

# Consumer attitudes and communication in circular fashion

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## Abstract

**Purpose** – The purpose of this paper is to explore consumers' views and expectations on circular clothing. This paper also clarifies how the remanufacturing process should be communicated and circular fashion marketed to consumers.

**Design/methodology/approach** – The research methodology consisted of consumer interviews, utilising an online innovation platform (Owela) to involve consumers and workshops with project partners and with external stakeholders.

**Findings** – Consumers' interest towards recycling and sustainable solutions has increased. They appreciate the idea of recycling textile waste to produce new clothes; circular products should become "the new normal". Consumers are asking for more visible and concrete information about circular clothing and how their behaviour has affected the environmental aspects of textile production. The communication should be timed correctly by using multiple communication channels and also paying attention to the shopping experience. In addition, digital services alongside circular clothing could create additional value for consumers.

**Research limitations/implications** – In this study, only consumers from Finland were involved. The results might be different in different parts of Europe and especially worldwide.

**Originality/value** – This study focusses on circular clothing – an area that has not been studied much before. Also, consumers involved in this study were of a different age compared to most of the previous studies, where the focus has been mainly on young college students.

**Keywords** Consumers, Communication, Co-creation, Circular economy, Circular clothing, Relooping fashion

**Paper type** Research paper

## Introduction

Sustainable consumption and production are important elements in preserving limited natural resources and avoiding climate change. In the textile sector, the increased consumption is mainly due to fast-changing, affordable fashion that results in an increasing amount of textile waste (Elander and Palm, 2015). The environmental impacts of textile production include energy consumption, water use, chemicals, dyes and finishes and

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greenhouse gas emissions (Pedersen and Gwozdz, 2014). Textile production is one of the most polluting industries in the world (NRCD, 2016).

According to Dahlbo *et al.* (2017), both increased reuse and recycling can potentially reduce environmental impacts compared to the current situation if virgin textile production is compensated. This requires changes in the whole value chain to keep materials and products in the loop and maintaining the highest possible value. Regarding textiles in the circular economy (CE) context, possibilities for consumers include, for example, purchasing durable textiles, lengthening the life cycle of textiles by careful care, repairing or reusing garments and recycling material that is no longer reusable (Dahlbo *et al.*, 2017).

The CE based on closed loops offers a framework through which reuse and recycling can significantly be increased. In fashion, the goal is to develop a more sustainable and closed-loop system, where garments are reused or recycled into new fibres. The latter is quite a new phenomenon (Niinimäki, 2017).

The global textile fibre production, consumption of textiles and amount of textile waste are constantly growing (Dahlbo *et al.*, 2017). The clothing industry offers more styles at lower prices in shorter time cycles and the consumers desire to change their style (Cao *et al.*, 2014). Fast fashion is a successful and increasingly prevalent business model in which fashion retailers create cheap, throwaway goods at much lower costs and have multiple seasons instead of the traditional two collections per year (Birtwistle and Moore, 2007). Textile disposal is an increasing problem (Bianchi and Birtwistle, 2012) and the share of textiles among solid waste is increasing (Dahlbo *et al.*, 2017).

On the other hand, organic products and sustainable brands are becoming more popular, and consumers are increasingly interested in recycling and an environment-friendly lifestyle. The fashion industry strives for a competitive advantage by differentiating their products through eco-fashions. Although consumers are becoming more aware of eco-friendly clothes and there is demand for them, they are still not selling very well (D'Souza *et al.*, 2015). In addition to eco-fashion, ethical fashion is discussed. New fashion brands are coming to the market with alternatives produced under ethically acceptable conditions and aiming to gain interest from ordinary fashion consumers. Ethical fashion includes good working standards and conditions to workers, sustainable business models in the country of origin and the use of organic material. (Joergens, 2006) According to Niinimäki (2010), consumers have a positive attitude towards ethical consumption, but the ethical purchasing decisions are more complex. Social orientation, ideals and ideology affect consumers' decision making (Niinimäki, 2010), where social motivators are more remarkable than personal ones (Freestone and McGoldrick, 2007). Ethics and sustainability in fashion are an abstruse phenomenon, and appears to be an oxymoron, especially within the fast fashion sector (Rutter *et al.*, 2017).

There are several ways to decrease inconsistency between sustainability and fashion. Cao *et al.* (2014) found out that consumers would keep and use adaptable garments for a long time and buy fewer new ones when they were able to utilise the same garments in different ways. Alongside fast fashion, the so-called slow fashion has become a more popular, socially conscious movement that shifts consumers' mindsets from quantity to quality. Slow fashion encompasses slow production schedules, fair wages and consumption and extending the lifespan of clothing, and focusses on valuing and knowing the product that will create significant experiences for users. It encourages people to buy high-quality items less often so that the garment could be seen as an investment (Jung and Jin, 2014; Clark, 2008).

Increased reuse and recycling of textiles can decrease the amount of new textiles from virgin materials and also reduce the use of water, energy and chemicals in the production (Dahlbo *et al.*, 2017). Even if the reuse of clothes has already increased, consumers are discarding higher volumes of textile waste than before as a result of the fast fashion trend.

In addition to that, wear and tear and non-removable stains make textiles non-reusable (Morgan and Birtwistle, 2009). In CE non-reusable clothing should be recycled to be used as raw material. That requires separate collecting and sorting, which is not yet available on a large scale in Finland or many other countries either. Any kind of separate collecting systems require consumer involvement and willingness to return materials in this system. Consumers' attitudes affect their involvement in material cycles and consumer behaviour can be guided towards higher involvement in buying sustainable and recycled materials as well as returning discarded textiles to reuse and recycling loops (Fontell and Heikkilä, 2017).

#### *Consumer attitudes and behaviour*

Consumers' environmental or ethical concerns do not always translate into their purchasing behaviour, as seen in previous studies (Connell, 2011; Grasso *et al.*, 2000; Henninger and Singh, 2017). The attitude-behaviour gap has not been totally understood (Henninger and Singh, 2017). Consumers' purchasing decisions are irrational and not always well connected with their values (Niinimäki, 2010).

Price has been one of the determining factors over sustainability factors in purchase decisions (Butler and Francis, 1997; Grasso *et al.*, 2000). Harris *et al.* (2016) found out that sustainability alone will not suffice to make the necessary changes in consumers' clothing purchases. There are three reasons for that: clothing sustainability is too complex, consumers are too diverse in their ethical concerns, and clothing is not an altruistic purchase; sustainability is a low priority concern when it comes to consumers' purchase criteria (Harris *et al.*, 2016). Reimers *et al.* (2017) found out that altruism, status enhancement, perceived consumer effectiveness and happiness have a significant effect on consumers' attitudes towards environmentally responsible clothing. In the case of sustainable clothing, the predominant target market could be found among people who are concerned about the environment. However, Joy *et al.* (2012) found out that for young consumers, sustainable fashion is not a priority, and that they separate fashion from sustainability even if they definitely support the idea of it.

Also, consumers do not pay much attention to ethical issues either; the majority of consumers are more interested in their own personal fashion needs than the needs of others involved in the clothing supply chain. Reasons for that, for example, consumers feel that they do not have a real choice since most of the garments are produced in developing countries and they do not have any information about production conditions (Joergens, 2006).

Chi (2015) found out that the price and quality of a garment are significant factors in purchasing decision making while social and emotional values are considered important but supplementary. However, for example in China, an increasing number of consumers are changing their personal consumption behaviour with the hope to have an impact on environmental protection. They also feel that purchasing and wearing environmentally friendly garments helps them gain social approval and make a good impression on other people (Chi, 2015).

Hartmann and Apaolaza-Ibañez (2012) pointed out that also psychological brand benefits, like experiential and symbolic benefits, are required in addition to utilitarian benefits, like sustainable pricing, quality, brand image and sustainable labelling. Trends that involve more sustainable purchase behaviour include vintage shopping, do-it-yourself (DIY) fashion, trashion (fashion made out of trash) and also "slow fashion" as well as utilising local cultural traditions in fashion (Harris *et al.*, 2016). Some luxury brands have taken steps towards CE products, for example, Stella McCartney's shoe collection made from a biodegradable and recycled plastic; Viktor and Rolf's new collection using fabrics from previous collections; G Star Raw's jeans and Adidas' training shoes made out of ocean plastic (Moorhouse and Moorhouse, 2017). Also, cultural differences may affect the perception of ethical fashion

(Carey and Cervellon, 2014). For example, the higher price of a garment denotes a higher quality in the UK whereas in France it symbolizes the quest for a higher status. These differences were also seen in the consumption of second-hand clothing (Carey and Cervellon, 2014).

In contrast to their purchasing behaviour, consumers already pay attention to finding new uses for their clothes. Often, it means donating the clothing to charity and giving away to family and friends (Bianchi and Birtwistle, 2012). Many consumers prefer to deliver clothing for reuse rather than binning it (Laitala, 2014). Young consumers, on the other hand, prefer swapping their clothes with friends over donating them to charities, because they want to use their fashionable clothes only a few times (Morgan and Birtwistle, 2009).

### *Communication*

Consumers can be encouraged to buy second-hand and sustainable clothing and recycle used clothing through appropriate communication (Goworek *et al.*, 2013). Morgan and Birtwistle (2009) found out that there is a lack of knowledge of the social and environmental impact of their behaviour. Most people lack knowledge regarding how the garment is made, or what the environmental consequences of artificial fibres and intensive cotton production are. This lack of awareness is thought to be a result of a lack of media coverage. Communication related to high-quality clothing and “value for money” thinking is to be increased (Morgan and Birtwistle, 2009).

The second-hand clothing market is powered by the low price of clothing, and also by the possibility to reduce the amount of disposed clothing and environmental pollution (Farrant *et al.*, 2010). Cultural differences are remarkable, and for example in the USA, the majority of the respondents of the study have purchased second-hand clothing when the same number in China is 10 per cent. However, there was no remarkable difference in second-hand clothing purchasing behaviour between young consumers in these countries. Therefore, young consumers are the major target market for the second-hand clothing trade (Xu *et al.*, 2014).

In the case of sustainable and circular fashion, the challenge is to share the message related to the reduction of consumption impacts and change consumer behaviour, but at the same time sell the products (Black, 2011). For effective communication, the intended audience and the most effective forms of transmission should be defined (Han *et al.*, 2017). Communication should be short, include creative messages to be delivered through a wide variety of media, by using highly engaging visual or non-verbal forms. According to Han *et al.* (2017), key elements for CE fashion communication also include relevant research (industry trends, competitor analysis etc.), coherent values, compelling products, and feedback loops. Moorhouse and Moorhouse (2017) have also discussed about the important role of celebrities to promote a brand, but also to be involved as designers, advocates and entrepreneurs.

Da Giau *et al.* (2016) discuss about “sustainable communication” – a set of strategies and subsequent practices that have a relevant role in disseminating information about an organisation’s environmental and social behaviours. They point out that the web has become the predominant communication channel for sustainability initiatives. Social media channels are the most commonly used ways to reach a wider audience and enable companies to contact consumers who have expressed a prior interest, for example, in sustainability issues (Han *et al.*, 2017). Companies are able to share their information easily with the end customers but that possibility has not been effectively utilised. Rutter *et al.* (2017) emphasised the importance of provenance and transparency in communication. Companies are expected to provide reports on sustainability and create ecologically focussed collections. Chan and Wong (2012) pointed out the importance of improving the store-related attributes of eco-fashion (e.g. store design, store’s ethical practices and shop convenience) to meet consumers’ needs

and affect their eco-fashion consumption, and not only to concentrate on product-related attributes like product design, quality and price. The price of circular clothing can be decreased when there are more materials and products available and the novel processes are stable and common. This will also affect the availability of circular clothes, like also Dahlbo *et al.* (2017) pointed out.

Due to the fact that consumers buy environmentally responsible clothing in order to enhance their reputation and gain recognition from others, the brand and garment should be easily recognisable. Promotion and product labelling should highlight the environmental damage the clothing industry causes to increase consumer effectiveness, for example, pointing out how much water is consumed in the production of a regular t-shirt compared with an environmentally responsible t-shirt. Happiness can be affected, for example, by retail atmosphere. (Reimers *et al.*, 2017). The British designer Amy Twigger Holroyd has, for example, taken a new approach to this: she uses Keep & Share labels in her knitwear to encourage consumers to buy less but also to share the garments with others. The garments have been designed so that they can be worn in different ways, by people of different sizes, and different genders. (Clark, 2008) Lai *et al.* (2017) found out that the difference between men and women is that women see sustainable fashion as unique and fashionable whereas men have the opposite opinion. In addition to gender, also age makes a difference: older consumers consider themselves as more ethical than the younger generation (Henninger and Singh, 2017).

Communication affects consumer behaviour also at the end of a garment's life cycle. Morgan and Birtwistle (2009) found out that there is a lack of knowledge on how and where clothing is disposed of and thus, consumers could be encouraged to donate more by providing more information and collection points. Some clothing retailer chains have started to engage in take-back schemes that enable consumers to bring their old clothing to retail stores. Brands in fashion, like Mark&Spencer, H&M and IKEA have a strong strategic commitment to recycling textiles as a part of a solid and sustainable business (Morgan and Birtwistle, 2009).

The goal of this study is to understand consumers' perceptions on circular garments and how information about the products should be communicated to consumers to increase the popularity of circular clothing. Consumers with their values, attitudes and behaviour are key enablers of the circular textile ecosystem (Fontell and Heikkilä, 2017). This study was conducted as a part of the Relooping Fashion project. The project focussed on a closed-loop model for textiles: post-consumer cotton no longer suitable for reuse is dissolved and spun into new cellulose carbamate fibre. With the new cellulose dissolution technique developed by VTT Technical Research Centre of Finland Ltd, the quality of the fibre was restored. The cellulose carbamate fibres obtained from this process resemble viscose fibres, but the chemistry used is more environmentally friendly than that of viscose.

The term "circular garment" is used in the text to describe new, high-quality garments made from chemically recycled post-consumer cotton (Fontell and Heikkilä, 2017). In the literature, the terms "relooped" and "remanufactured" garments have also been used for this.

## Method

The research questions in our study were as follows:

*RQ1.* What are the consumers' views on circular garments?

*RQ2.* How should the remanufacturing process be communicated to encourage consumers to choose circular garments?

The research methodology consisted of interviews, an online innovation platform and workshops with project partners and external stakeholders, summarised in Table I. This research utilises a qualitative design to explore consumer perceptions of circular clothing and their marketing.

	Number of participants	Focus group	Topic
Interviews	5	Finnish consumers	Consumers' views on sustainability issues in the fashion industry, second-hand vs circular clothing, communications & marketing of circular fashion
Innovation platform, Owela	50	Finnish consumers	Consumers' motivation in recycling and communication
Internal workshop	5-10	Project partners	Ideas and material for communicating and marketing circular products and services
External workshop	18	External stakeholders consisting of communications, marketing and textile professionals	Developing further the "anchors for circular narrative"

**Table I.**  
Summary of the used methodologies

### *Interviews*

The face-to-face, semi-structured interviews were implemented with five Finnish consumers (two men and three women) aged from 18 to 55. The interviewees were intentionally chosen not to be particularly interested in recycling nor considering themselves to be very "green". The aim was to get a general overview of what people think about circular garments. The results guided the project team to structure the next part of the research.

The interviews were kicked off by watching the Relooping Fashion video (VTT, 2015) and discussing what the participant thought about the information provided in the video. Other discussion topics included second-hand clothes vs circular clothing and the possible impact of environmental or ethical issues on purchasing decisions. A big part of the interview revolved around communication and marketing channels and styles; where, how and who should be communicating, marketing and raising awareness about circular garments.

Each interview took about one hour and they were recorded and transcribed. Afterwards, answers from different interviewees were combined, themed and analysed.

### *Innovation platform*

VTT's innovation platform Owela (<http://owela.fi>) was utilised for the themed discussion. Owela is an online innovation space that helps companies to develop products and services together with the users (Friedrich, 2013). It supports active user involvement in the innovation process from early ideas to piloting and actual use.

The discussion in Owela was open for five weeks in February-March 2016. The participants were invited through project partners' newsletters, Twitter and Facebook. Unlike in the interviews, these people were expected to be interested in these issues as they volunteered to participate in the discussion. A total of 50 users contributed to the discussions. The age of the participants was between 16-78 years, and the average age was 43 years. Only 14 per cent of the participants were male and 86 per cent female. That has been the case also in many previous studies (Laitala, 2014). In general, women acquire more clothing, and they might be responsible for most clothing disposal in their families.

In Owela, participants were advised to contribute actively during the whole study. Each week a new topic was presented and participants were incentivised to comment actively through small rewards at the end of the five-week period. Two of the discussion themes were about the themes of recycling and communication that are in the focus of this paper. The other three weeks were related to company-specific discussions. Afterwards, all the comments were combined and analysed.

#### *Internal workshop*

The results from the interviews and discussions on the Owela platform were explored more deeply in internal workshops with the project partners. The three-hour workshops included an introduction to the topic, discussion and working in smaller groups. All the groups presented their results to the others. Results were discussed and conclusions and the next steps were defined. Through discussions and various exercises, the results were taken to the next level to provide ideas and material for communicating and marketing circular garments and services. The aim was to come up with a value proposition and what we called “anchors for a circular narrative” without strictly defining key messages.

#### *External workshop*

A workshop with external stakeholders consisting of communications, marketing and textile professionals got 18 participants. The aim of the workshop was two-fold: to introduce the basic tenets of CE and the importance of creating consumer demand for circular clothing through communications and marketing, and to further develop the “anchors for circular narrative” with professionals who were not familiar with the project. The participants were divided into groups of 5-6 people, where their task was to brainstorm and prioritise aspects that should or should not be used in marketing messages. The duration of the external workshop was three hours.

### **Results and discussion**

#### *Circulation of clothing*

Circular clothes are not very common yet; the participants of our study were more familiar with the reuse and return of old garments. The interviewees saw that the closed-loop recycling concept presented in the video was “cool” and “simply a sensible thing” to do. Also, circular clothing was seen basically as new, and in that sense those interviewees who would normally not wear second-hand clothes would happily buy circular garments. For example, one of the interviewees commented that “The feeling I got [...] {from the video} is that it is just plain silly to throw away garments if you can use them in some way [...] it simply makes sense and I am sure that it is ecologically beneficial, too”. It seems that a positive attitude towards circular garments exists, which is a good starting point for creating consumer demand through communications and marketing.

Quality, style and comfort were the main concerns when discussing circular clothing. Consumers expect high quality, and luxurious and stylish fashion also from circular clothing. Actually, these are the same properties that consumers expect from luxury brands (Joy *et al.*, 2012). Luxury brands could become the leaders in sustainability because of their emphasis on artisanal quality and timeless design (Joy *et al.*, 2012). Harris *et al.* (2016) discussed about normalised designs for sustainable clothing, something not too exceptional. Also, Niinimäki (2010) pointed out the importance of quality and design in eco-fashion. In our study, consumers expected that the quality of circular clothing equals that of new garments made from virgin raw materials. They were concerned, for example, about “Does it shrink or stretch? What about the colours, do they stay? Can I wash it in 40 degrees? Does it pill easily?” The question of style was naturally essential for the interviewees and they felt that there is a lack of stylish ethically produced clothes: “I haven’t yet found stylish and reasonably priced ethically produced or Made in Finland clothes [...] the most ethically produced are not so cool [...]”. The interviewees pointed out that the circular garments cannot differ too much from clothes manufactured from virgin fibre; “They should be equal to new clothes, not like some awful shapeless jute bags but stylish and similar to new”. Other concerns were related to the comfort of

circular clothing, for example: “How does it feel on my skin? Is it soft, is it breathable, is it unlike synthetic fibres? I wish relooped fabric feels at least as comfortable as cotton or blended fibre”.

Most of the Owela participants and interviewees were diligent about returning their clothes for reuse, although the interviewees had initially stated that they were not particularly interested in “green” issues. Consumers’ interest towards finding a new use for their garments has been stated also in previous studies (Bianchi and Birtwistle, 2012; Laitala, 2014). In terms of the life cycle, participants were more interested in taking care of the end of the life cycle than finding out what happens at the beginning of the life cycle. It seemed that some participants wish to know, for example, the country of origin and working conditions there, but only a few people admitted this information would affect their buying decision. These kinds of results have also been found out in previous studies (e.g. Butler and Francis, 1997; Grasso *et al.*, 2000; Joergens, 2006; Connell, 2011). Consumers also feel powerless over the beginning of the life cycle, because most of the garments have been produced far away in the developing countries (Joergens, 2006).

The participants emphasised that ease and simplicity increase their motivation to deliver discarded materials for reuse. They mostly commented that “I am not as much interested in finding out where my clothes come from as I am in knowing where they will end up”. In practice, most participants donated their old garments to a charity or someone in need, swapped with friends or sold at flea markets. Currently there is no large scale channel in Finland to recycle clothes that are too worn out and/or stained for second-hand purposes. The participants felt that these worn out textiles could easily be recycled alongside other domestic recycling: many housing companies have recycling containers for paper, cardboard, and some also organise glass, metal and plastic recycling. One more container for textiles was considered as an easy and simple solution, or even “It would simply be awesome, if someone came and picked up my old garments from home”. Recycling containers in shopping malls, near supermarkets or public transportation were also seen as viable solutions, as well as a system similar to the current bottle recycling process where a small deposit is paid for each bottle. Morgan and Birtwistle (2009) pointed out the same challenge and suggested increasing the number of collection points. The participants in our study ideated that “I like the idea of returning a couple of my old shirts when going shopping” or the option to return old clothes to the clothing store when shopping for new items. Some clothing retailer chains have started to engage in take-back schemes that enable consumers to bring their old clothing to stores (Morgan and Birtwistle, 2009). Other ideas from the project focus groups included sending clothes back to the retailer. Consumers ideated also a pick-up service and an application showing the nearest containers.

#### *Communication and marketing*

In general, the participants felt that clothing brands could communicate far more on the environmental or ethical aspects of their operations. The nature of current information was described as too generic, too vague and containing too much drama and guilt factor mixed into the messages. There seems to be a kind of “world-saving-overload”. One of the interviewees commented that “There has been quite a lot of that sort of adverts [...] I do not miss dramatising things more, the message could be conveyed in a neutral manner, like in the video. Otherwise I just get the feeling that I have done something wrong all the time”. Morgan and Birtwistle (2009) also pointed out the lack of information in marketing sustainable clothing and asked for making social and environmental consequences concrete for consumers. Black (2011) discussed the challenge in sharing facts and simultaneously selling the products. Similarly, over-promising was considered



frustrating: “Too many things are spearheaded with the save-the-world idea and people get bored about it. Nothing changes quickly in this world, so people feel disappointed when promises do not deliver results as prospected”. Some participants wanted merely neutral and fact-based communications, while others were calling for more humoristic and refreshingly surprising marketing means. A humoristic approach could increase the happiness that also Reimers *et al.* (2017) ask from the marketing of sustainable clothing.

There is clearly a lot of room for marketing professionals to explore these different styles in the future. Key elements for CE fashion were stated by Han *et al.* (2017), including, for example, short and clear, visually attractive messages delivered through a wide variety of media. Henninger *et al.* (2016) have created a sustainable fashion matrix to help companies to indicate their sustainable fashion priorities and to communicate it clearly to the stakeholders and strengthen their image. This matrix includes different attributes of sustainable fashion, including innovation, ethically sourced, local production, environmental standards, limited transportation, etc. to be ranked by priority for the company.

All in all, it was clear that circular garments should become “the new normal”. One important aspect was engaging people through communications and especially through storytelling. The participants brainstormed that circular garments should be more visible and concrete for consumers, like “[...] to see that my totally worn out garment became such a nice-looking piece of clothing. Making it concrete that I brought so and so many pieces of clothing and they were remanufactured into this” and “It sounds like a sensible solution [...] if I knew that they were remanufactured into new clothes, it would somehow feel more personal, to know what is really happening to my old clothes”. Storytelling to engage people emotionally was also strongly emphasised by communications and marketing professionals at the external workshop. In their view, the story should start from the person who has donated the old garment and go transparently through the whole loop giving facts and using terms like, “reborn”, “nextile” or the more humoristic “reincarnation” of an old garment.

Incentives should be in place for people wanting to become part of the cycle and choosing circular garments accordingly. The fact that the dissolution technology is developed in Finland should be highlighted as a selling argument for Finnish consumers since many of them prefer locality when possible. Other aspects to promote circular garments included high quality; some even suggested marketing them as luxury items of the future. In addition, “limited edition” or “priority buying” campaigns were brainstormed to boost interest towards circular clothing. The fashion industry is looking for a competitive advantage by creating eco-collections and using celebrities to promote the brands (D’Souza *et al.*, 2015; Moorhouse and Moorhouse, 2017). Combining emotional and factual information was considered critical.

Transparency of the whole production process loop is crucial as it increases consumers’ trust, which was also pointed out by Harris *et al.* (2016) and Rutter *et al.* (2017). There was clearly a need to understand the basic principles of how the loop is closed and what happens at each stage. Aspects that should not be brought into marketing were stated as follows: focussing too much on the dissolution technology, chemical consistence and technical details. Also talking about textile waste was not seen to be compelling to consumers.

Unsurprisingly, communicating circularity should be embedded in multiple communication channels, whether it is social media, web page, radio, adverts on television or public spaces, or information on the price tag. Morgan and Birtwistle (2009) saw the lack of awareness as a consequence of the lack of media coverage. The use of web and social media channels is nowadays essential in communication and marketing (Da Giau *et al.*, 2016; Han *et al.*, 2017; Rutter *et al.*, 2017). Naturally, by utilising digital channels for advertisements

it is possible to reach large crowds easily and with low costs. Also, having sales personnel to tell about closed-loop operations would be an effective way to share the information about the background and remanufacturing process, like “I think the most viable thing would be if the sales staff would talk about it”. Also, Han *et al.* (2017) pointed out the in-store dialogue with the customers to create a unique shopping experience. Reimers *et al.* (2017) emphasised the effect of the positive atmosphere of the clothing stores when Chan and Wong (2012) discussed the importance of store design and environment as well as ethical practices and shop convenience. Our focus group also saw that organising public events would give extra credibility to the brand.

To encourage circular clothing purchases, information needs to be not only clear and correct, but also well timed. This is one of the reasons face-to-face information was seen essential, like “Face-to-face is the most effective way of communicating. I would recommend free of charge public events, where company representatives could talk about their operations. I am sure that the audience would come there if marketed locally and targeted at specific client groups”.

Getting people to buy circular clothes calls for bold marketing, communication and branding. “Maybe it should be done with a brave attitude [...] if it is kicked-off as a small eco-textile project, which you can find in an eco-store, it will disappear into the unknown. It [marketing] should be really visible and capturing, so that the consumers’ mindset would change completely. A small and modest launch will not make a sufficient impact”. Still, quite a few participants felt that developing a circular approach makes the brand far more interesting. Even more, they saw opportunities for new services based on the approach, which could differentiate the brands from their competitors. Participants pointed out that “Services, such as advice on style and matching different clothes, repair services, DIY workshops and take-back for worn out textiles attract customers”. Armstrong *et al.* (2015) found out that services in fashion like clothing take-back, swaps and consultancy services are the most interesting ones for the consumers. Consumers are familiar with digital technologies and devices, and more and more interested in value-added services, compared to the basic products themselves (Niinimäki, 2017). Also, Antikainen and Valkokari (2016) highlighted the novel business opportunities that can be created besides CE production.

New ways to engage consumers are needed since manufacturers, designers and retailers do not truly know what consumers want and expect from eco-fashion, and it is suggested to utilise consumers as stakeholders (Niinimäki, 2010). Change towards more sustainable consumption can be achieved by focussing on consumers’ values and needs and also by providing better consumer satisfaction (Niinimäki and Hassi, 2011; RSA, 2016). Niinimäki and Hassi (2011) have discussed also a new kind of value creation through service thinking that focusses on product value defined during the use. It should be profoundly connected to consumer satisfaction as well as the product life span. Other important values for the consumers are emotional and environmental value. From the business point of view, cultural and social value, sustainable development and future-oriented value are the most crucial ones (Niinimäki and Hassi, 2011).

### **Conclusions, implications and limitations**

The time is ready. Consumers and companies are aware of the limited natural resources and climate change and concerned about the challenges they cause. It is understood that something needs to be done. Novel technological solutions for a more sustainable and closed-loop system have been developed for the textile industry, and new sustainable and circular brands are coming to the market. The closed-loop system, where garments are recycled into new fibres, is quite a new phenomenon and a new business opportunity.

In this study, we reviewed consumers' views on circular garments (*RQ1*). Consumers really like the idea of recycling textile waste to produce new clothes. Finnish consumers more commonly return the clothes for reuse than throw the old garments away and they would be willing to return their textile waste to a separate collection point as they do with paper, metal and glass. The attitude towards circular clothing is positive. Circular clothing is seen basically as new, and in that sense those who would not wear second-hand clothes, would happily buy circular garments. Circular garments should be more available on the market, and they should be branded as luxury items and a special edition that would be easily recognisable.

Even if consumers are interested in taking care of the end of the life cycle, they are not actually so interested in the beginning of the life cycle. And, even if consumers are interested in environmental and ethical issues, and they have the facts about manufacturing and working conditions, these do not usually affect their buying decision. More information presented in an attractive way needs to be provided to increase consumers' knowledge and willingness to buy sustainable clothing.

Communication has a remarkable role in convincing consumers of the importance of sustainable consumption. This study aimed also to clarify how the remanufacturing process should be communicated to encourage consumers to choose circular garments (*RQ2*). Obviously, more information about the environmental and ethical aspects of the textile manufacturers and brand owners should be available and communication should be more visible. Consumers also expect more concrete information regarding how their behaviour has affected, for example, the decrease of waste or the use of poisonous chemicals and hoped to see the results that have been achieved. Here, storytelling was seen as a useful way to share this information. Consumers expected neutral and fact-based information, even humoristic, but preferred to avoid drama in the communication. Transparency of the production process is crucial to gain consumers' trust. All communication channels should be widely used in marketing. The role of web and social media channels has increased lately, but exploring different marketing styles is a must.

Feedback from the focus groups emphasised the need for value-added new services. Various services linked to circular clothing could create additional value for the consumers. Servitisation and digitalisation enable novel service development. Digital technologies have become more integrated across all sectors of our economy and society, and they create novel possibilities for economic growth (Vehmas *et al.*, 2015). However, it is important to understand the needs and expectations of the consumers and use them as a starting point for service development. The best outcome will be achieved when developing the future services with the end-users. The service element needs to be included in the product design and business model from the beginning (Niinimäki, 2017). Cultural differences in using second-hand clothing are significant (Xu *et al.*, 2014), but it can be expected that the difference is not so important in circular clothing.

This study was qualitative, thus quantitative information about consumer behaviour was not obtained. In order to ensure a better reliability, we selected consumers for individual face-to-face interviews to not be so focussed on sustainability as we knew that Owela discussions attract those who are already oriented towards this topic. In this study, consumers only from Finland were involved. The results might be different in different parts of Europe and especially worldwide (Carey and Cervellon, 2014; Xu *et al.*, 2014; Chi, 2015). For example, Finnish consumers are very diligent in returning their old clothes for reuse and it can be expected that they have a more positive attitude towards recycling also their textile waste and also to using circular clothes. Still, consumers involved in the study were of a different age compared to most of the previous studies, where the focus group has consisted mainly of young college students (Laitala, 2014).

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### Further reading

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