key ring	 key wallet	 phone sleeve	 reusable tissue
How to create a feel good moment?	 fortune flower	 mirror	 karma credits	 happy message	 1:1 you & the maker	 using metaphors (e.g. treasure)			
How to engage the consumer afterwards?	 collect photo album	 quiz	 game	 personal contact with makers	 weekly updates	 support local community			
Possible interactive elements for in-store	 fixing room responds	 sensor activates light	 smell	 vibrates when touched	 receive a text message				
How to stimulate consumers to go online?	 barcode	 QR code	 text message	 tracking number	 scanning picture activates links	 manually type website	 NFC		



Overview of different smart phone scanning applications

What?	Benefits	Disadvantages
<p>A QR-code is a 2-dimensional barcode that can be scanned when a free app is installed to a smartphone or tablet.</p> 	<p>QR codes can be printed on any object. Free to generate. Easy to recognise. There are multiple apps for any type of smartphone that can read the QR code.</p>	<p>An app needs to be downloaded to read the code. The QR code is used in abundance. People get tired of QR codes, the usage rate is low. Not innovative (Patel, 2012; Pozen, 2013)</p>
<p>A SnapTag works similar to a QR code but features a brand's logo or icon in the middle of the SnapTag Code Ring. The gaps in the ring can be moved to different positions to create a unique link.</p> 	<p>SnapTags look more attractive than QR codes and are not used in abundance yet. It can be printed on any object.</p>	<p>The SnapTag Reader app has to be downloaded. Older smartphones are not compatible. It is difficult to recognise for consumers who are unfamiliar. SnapTag is a paid service (SpyderLynk, 2014).</p>
<p>NFC (near field communication), the follow-up of RFID, uses radio communication. Hardware is built in many new smartphones that can read 'NFC textiles' (a small sticker) within <10 cm distances.</p> 	<p>No extra app is needed. The NFC textiles can be programmed for free. Two-way traffic is possible, e.g. orders and payments can be done, by holding the back side of two phones to each other.</p>	<p>Android & Blackberry producers implement the hardware in new phones, but old models and I-phones are unable to scan NFCs. Instead, Apple tests with another feature called iBeacon. An NFC textile currently costs around €0,75/sticker. The NFC textile contains tiny metal wires, which are difficult to recycle (Gottipati, 2013, van Lier, 2013).</p>
<p>With MVS (mobile visual search) a picture is made of a product or logo with the smartphone's built-in camera. This picture is compared with a database of labelled images. Then (augmented reality) layers of digital information – videos, photos, sounds – are added directly on top of the capture.</p> 	<p>Two-way traffic is possible, e.g. orders and payments can be done. Interactive and visually attractive, transforming static print into digital content. Most apps (e.g. Layar) are compatible with most smartphones.</p>	<p>A separate app needs to be downloaded (e.g. Layar, CamFind, Clickable Paper). The pictures are not recognisable by a code, so consumers need to be told they can scan it. Conversion rate is low (e.g. Layar around 1%). Firms need to pay for the service (van Wijck, 2013).</p>

Gottipati, H. (2013). With iBeacon, Apple is going to dump on NFC and embrace the internet of things. <http://gigaom.com/2013/09/10/with-ibeacon-apple-is-going-to-dump-on-nfcand-embrace-the-internet-of-things/>.

Van Lier, H. (2013). Apple doet niet mee met NFC: tegenslag voor mobiel betalen. De Volkskrant, 11/09/13 [available online at]

<http://www.volkskrant.nl/vk/nl/2680/Economie/article/detail/3508015/2013/09/11/Apple-doet-niet-mee-met-NFC-tegenslag-voor-mobiel-betalen.dhtml>.

Pitney Bowes (2012). Getting ahead of the emerging QR Code marketing trend. <http://s3.amazonaws.com/pb-web/pdf/smb/pitney-bowes-2012-qr-codes-use-us-europe-report.pdf>

Pozen, I. (2013). QR Codes: Are They Dead Yet? <http://www.linkedin.com/today/post/article/20130513152348-5799319-qr-codes-are-they-dead-yet>

Spyderlink (2014). Turns out the secret to successful mobile marketing is no secret at all. It's your logo. As a SnapTag. <http://www.spyderlynk.com/snaptag/what-is-a-snaptag/>

Van Wijck, D. (2013). QR of Layar: wat moet je kiezen? <http://www.dendj.nl/blog/qr-of-layar-wat-moet-je-kiezen>

APPENDIX G: QUESTIONNAIRE LAB-SETTING EXPERIMENT

e questionnaire

roduction

is questionnaire measures your reactions to the jeans and the label. There are no wrong or right answers to the questions; just fill them in as you best see fit. Please make sure to fill in all questions. Thank you for your participation!

Please list the first impression you have towards **the jeans** and **the label that is hanging from the jeans**. Please separate each thought with a semicolon (;).

.....

.....

.....

.....

.....

How attractive are **the jeans**? (Select between 1-7)

Likeable	1	2	3	4	5	6	7	Not likeable
Good	1	2	3	4	5	6	7	Bad
Appealing	1	2	3	4	5	6	7	Unappealing

How attractive is **the label**? (Select between 1-7)

Likeable	1	2	3	4	5	6	7	Not likeable
Good	1	2	3	4	5	6	7	Bad
Appealing	1	2	3	4	5	6	7	Unappealing

In your view, how important is the label in selecting the jeans? I think this label is....

.....

.....

.....

.....

.....

5. I think this label (is): (Select between 1-7)

a)	Important	1	2	3	4	5	6	7	Unimportant
b)	Irrelevant	1	2	3	4	5	6	7	Relevant
c)	Means a lot to me	1	2	3	4	5	6	7	Means nothing to me
d)	Unexciting	1	2	3	4	5	6	7	Exciting
e)	Dull	1	2	3	4	5	6	7	Neat
f)	Matters to me	1	2	3	4	5	6	7	Doesn't matter
g)	Fun	1	2	3	4	5	6	7	Not fun
h)	Appealing	1	2	3	4	5	6	7	Unappealing
i)	Boring	1	2	3	4	5	6	7	Interesting
j)	Of no concern	1	2	3	4	5	6	7	Of concern to me

6. The label makes me **feel**... (Select between 1-7)

a)	Not at all curious	1	2	3	4	5	6	7	Very curious
b)	Not at all happy	1	2	3	4	5	6	7	Very happy
c)	Not at all proud	1	2	3	4	5	6	7	Very proud
d)	Not at all guilty	1	2	3	4	5	6	7	Very guilty
e)	Not at all playful	1	2	3	4	5	6	7	Very playful
f)	Not at all confused	1	2	3	4	5	6	7	Very confused
g)	Not at all inspired	1	2	3	4	5	6	7	Very inspired
h)	Not at all irritable	1	2	3	4	5	6	7	Very irritable
i)	Not at all enthusiastic	1	2	3	4	5	6	7	Very enthusiastic

9. Visibility in store (Select between 1-7)

a) This label is eye-catching

Totally disagree	1	2	3	4	5	6	7	Totally agree
------------------	---	---	---	---	---	---	---	---------------

b) When being in a store, I would check this label

Totally disagree	1	2	3	4	5	6	7	Totally agree
------------------	---	---	---	---	---	---	---	---------------

c) This label is unique

Totally disagree	1	2	3	4	5	6	7	Totally agree
------------------	---	---	---	---	---	---	---	---------------

d) I think this label fits to a conscious fashion brand

Totally disagree	1	2	3	4	5	6	7	Totally agree
------------------	---	---	---	---	---	---	---	---------------

10. With this label, I want to (Select between 1-7)

a) find out more about the brand Kuyichi

Totally disagree	1	2	3	4	5	6	7	Totally agree
------------------	---	---	---	---	---	---	---	---------------

b) find out more about the journey of my jeans

Totally disagree	1	2	3	4	5	6	7	Totally agree
------------------	---	---	---	---	---	---	---	---------------

c) go to the website to track my jeans

Totally disagree	1	2	3	4	5	6	7	Totally agree
------------------	---	---	---	---	---	---	---	---------------

9. a) Imagine this label has a scanning feature for your smart phone. Would you make use of this scanning feature? (Please tick one answer)

☐ Yes ☐ No ☐ I don't know

b) Why or why not? (Open question)

.....

.....

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.....

10. At this moment, having seen the information regarding the jeans, how much would you be willing to pay for them?

I would be willing to pay ____ Euros for a pair of these jeans

11. Sustainable fashion (Select between 1-7)

a) I know a lot about sustainable fashion

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
-------------------	---	---	---	---	---	---	---	----------------

b) My knowledge on sustainable fashion is

Inferior	1	2	3	4	5	6	7	Superior
----------	---	---	---	---	---	---	---	----------

c) My knowledge of sustainable fashion is

Very poor	1	2	3	4	5	6	7	Very good
-----------	---	---	---	---	---	---	---	-----------

12. I spend __% of my **clothing** purchases on sustainable brands (Please estimate)

13. I spend __% of my purchases **in general** on sustainable brands (Please estimate)

14. Before this test, I already knew the brand Kuyichi (Please tick one answer)

☐ Yes ☐ No ☐ I don't know

Personal details

15. Age years (Please fill in your age)

16. Gender ☐ M ☐ F

17. Student ☐ Yes ☐ No

18. Do you have anything to add to this questionnaire, for example comments or remarks? (Please write down your thoughts below)

.....

.....

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.....

.....

The end

Thank you very much for your time! I really appreciate your help.
If you want to keep up to date with my research please leave your e-mail address at the list on the table.

APPENDIX H: RESULTS LAB-SETTING EXPERIMENT

	Benchmark Concept A (N=21)	Provoking question Concept B (N=21)	Material-use Concept C (N=22)	Concept D Self-reflection (N=21)	Concept E Storytelling (N=22)
Q11 Knowledge sus. fashion	M = 3.00; SD = 1.41	M = 3.35; SD = 1.53	M = 2.61; SD = 1.03	M = 3.67; SD = 1.49	M = 2.87; SD = 1.09
Q12 Purchases sus. fashion	M = 15.33	M = 10.61	M = 10.14	M = 20.71	M = 11.95
Q13 Purchase sus. products	M = 19.67	M = 21.56	M = 20.23	M = 22.38	M = 15.00
Q14 Already know Kuyichi	47,6% yes; 42,9% no; 9,5% I don't know	42,9% yes; 47,6% no; 9,5% I don't know	40,9% yes; 54,5% no; 4,5% I don't know	47,6% yes; 52,4% no;	50% yes; 50% no;
Q15 Age	M = 24.14 years	M = 24.24 years	M = 23.68 years	M = 23.52 years	M = 22.77 years
Q16 Gender	57% male; 43% female	52% male; 48% female	54,5% male; 45,5% female	52% male; 48% female	50% male; 50% female

FACTOR ANALYSIS

Q2A-2C) ATTRACTIVENESS JEANS

1 factor = attractiveness jeans

Cronbach's alpha = 0,795

Q3a-3c) Attractiveness label

1 factor = attractiveness label

Cronbach's alpha = 0,840

Q5A-5J) INVOLVEMENT LABEL

2 factors: importance and interest

Note: Question 5d was removed.

Importance factor, q) 5a, 5b, 5c, 5f, 5j: Cronbach's alpha = 0,833

Interest factor, q) 5e, 5g, 5h, 5i: Cronbach's alpha = 0,727

Q6A-6I) EMOTIONS

1 factor: positive emotions

Positive = q) 6a-c, 6e, 6g, 6i

Cronbach's alpha = 0,835

Q7AB) ATTENTION

1 factor

Cronbach's alpha = 0,835

Q8A-8C) ACTION ORIENTATION

1 factor = trigger

KMO = 0,688; Bartlett < 0,001

Total variance explained by the model = 73,94%

Cronbach's alpha = 0,820

Q11) KNOWLEDGE ON ETHICAL FASHION

1 factor = Knowledge on ethical fashion

Cronbach's alpha = 0,943

COMPARE MEANS (ONE-WAY ANOVA)

Relevant measures

Q2) ATTRACTIVENESS JEANS

Mean = 5,36; SD = 0,90;

Levene = ns

$F(4,102) = 1,583$, ns

Q3) ATTRACTIVENESS LABEL

Mean = 5,17; SD = 1,15;

Levene = ns

$F(4,102) = 0,515$, ns

Q10) WILLINGNESS TO PAY

Mean=66,33; SD=20,79

Levene = ns

$F(4,102) = 0,484$, ns

RESULTS PLANNED CONTRASTS

Table 6: Main results, lab-setting experiment.

	Benchmark (concept A)	Provoking question (concept B)	Material use (concept C)	Self-reflection (concept D)	Storytelling (concept E)
Action-orientation	M = 3.40 SD = 1.44	M = 4.89 SD = 1.42	M = 5.00 SD = 1.26	M = 5.10*** SD = 1.02	M = 4.38 SD = 1.40
Attention	M = 5.24 SD = 1.12	M = 5.31 SD = 1.12	M = 5.10 SD = 1.12	M = 5.74* SD = 0.78	M = 4.57 SD = 1.02
Uniqueness	M = 3.43 SD = 1.72	M = 4.19 SD = 1.25	M = 3.95 SD = 1.68	M = 4.95** SD = 1.43	M = 4.05 SD = 1.56

Planned contrasts results for the self-reflection condition [concept D] versus the benchmark [concept A]: * for $p \leq .05$, ** for $p \leq .01$, and *** for $p \leq .001$.

A one-way ANOVA showed a significant effect of type of label on action-orientation, $F(4,102) = 6.00$, $p < .001$. Planned contrasts revealed that the self-reflection condition [D] was evaluated more favorably than the other conditions ($M_{\text{question}} = 4.89$, $SD_{\text{question}} = 1.42$; $M_{\text{material}} = 5.00$, $SD_{\text{material}} = 1.26$; $M_{\text{story}} = 4.38$, $SD_{\text{story}} = 1.40$), as well as the benchmark condition [A] ($M_{\text{reflection}} = 5.10$, $SD_{\text{reflection}} = 1.02$; $M_{\text{benchmark}} = 3.40$, $SD_{\text{benchmark}} = 1.44$).

With regards to attention, there was a significant effect of label on attention $F(4,102) = 3.20$, $p < .05$. Planned comparisons show that self-reflection concept scored significantly higher than the other conditions with regards to attention ($M_{\text{question}} = 5.31$, $SD_{\text{question}} = 1.12$; $M_{\text{material}} = 5.00$, $SD_{\text{material}} = 1.12$; $M_{\text{story}} = 4.57$, $SD_{\text{story}} = 1.02$), a finding that also holds true when comparing it with the benchmark condition ($M_{\text{reflection}} = 5.74$, $SD_{\text{reflection}} = .78$; $M_{\text{benchmark}} = 5.24$, $SD_{\text{benchmark}} = 1.12$).

The self-reflection condition also scored significantly higher on uniqueness than the other conditions ($F(4,102) = 2.69$, $p < .05$; $M_{\text{question}} = 4.19$, $SD_{\text{question}} = 1.25$; $M_{\text{material}} = 3.95$, $SD_{\text{material}} = 1.68$; $M_{\text{story}} = 4.05$, $SD_{\text{story}} = 1.56$), also when compared with the benchmark ($M_{\text{reflection}} = 4.95$, $SD_{\text{reflection}} = 1.43$; $M_{\text{benchmark}} = 3.43$, $SD_{\text{benchmark}} = 1.72$), $F(2,102) = 5.24$, $p < .01$.

APPENDIX I: QUESTIONNAIRE IN-STORE EXPERIMENT

Introduction

This questionnaire measures your reactions to the jeans and your interest to find out more information. There are no wrong or right answers to the questions; just fill them in as you best see fit. Please make sure to fill in all questions.

Thank you for your participation!

1. How attractive are the jeans? (Select between 1-7)

Not Likeable	1	2	3	4	5	6	7	Likeable
Bad	1	2	3	4	5	6	7	Good
Unappealing	1	2	3	4	5	6	7	Appealing

2. How attractive is the hangtag that is hanging from the jeans? (Select between 1-7)

Not likeable	1	2	3	4	5	6	7	Likeable
Bad	1	2	3	4	5	6	7	Good
Unappealing	1	2	3	4	5	6	7	Appealing

3. Please list the first impression you have towards the hangtag (that is hanging from the jeans).

4. (Select between 1-7)

	Totally disagree							Totally agree		
This hangtag is eye-catching	1	2	3	4	5	6	7			
I want to check out this hangtag	1	2	3	4	5	6	7			
This hangtag is unique	1	2	3	4	5	6	7			
With this hangtag, I want to find out more about the brand Kuyichi	1	2	3	4	5	6	7			
With this hangtag, I want to find out more about the journey of my jeans	1	2	3	4	5	6	7			
With this hangtag, I want to go online to track my jeans	1	2	3	4	5	6	7			

Imagine you are considering to buy this pair of jeans...

5. What kind sustainability related information would you like to get for this pair of jeans? (Please tick the boxes; multiple answers possible)

- ☐ Material specifications (organic cotton, recycled PET, etcetera)
- ☐ Name and location of all suppliers
- ☐ The production process (how it's made)
- ☐ Carbon footprint of the jeans
- ☐ Sustainability certifications
- ☐ Working conditions in the factory
- ☐ Summary of factory audits
- ☐ Cost structure of the jeans (where does the money go to)
- ☐ Water use & treatment
- ☐ Other information (please explain)

☐ I am not interested in more information ☐ [please go to question 8](#)

6. How would you like this information to be presented to you? (Multiple answers possible)

- ☐ With short movies
- ☐ With real images
- ☐ With infographics
- ☐ On factsheets with tables
- ☐ I would like the salesman to tell me directly
- ☐ No preference
- ☐ Other (please explain)

7. Where would you like to get this information? (Please tick one answer)

- ☐ In the store
- ☐ At home
- ☐ Other (please explain)

8. a) Imagine the label at the jeans has a scanning feature (not a QR code) for your smart phone. Would you make use of this feature to track this information on your jeans? (Please tick one answer)

☐ Yes ☐ No ☐ I don't know

- b) Why or why not? (Open question)



9. I know a lot about sustainable fashion (Select between 1-7)

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
-------------------	---	---	---	---	---	---	---	----------------

10. I spend ___% of my clothing purchases on sustainable brands (Please estimate)

11. Before this test, I already knew the brand Kuyichi

☐ Yes ☐ No ☐ I don't know

12. Age years (Please fill in your age)

13. Gender ☐ M ☐ F

14. Do you have anything to add to this questionnaire, for example comments or remarks? (Please write down your thoughts below)

The end

Thank you very much for your time! I really appreciate your help.

APPENDIX J: RESULTS IN-STORE EXPERIMENT

	Benchmark Concept A (N=20)	Self-reflection Concept D (N=21)	Story-telling Concept E (N=20)
Q9 Knowledge sus. fashion	M = 3.80; SD = 1.70	M = 4.00; SD = 1.63	M = 4.00; SD = 1.52
Q10 Purchases sus. fashion	M = 29.50; SD = 23.78	M = 40.00; SD = 24.92	M = 35.00; SD = 23.45
Q11 Already know Kuyichi	55% yes; 40% no; 5% I don't know	57.1% yes; 42.9% no;	50% yes; 40% no; 10% I don't know
Q12 Age	M = 37.78; SD = 11.57	M = 38.04; SD = 11.36	M = 39.16; SD = 13.08
Q13 Gender	55% male; 45% female	3.3% male; 66.7% female	45% male; 55% female
Q15 Nationality	80% Dutch; 15% Other European; 5% Other	1% Dutch; 19% Other European;	75% Dutch; 25% Other European;

PLANNED CONTRASTS IN-STORE EXPERIMENT

	Benchmark (concept A)	Self-reflection (concept D)	Storytelling (concept E)
Action-orientation	M=2.77 SD=1.08	M=4.05** SD=1.32	M=4.02 SD=1.38
Attention	M=3.90 SD=1.15	M=4.98** SD=1.18	M=4.73 SD=.94
Uniqueness	M=3.60 SD=1.00	M=5.57*** SD=1.25	M=4.20 SD=1.06

Planned contrasts results for the Self-reflection condition versus the benchmark (A):
* for $p \leq .05$, ** for $p \leq .01$, and *** for $p \leq .001$.

Q4A+Q4B ACTION ORIENTATION

Cronbach's alpha = .919

There is not a significant effect of type of label on Action-orientation, $F(2,52) = 6.80$, $p = ns$. Planned contrasts revealed that the self-reflection condition (D) was evaluated equal compared to the other condition (Mstory= 4.82, SDstory= .87), but more favorably than the benchmark condition (A), $F(2,52) = 6.80$, $p < .01$ (Mreflection = 5.08, SDreflection = 1.09; Mbenchmark = 2.77, SDbenchmark= 1.08).

Q4A+Q4B ATTENTION

Cronbach's alpha = .715

There is a significant effect of label on Attention $F(2,52) = 5.35$, $p < .05$. Planned comparisons show that self-reflection concept scored significantly higher than the other condition with regards to attention (Mstory= 4.82, SDstory= .87), a finding that also holds true when comparing it with the benchmark condition (A) $F(2,52) = 5.35$, $p < .01$ (Mreflection = 5.08, SDreflection = 1.09; Mbenchmark = 3.81, SDbenchmark= 1.15).

Q4C UNIQUENESS

The self-reflection condition scored significantly higher on Uniqueness than the other condition $F(2,52) = 17.15$, $p < .001$; (Mstory= 4.32, SDstory= 1.08), also when compared with the benchmark (A), $F(2,52) = 17.15$, $p < .001$ (Mreflection = 5.83, SDreflection = .92; Mbenchmark = 3.61, SDbenchmark= 1.04),

APPENDIX K: COST ESTIMATION HANGTAG

This table shows a rough calculation of the cost price of one hangtag. Prices are estimated when ordering quantities of at least 500 units, produced in Tunisia.

What	Material costs	Labour costs	Comments
Mirror sticker	€ 0,05		With good reflecting qualities
Thick paper or cardboard	€ 0,05		85 x 85 x 0.8 mm
String	€ 0,03		30 cm
Cutting shape mirror		€ 0,05	For making silhouette shape, can be done quick with a special mold
Printing costs	€ 0,05	€ 0,05	Printing double sided, multiple hangtags per sheet
Cutting edges		€ 0,05	Cutting the edges to get the 85 x 85 mm shape
Punching the hole		€ 0,05	
Attaching the string		€ 0,05	
Distribution costs	€ 0,02		
Sub total	€ 0,20	€ 0,25	
Profit printing agency (30%)			30% of € 0,45
Total	€ 0,59		



A mobile website requires smaller investments than an application, and has a lower threshold because it does not have to be downloaded first. Another advantage of a mobile website compared to an app (or physical product like the hangtag) are the automatic updates. A mobile website allows users to view the website on their smart phone, tablet or pc. Other characteristics are displayed in the Table below.

Category	Characteristics
Audience reach	Viewable by anyone with a mobile browser and internet connection. No distribution or installation needed.
User experience	Limited by site performance and data transfer speed.
Ease of development	Can be built with standard web development tools (free or paid). The different screen sizes make it more complex.
Development resources and costs	Once build it can be expanded to other devices. The cost depends on designer expertise needed. Usually less expensive than an app.
Implementation and maintenance	The website can first run in beta-version for testing. Once published, updates require the same steps as a traditional website. The updates immediately work when the browser is refreshed.

Klein, D. (2012). How to decide: Mobile websites vs. mobile apps. [Online] Available from: <http://www.adobe.com/inspire/2012/02/mobile-websites-vs-mobile-apps.html> [Accessed: 11th April 2014].

APPENDIX M: CONTENT OPEN SOURCE

Once consumer have gone online the challenge is how to satisfy their needs and keep their attention:

“In a world of instant gratification and where an alternative website is just a mouse click away website owners need to find ways to firstly grab the attention of a user, and then keep it for long enough to get your message across. If you don’t, their cursor will be heading to the back button and on to a competitor in the blink of an eye.” (Weatherhead, 2012).

The first screen is really important. Research showed that visitors’ continuation is disturbed when pages load more than one second. After ten seconds the majority has already left the page (Nielsen, 2010). When visitors enter the OS they should immediately see some content (the ‘above-the-fold content’), while the remainder can load in the background.

The content can be divided in categories, which contain sub-categories and sub-sub categories. One way to divide categories is according to the principle of people, planet and profit. Besides there can be a fourth category, where Kuyichi can explain other projects, for example their relation with the Ubuntu Academy.

The categories can also be divided differently, for example in Vision on sustainability; Supply chain; Accreditations and partnerships. Alternatively Kuyichi could present the content with a kind of timeline, following all production steps from raw material to finished product in chronological order.

At every step the relevant information will be shown. For example the step “cotton production” could include information on:

- Why organic cotton (compared to ordinary cotton)
- certifications used (and their meaning)
- a list of all farms and weight of material
- the role of partner organisations

When looking at the content, the following topics are ideally covered in the Open Source:

PEOPLE: Labour conditions

- The Code of conduct
- List & world map of suppliers
- Factory facts, pictures and quotes (consumers want to see in what conditions they are working)
- Partner organisations, like FWF, Fairtrade -> link to these websites
- Compliance level and monitor level

PLANET: Raw materials & treatment

- Transparency on materials used
 - o Volume of environmentally friendly raw materials
 - o Certifications (and their meaning) -> link to these websites
- Policy to avoid ‘wrong’ materials
- Policy to phase out hazardous material and chemicals used in production

PLANET: Carbon footprint

- Kuyichi’s policy to reduce carbon emissions / to combat Climate Change, including targets.
- A calculation of the absolute carbon footprint and the actions to compensate
- Actions related to reducing CO2 of partner companies

PROFIT

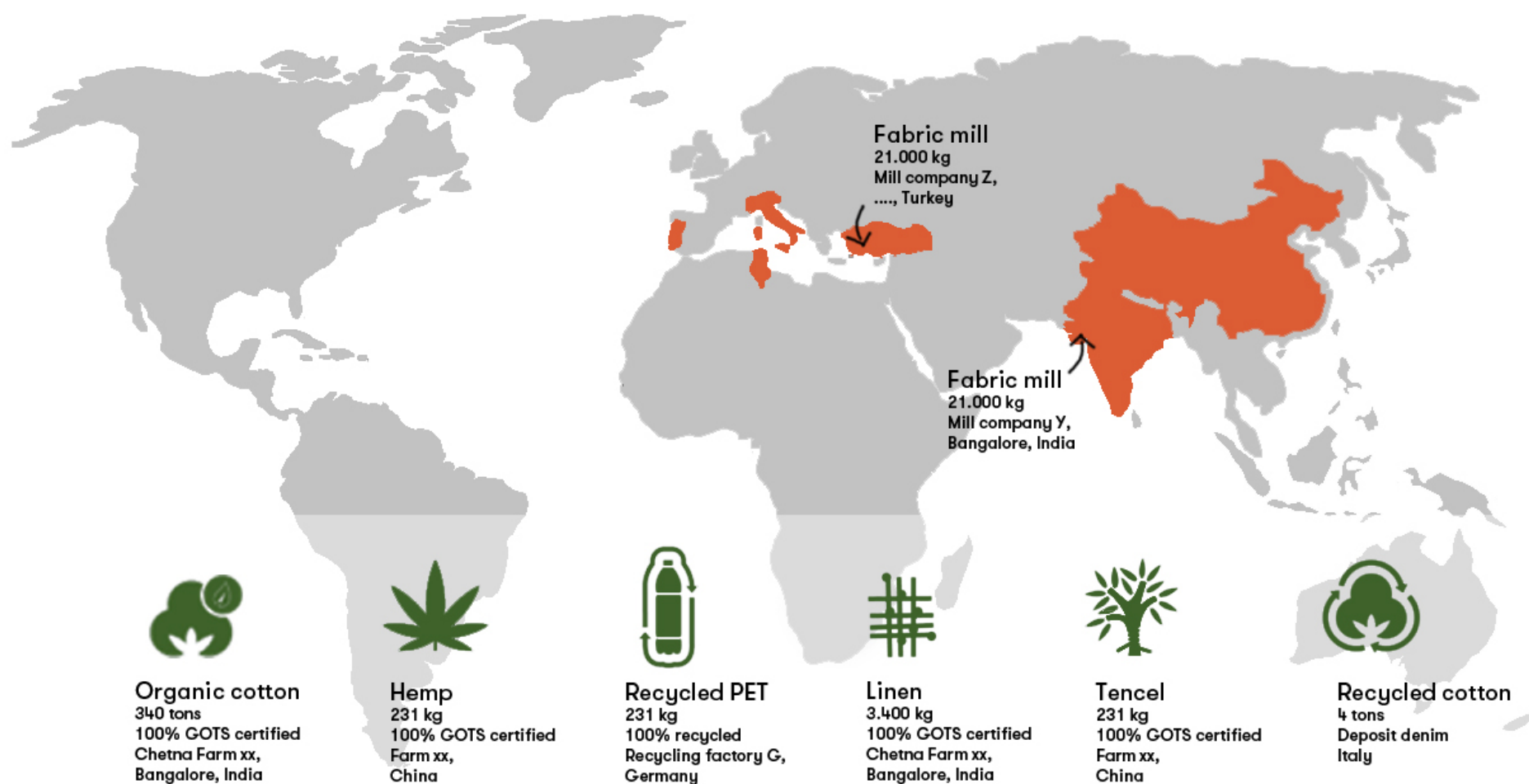
- Full cost structure of the clothes
- Long-term investments

OTHER

- Kuyichi’s collaboration with the Ubuntu academy
- Plastic whale (or similar projects)
- Awards related to sustainability

Kuyichi could show its suppliers using a world map. This is also done by some other brands so it is not the most innovative method, but it is visually attractive and it gives a clear overview. In this map, Kuyichi can indicate the name and location of the supplier, their activity (CMT / farm, etcetera).

In the same map the materials that Kuyichi sources can be shown. If available, the material suppliers can be added and the percentages of that material used compared the total production.



APPENDIX N: MEDIA POSSIBILITIES OPEN SOURCE

There are multiple ways to design a website and how to transfer information, like with images, movies, text, etc. The in-store research did not show a strong preference for presentation type. Each media type has its benefits and disadvantages, which will be discussed in this appendix.

SHORT MOVIES

Movies or animations can be powerful to tell stories, explain complex content and show proof of concept. They exist in many different styles, from old fashioned documentary to high-tech animation. Some participants of the in-store experiment (paragraph 5.2) were in favour of movies, but others disapproved.

With movies, the viewer lacks control of the data transferring speed and duration. If Kuyichi wants to create movies for the OS, it is advised to only add short movies (1-2 minutes) and to offer it for background/inspiration rather than for communicating facts. An animation will be more suitable to explain the production process, while real film material can better show the human side of the supply chain (Jantsch, 2012).

The most common movie types are: real film or 2D-animation or a combination of those. It can be in the style of documentary, or an interview or voice over, with or without background music. A stop-motion movie is less common but can be a low cost solution.

The costs for making a movie strongly depend on the type and quality. For example a video testimonial can be shot by just one filmmaker, who writes a brief script, conducts the interview, and also edits the video. Adding a second camera and lighting makes the image beautiful and dynamic, but is also more expensive and requires extra editing (Kok, 2012). A rule of thumb is that someone can finish three minutes per day. Editing usually takes twice as long as the filming itself (van den Boogaard, 2012). On top there are travel costs, and figurants' compensation.

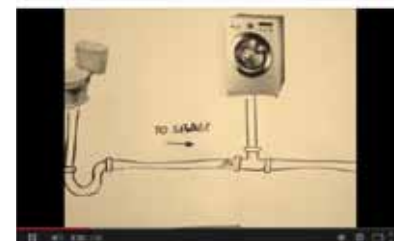
2D-animations are usually not cheaper nor faster. First a script and storyboard has to be written, then the graphic design elements can be created, and finally the editing with music or a voice-over can start. Logically, working with students or starters reduce the costs.



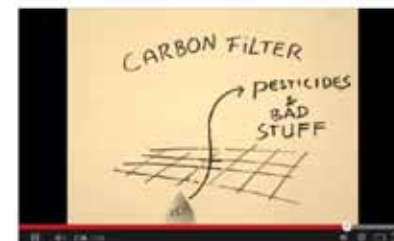
Real film (PME legend)



2D Animation



Stop motion movie



IMAGES & TEXT

The phrase, “a picture is worth a thousand words” still holds, as pictures capture a certain mood, emotion, narration, and message. Text requires more effort and motivation to be processed by the reader, but is useful in combination with pictures. With static images and text the reader has control over the pace of information transfer.

Nowadays almost anybody can take pictures with their smart phone or basic digital camera. Professional photo shoots are more costly and time consuming. Kuyichi should calculate the travel time to the farms and factories, and costs for local guides or translators, the equipment (camera and lighting), and most of all labour costs for the photographer during the shoot and editing afterwards.

INFOGRAPHICS

An infographic can be a strong tool to communicate complex relationships and statistics: “Keeping text to a minimum and using unique visuals to offer a blueprint of modern life. Easy to flick through but intriguing and engaging enough to study for hours”. Infographics contain different information levels. The first layer (title + image) should make clear what the topic is about, the second layer tells shows the relevance, while the third layer presents details. Infographics are less strong in story-telling, and data can be easily misinterpreted when the audience scans only a tiny part of the infographic.

Infographics can be made at relatively low costs, since no real images or movie material is needed.

GAMIFICATION

Kuyichi could also make use of gamification, to stimulate the visitor to gameful experiences. A nice example of a Track & Trace tool

using gamification is the “TrackMyT” of Anvil (Appendix E).

Gamification can be suitable to engage consumers, as users are often rewarded for accomplishing tasks. Possible pitfalls are a misfit with the target group, as it can be perceived too childish. Besides it usually requires a lot of clicking.

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