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What does the brand tell us? — Sustainability and responsibility in a circular perspective



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1. Introduction

This paper conceptualizes a circular model to assess how the outdoor brands sector market their environmental and social responsibility in 2017 and 2019; the model is used to study the extent to which the brands include information about themes related to the whole product cycle.

According to Middlemiss (2018), the goal of sustainable consumption raises several questions, among them what can be done to "reduce negative environmental and social impacts of high consumption lifestyles". Parisi et al. (2015) defines a sustainable product as "one that is manufactured in a way that considers the social elements of fair trade and human rights of the people involved in the manufacturing chain with the lowest possible environmental burdens (...). But equally important, a sustainable product is one which can compete effectively in the global marketplace against less sustainable products" (p. 515). Dangelico et al. (2017) state that developing and manufacturing sustainable products are needed to lessen environmental impact, and marketing this is fundamental, since "developing green products (...) would be useless for environmental sustainability unless widespread in the market" (p.1264). Uusitalo and Oksanen (2004) find that consumers perceive lack of information about ethics as a hindrance to ethical consumption and claim that the customer needs to be educated about ethical products and that it is a challenge for firms to provide reliable information about the ethical aspects of a product. Part of this information includes environmental impact. Jung and Ha-Brookshire (2017) examined what consumers expect in terms of responsibility from corporations and find that working conditions are most important, followed by environmental support, community support and transparency. Middlemiss (2010) argue that the ecological footprint consists of four capacities. Cultural capacity describes one's ability based on one's culture; organizational capacity explains choices we take as members of an organization; personal capacity describes the choices we make based on our knowledge and education, while infrastructural capacity describes what kind of options are created externally. Information, then, is crucial for a consumer who wants to make the right choice.

The recent focus on the circular economy (Kirchherr et al., 2017; Korhonen et al., 2018; Murray et al., 2017; Prieto-Sandoval et al., 2018) raises new and interesting questions about the aspects that need to be covered since the conception of the value chain has changed from linear to circular. Information about sustainability issues should include the whole cycle of the product and not merely focus on the pre-consumer process. Therefore, this study is aimed at showing what information a consumer can find about sustainability and responsibility issues in a circular perspective — meaning a perspective covering these aspects from cradle to cradle.

Definitions of the circular economy are numerous (see Kirchherr et al., 2017; Prieto-Sandoval et al., 2018). Kirchherr et al. (2017 p. 229) define it as "an economic system that replaces the 'end of life' concept with reducing, alternatively reusing, recycling and recovering materials in production/distribution and consumption processes (...)".

Circulation economics (CEc) (Ingebrigtsen and Jakobsen, 2007) is a concept developed before the mainstream wave of the circular economy but has clear similarities to the latter. It can be defined as a framework in which companies and consumers are integrated with nature and culture, and economic activity takes place within borders of the ecosystem and social and societal knowledge, values and norms (Ingebrigtsen and Jakobsen, 2007 p 114–116). The value chain used for illustration is a systematic circular framework that provides a schematic conceptualization for understanding the full product lifecycle and the integration with nature and culture. CEc is therefore a suitable starting point for conceptualizing a model to assess information on sustainability work through the lifecycle

stages of production, distribution, consumption and redistribution. This will be presented in Section 3.

Thus, this article has two objectives; it conceptualizes CEc (Ingebrigtsen and Jakobsen, 2007) as a systematic model comprising a framework covering 16 themes based on production, distribution, consumption and redistribution in which different forms of environmental sustainability and social responsibility can take place. The framework is then applied to the information given on the web pages of 44 brand producing/marketing outdoor gear in Norway and Sweden in 2017 and 2019 to answer the following research question:

"What parts of the circular value chain in circulation economics do the brands inform their customers about in 2017 and 2019?".

2. Research context – outdoor industry

The Outdoor industry has been chosen as a research context for several reasons. The industry in Scandinavia is organised in the Scandinavian Outdoor Group (SOG) (SSB (2019) which is associated member of the European Outdoor Group (EOG). EOG (2019) has a policy of sustainability describing a three-stage journey to commit their members to sustainability. Within stage 3, a "whole-life-cycle perspective on product and service responsibility" and communication and promoting of "sustainability aspects in all dimensions of its business" is put forward. Dargush and Ward (2010) point out that the people participating in outdoor life have an interest in sustainability issues.

Outdoor life is a common pastime in the Nordic countries, and according to Statistics Norway (www.ssb.no), 84% of the population have been on at least a short hike; 66% have been on at least 25 shorter hikes, while 23% have been on a longer skiing trip or hike in the mountains in 2016. European Outdoor Group (EOG, 2019) reports that sales in Europe amounted to 5.3 bn Euro in 2015 in the product groups of tents, backpacks, sleeping bags, footwear, apparel and other. Norway have around 2% and Sweden have around 2.5% of the European market. According to Arne Naess (Naess and Rothenberg, 2001) outdoor life should be the beginning of a more nature-friendly lifestyle. The ideals are to leave no trace, take care of nature and act in an environmentally friendly manner, and these hallmarks are still part of the consciousness and identity of the people in Norway who participate in outdoor life (Ingulfsvann, 2013). Holmquist et al. (2018) did a survey on the willingness of Swedish outdoor consumers to pay a higher price for non-hazardous garments, indicating that they were indeed willing to pay, but quality information is needed when the price is high. Based on the industry's policy and the interest of the customers, this is a suitable context.

3. Theoretical framework and conceptual development

Sheehy (2014) defines Corporate Social Responsibility CSR as a type of international self-regulation, where the focus should be on the environmental perspective as well as the human and social aspects. Given the idea of self-regulation and the lack of clear international rules and regulation, efforts toward sustainability and social responsibility are left to the brands. They choose what they do and the kind of information they want to provide their customers. Salmones (2018) points out that communication of CSR actions can be effective but might depend on the ethical reputation of the firm, bearing in mind that everything about the firm can become public knowledge. Principles for CSR must be well established, and ongoing communication must take place. These aspects are interesting, but focus is on the perception of the firm, not the product chain. A firm in Scandinavia can, in practice, argue that they satisfy all economic and legal requirements, all relevant ethical

norms, and even that they make contributions to sports, NGOs and the like in Scandinavia, but the main impacts or burdens are not located to Scandinavia at all.

The recent interest in circular economy opens a new frame for responsibility, since the value chain changes from linear to circular. Much of the development is done by practitioners (Korhonen et al., 2018) and the concept can be diffuse (Kirchherr et al., 2017). Ingebrigtsen and Jakobsen (2007) state that "circulation economics" (CEc) was developed as a practical understanding of ecological economics to achieve sustainability and is put forward as a complete framework with a schematic value chain included. With the emergence of recent definitions of the circular economy such as those of Kirchherr et al. (2017) and Prieto-Sandoval et al. (2018) p. 613), the notion of the circular economy is "an economic system that represents a change of paradigm in the way that human society is interrelated with nature and aims to prevent the depletion of resources, close energy and material loops and facilitate sustainable development through its implementation of micro (enterprises and consumers), meso (economic agents in symbiosis) and macro (city, regions and governments) levels.(...)". Circulation economics and circular economy are quite similar, but CEc put more weight on the cultural aspect of economy and the clear and concise model that is suitable for conceptualizing.

CEc consists of three integrated cycles – nature, culture and the economy (see Fig. 1), the latter depending on the first two. Input factors from nature are energy and matter; likewise, output comprises the same two factors but (usually) in a different form (Ingebrigtsen and Jakobsen, 2007). These factors relate to environmental responsibility. Culture is based on Schein's (2004) levels of culture. Ingebrigtsen and Jakobsen (2007) described the input as values and knowledge, these would change or develop during the cycle. These factors relate to social responsibility.

As a framework, CEc provides an overview of the different stages, production, distribution, consumption and redistribution for a product from cradle to grave, or cradle to cradle. This can be used to develop a framework for assessing circular responsibility.

3.1. Developing the theoretical concept - circular responsibility

Nature and culture are the main categories in the framework. Each has two secondary categories based on the input/output factors in the cycle; Nature has matter and energy, and Culture has knowledge and values. These factors have environmental and/or social consequences related to the four stages — production, distribution, consumption and redistribution.

We can then subdivide the categories into 16 themes (see Table 1), and to simplify things, we designate these by means of acronyms, so that Nature — Energy — Production is NEP, and so on. Each acronym represents a theme for responsibility. The input/output factors in the subcategory have various consequences for nature and/or culture, and information about actions towards these

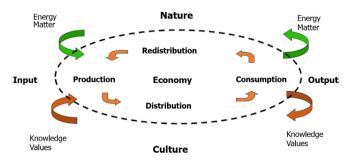


Fig. 1. "Circulation economics" based on Ingebrigtsen and Jakobsen (2007) p. 111.

Table 1Categories for classification based on the cycles in Fig. 1 Stages: P= Production, D = Distribution, C= Consumption, R = Redistribution.

Main cat.	Nature (N)								Culture (C)							
Secondary cat.	Energy (E)				Matter (M)				Knowledge (K)				Values (V)			
Stage	P	D	С	R	P	D	С	R	,	,	С	R	P	D	С	R

in the different stages are of interest.

The content of the themes is based on literature and is then adapted for the stage in the value chain. Within the energy subcategory, for example, Parisi et al. (2015) show, through a life cycle assessment (LCA) with respect to textile production, that environmental improvements can be achieved through reduced use of energy. Rønning et al. (2002) suggest that more eco effective energy sources should be selected. Jung and Ha — Brookshire include "building and running energy efficient facilities" (p. 334) as a part of environmental support. NEP, NED, NEC, and NER therefore share in common what is being done or can be done to reduce and/or otherwise improve energy use.

Within subcategory matter; Parisi et al. (2015) show that reduction in water and consumption of raw materials have beneficial consequences. Rønning et al. (2002) point out that using more eco-efficient raw materials, reducing emissions to air and water, reducing waste from production, increasing effective application, switching to more green products and recycling materials are all ways to potentially enhance environmental sustainability (Rønning et al., 2002). Jung and Ha – Brookshire (2017) include a reduction in environmental harms through limiting chemicals, water use, CO² emissions, and waste. They also include recycling and upcyling, and reduced packaging under environmental support. Dangelico et al. (2017) point out that environmentally friendly packaging needs specific attention. NMP, NMD, NMC and NMR, therefore, represent different actions taken to cut back usage, to make environmentally better decisions in terms of materials, chemicals, prolonged usage, recycling or other ways by which to reduce environmental consequences related to material input and output.

Subcategory knowledge is related to development of and use of knowledge to improve or reduce the footprint from the product. Jung and Ha - Brookshire (2017) include designing environmentally friendly products in environmental support, enhancing student learning and professional development in community support and sharing information publicly and transparently. According to Crane and Matten (2016), responsibility can be understood in three ways: responsibility to avoid doing harm, preventing others from suffering and demonstrating philanthropy. This means that responsibility in this context also includes transferring information that enables the customer to contribute towards the two first objectives, while philanthropy relates to the values subcategory. CKP, CKD, CKC and CKR will then describe different ways they work so as to develop and transfer knowledge about how to improve or reduce the ecological footprint, including concrete actions the consumer can take to repair and or recycle.

The values subcategory deals with the actions related to the surroundings, including philanthropical actions. Jung and Ha-Brookshire (2017) include preserving nature under environmental support, providing education programmes, fair employment opportunities, medical services and partnering with organizations who help children, donating money to charity under community support. Within the working conditions listed by Jung and Ha-Brookshires (2017), we find providing a proper working environment, fair treatment and prohibition of child and forced labour; under transparency we find being certified by Fairtrade, having a whistleblowing system and sharing information (intentionally

included both here and under knowledge). Velden and Vogtländer (2017) include the following factors as important in S-LCA in conjunction with the textile industry — providing a minimum acceptable wage, avoiding child labour, extreme poverty, excessive working hours and ensuring occupational health and safety. CVP, CVD, CVC, CVR have in common that they deal with different issues and intentions related to establishing an ethical frame for the brand, including relations to the producers and their workers, requirements made to suppliers, intentions transferred to customers regarding lessening the ecological footprint, and suggestions on what the customer can do with the product after use (but with no specifically proposed solution).

The model covers most activities that are interesting in a CSR and Environmental responsibility perspective. The empirical part will exemplify the different themes. By using this model to analyse information, responsibility in the whole life cycle of the product becomes clearer, and it will also reveal the areas to which many brands have paid little attention.

4. Methodology

The method used in this paper is document analysis. Document analysis is defined as "a systematic procedure for reviewing or evaluating documents - both printed and electronic (computerbased and Internet-transmitted) material" (Bowen, 2009 p. 27). The documents at hand are the written content on the web pages of 44 producers of outdoor gear in Norway and Sweden. Unlike other types of marketing, the web pages have unlimited space, and it is possible to use this to inform the customers of every aspect of the brand's work. The members list of the Scandinavian Outdoor Group, an associated member of EOG, was accessed in February 2017 (Scandinavian Outdoor Group, 2017). Brands based in Finland (4), Denmark (3) and Iceland (1), as well as brands where the production of gear for outdoor customers is not the primary commercial goal were removed; likewise "development members". This left 13 Norwegian and 31 Swedish brands. Their main web page was accessed in February/March 2017 and in February/March 2019 to find all texts relevant to environment and CSR on an overall level. Bowen (2009) points out three steps in a document analysis – skimming, reading and interpretation. The skimming phase in this case was to find the relevant content. Most brands have this information either under a heading called CSR, Responsibility, Sustainability or About us. If the page was available in several languages, the most extensive description was used. The texts were copied and saved, resulting in 459 pages including text and pictures. According to Bowen (2009), one advantage of documents is that one can track development, so an important aspect is to look at the development from 2017 to 2019. Links to other sites such as branch initiatives, environmental certification sites and the like were excluded – but membership in them was noted as a theme. The reading phase consisted of copying and saving the material and reading through the whole text. The interpretation phase consisted of sorting and finding out what kinds of themes the different producers covered. Taylor (1999) states that the point of an interpretation is to bring to light what is underneath; meaning in a text is dependent on context. According to Bowen (2009) the researcher should consider the original purpose of the document. Here, it means communication to customers and potential customers. The approach entailed putting oneself in the place of the informed consumer looking for information about a brand's responsibility. Classification of the text in themes depends on the structure of the brand. The typical industry model of a headquarters in Scandinavia and producers abroad means, for example, that environmental certification of the brand in itself is in most cases a distributive issue, because what they certify is not the factories but their Scandinavian offices, storage and facilities. If they run the production themselves, then it is a production issue. If the operations of the production site are not controlled on a daily basis, they are merely customers of another business, and can make demands, but they are not responsible for the operation. On the other hand, they are responsible for the products in the distribution phase. Choosing certified fabrics or chemicals, on the other hand, is a production issue.

To say a brand does something about NEP (nature, energy, production), businesses look for terms indicating that they try to minimize or reduce energy consumption, use renewable energy or demand that their producers do so. This is a "snowball" process; the theory is that if one brand is doing something that is relevant, all the other brands must also be checked for this, which entails rereading the text. An understanding of the content of a theme then emerged from the material, helping to ensure that relevant information that the researcher has not thought of is registered. Within a theme, the brand would either be registered as having the theme present (1) or not present (0), no matter how extensive their presentation is or how many different issues they covered under an individual theme. The process of doing this cannot be automatized, since it is context-based, not word-based. In addition, several brands have presented their material in the form of pictures. The interpretation is therefore done manually, reading the text repeatedly.

5. Empirical data and summarized results

This section shows the empirical data on each theme and exemplifies the issues that are categorized under the themes.

5.1. NEP: nature, energy and production (2017 = 4, 2019 = 10)

This theme concerns what the business writes about different ways to reduce use of energy, change to green energy, use energy more efficient or similar. Information is becoming more keenly focused. In 2017 the focus was mainly on choice, reduction, and evaluation of energy use. In 2019, the theme is illustrated with additional claims that extended use of recycled materials also reduces energy consumption. The actions taken here are typical actions based on LCA data. For example: Fjällräven (2019) wrote that they work to "(...) increase their use of green energy" and also provide information on energy use in the spinning process. Isbjörn (2019) mentioned design for a more limited use of energy, that is, manufacturing products with reduced energy consumption.

5.2. NMP: nature, matter and production (2017 = 24, 2019 = 30)

NMP consists of different aims and measures to either reduce the use of materials, choose other, more environmentally friendly materials or reduce the environmental burdens by choosing different strategies. NMP is the theme focused on by most of the brands that provide information in both 2017 and 2019. The focus here in both years is on reducing the amount of materials used, the environmental burden of production of wool and cotton certification of material and chemical use REACH (Ulvang, 2019; 8848 Altitude, 2019; Craft, 2019; Didrikksons, 2019; Hilleberg, 2019; Icebug, 2019), Bluesign (Bergans, 2019; Norrøna, 2019; 8848 Altitude, 2019; Haglöfs, 2019 Houdini, 2019; Icebug, 2019; Isbjörn, 2019; Seger, 2019), Oekotex (Norrøna, 2019; Ulvang, 2019; 8848 Altitude, 2019; Fjällräven, 2019; Icebug, 2019; Seger, 2019; Woolpower, 2019) and use of recycled materials. For example, Klättermusen (2019) writes, "For over a decade we have been working with recycled polyester, which creates a net benefit from a sustainability perspective. The recycling process is significantly less harmful than virgin polyester production while material that would end up in a land-fill is put to good use." One interesting feature here is that some of the brands are providing much information about what their suppliers do, or on the demands they make to their suppliers; this is especially the case for wool clothing, with stories and pictures about the farmers and their limited use of fertilizer, little use of pesticides, and sustainable use of the farmlands (Dale, 2019; Devold, 2019; Ulvang, 2019; Woolpower, 2019).

The issues treated here are typical of the textile business; the emphasis on reduction of material use is in accordance with Parisi et al. (2015) and Rønning et al. (2002). It is noteworthy that most of the efforts they put forward here are aimed at cost reduction and are therefore beneficial to achieving a positive financial bottom line

5.3. CKP: culture, knowledge and production (2017 = 12, 2019 = 20)

This category is related to how the brands work with knowledge about their production and how they use this knowledge to improve production. There are claims that they actively seek new materials to improve product longevity or to lessen the ecological footprint, certify production, train employees in sustainability, work on design to improve durability and cooperate with suppliers for improvement. One example is Houdini (2019) who claim they begin their sustainability work in the planning phase, and refers to a list of questions that should be answered before a product is made: Does the product deserve to exist, will it last long enough, is it versatile, will it age with beauty and is it free from unnecessary details. The change between 2017 and 2019 is that more brands are publishing information about these efforts.

5.4. CVP: culture, values and production (2017 = 23, 2019 = 29)

All the categories related to values are connected in many ways to what we can describe as good intentions related to animal welfare and conditions for workers. However, values in production are also quite specific since this category contains typical certifications and codes of conduct. This theme is in focus, and issues raised concern the ethical side of production, codes of conduct, requirements to the working environment, salaries, claims pertaining to animal welfare, factory lists and claims on few and longlasting cooperative agreements with factories. (ex: Alfa, 2019; Bergans, 2019; Devold, 2019, Helsport, 2019; Craft, 2019; Didrikksons, 2019; Hilleberg, 2019; Norrøna, 2019; Skogstad, 2019; Viking, 2019). Northern Playground (2019) compensates CO² by planting trees. Tretorn (2019) uses old fish nets in new clothing, purportedly as a value decision: "old nets get dumped in the sea. These nets drift with the wind and currents for (...)they can destroy entire ecosystems. Tretorn Ghost Net collection is made out of recycled fishing nets collected to prevent Ghost Nets in our

5.5. NED: nature, energy and distribution (2017 = 12, 2019 = 15)

This category focuses on what the business tells us about their energy use in distribution. Typical examples are the choice of or reduction in transportation and energy use in storage facilities. The most common information in both years is related to choice of transportation. Some brands (ex: Bergans, 2019; Craft, 2019) point out that they try to use sea freight instead of air shipping. Others, like Devold (2019) point out that they have chosen to keep their production close to the market, meaning either Scandinavia or Eastern Europe instead of Asia. Other examples from single brands are climate compensation and graphs showing reduction in car use

among employees. One brand even points out that they use only renewable energy at their main office, located in Norway; it may be a good argument in almost every other country, but given Norway's energy mix of at least 99% renewable energy (Energifakta, 2019), it is as expected.

5.6. NMD: nature, matter and distribution (2017 = 9, 2019 = 10)

Nature, matter and distribution is a theme pertaining to issues about the quantity and nature of materials used in the distribution process. One example of this is the approach to packaging in production. This theme covers small initiatives/actions; information provided is about recycling and reduction of paper use in head-quarters and use of recycled packaging. Aclima (2019), Fjällräven (2019) Lundhags (2019) and Primus (2019) refer to FSC. Tentipi (2019) point out that they use environmentally friendly detergents in their offices.

5.7. CKD: culture, knowledge and distribution (2017 = 4, 2019 = 7)

Focus on developing and maintaining knowledge about distribution issues is placed in this category. Examples include whether the producer communicates with suppliers concerning how to make distribution more environmentally friendly. Issues treated are courses in sustainability for people working at HQ and in the environmental management system/certification at the main office in Scandinavia. Aclima (2019), Hestra (2019), Mora (2019) and Woolpower (2019) are all ISO 9001 and ISO 14001 certified, while Alfa (2019) and Bergans (2019) follow the Norwegian Eco Lighthouse. Houdini (2019) are EMAS certified.

5.8. CVD: culture, values and distribution (2017 = 10, 2019 = 14)

Issues in this category are mainly associated with (fair)trade, marketing and philanthropic activities at HQ. Examples are Bergans (2019), Helsport (2019), Norrøna (2019) and Viking (2019). All these specify that they are members of the initiative for ethical trade. Others provide information about cooperation with different NGOs and that they donate an amount from the annual turnover to conservation and contributions to causes, like Fjällräven (2017): "For many years we have taken part in conservation projects and in particular we have chosen to focus on the Scandinavian arctic fox (...)" and Lundhags (2019) focusing on forest conservation. Even minor initiatives are listed, like Aclimas' (2019) claim that they use Fairtrade coffee at their headquarters.

5.9. NEC: nature, energy and consumption (2017 = 5, 2019 = 8)

Nature, Energy and consumption is a theme reflecting whether the producer cites anything that can help the consumer reduce the energy the product consumes when in use. There is little variety in what is in focus here; the companies that produce clothing give advice on how to reduce energy use (Bergans, 2019; Fjallraven, 2017, 2019) either by washing the products at low temperature or by simply airing them (Woolpower, 2017, 2019). Icebug (2019) has an interesting solution; instead of shipping your shoes to them to be repaired, they argue that you can save transportation by going to your local shoemaker and getting a reimbursement from them.

5.10. NMC: nature, matter and consumption (2017 = 15, 2019 = 19)

Consumption is the longest phase for a product of this type, and this category examines what the brands write about their efforts to either prolong the life of the product, e.g. whether they offer repairs or spare parts, and also if they give advice on maintenance (Didrikksons, 2017, 2019). The offer of repair service is quite common within this theme both in 2017 and 2019 (Bergans, 2017, 2019; Norrøna, 2017, 2019; Houdini, 2017, 2019; Isbjörn, 2017, 2019; Lundhags, 2017, 2019) in addition to claims that the products are made to last a long time (Tentipi, 2017, 2019). The focus on microplastic is present in some brands in 2017 (Haglöfs, 2017) but a new solution is found in two brands in 2019 that offer a "Guppy" bag (Norrøna, 2019) and washing bag (Haglöfs, 2019), in which you can wash the clothing to avoid micro plastic particles in the spill water. This can be considered a small indication that issues that are problematic are in focus and that solutions are implemented for the customer.

5.11. CKC: culture, knowledge and consumption (2017 = 5, 2019 = 18)

This category treats issues concerning whether the producer promotes initiatives to enhance their knowledge and transfers this to the consumer so as to lessen the overall footprint of the product.

Issues here include offers of materials, guides and advice for repairs (Bergans, 2017, 2019; Hestra, 2017, 2019; Amok, 2019; Ulvang, 2019; 8848 Altitude, 2019; Icebug, 2019; Haglöfs, 2019) videos on how to look for faults (Primus, 2019) and extensive information about the product's footprint (Norrøna, 2019). At first glance, some of the issues are similar to those of the previous category, but there is a difference between offering repairs (done for the customer) and offering guidance for the customer in how to repair items themselves. Within the theme of consumption, this is the category showing the highest increase between 2017 and 2019.

5.12. CVC: culture, values and consumption (2017 = 6, 2019 = 9)

This category is about what the brands try to do to enable the consumers to lessen their own ecological footprint. This is an interesting category, because from a profit-oriented business point of view, it is easier to sell a product if your customers are unaware of their footprint. Two brands rent out their clothing (Bergans, 2019; Houdini, 2017, 2019) the argument behind this is that it reduces consumption. Haglöfs (2019) and Isbjörn (2019) encourage people to sell their goods after use. Fjällräven (2017) are promoting sustainable outdoor life. Isbjörn (2019) and Röjk (2019) encourages less consumption, while Tentipi (2019) point out that they are so expensive that you must keep and maintain the tent.

5.13. NER: nature, energy and redistribution (2017 = 0, 2019 = 0)

This category deals with issues related to energy use in the process of redistributing and reusing the materials when discarded. There is no material that supports awareness of this category. Examples of actions might include spill water from production used to heat a factory or adjacent buildings. This is a very common way to recycle energy in the industrial sector. The reason why no brand mentions this may be due to the structure in the business. Few brands own factories, and this is typically an initiative that would have most effect in a factory environment; the suppliers from whom the brand buys the clothing would have to implement this.

5.14. NMR: nature, matter and redistribution (2017 = 9, 2019 = 13)

Redistribution is important in circulation economics, and a change in resource use demands that we find ways to use materials more than once. This category therefore examines whether the brands have established a system for redistribution, or whether they use production techniques that enable redistribution of the materials. There is a slight increase in this theme from 2017 to 2019.

The issues pertain to what they do with leftover materials. Examples are Aclima (2017, 2019), who send the spill material to a company producing punching balls. Haglöfs (2019) has a "leftover collection" of clothing and equipment sewn from left-over materials. This also means that these products are quite individualistic. Two other companies (Tretorn, 2019; Woolpower, 2019) also do this, but they do not designate the practice with a name. Houdini (2019) claims that the material is so clean and biodegradable that it can be mixed with soil to grow food. Bergans (2019) sells products that they have repaired. The most common information is that the clothing can be recycled, and actions taken to ensure this, such as using few materials and avoiding a mix of materials (Craft, 2019; Isbjörn, 2019; Primus, 2019).

5.15. CKR: culture, knowledge and redistribution (2017 = 2, 2019 = 6)

This theme investigates whether anything is done to enable the customer to redistribute the product? Is knowledge about the bran 's solutions for redistribution made available? Houdini (2017, 2019) and Bergans (2019) offer a refund in exchange for sending in or returning your old products. The model provides for giving a discount on your next purchase when you turn in an older product; the brand then disposes of your old clothing. Since the discount you get is in the brand's own store, and their price to the consumers is usually higher than in retail and web shops, this might also reduce the price in the brand store, making it competitive with retail. Besides this, the actions here include providing information that products are made to facilitate recycling (Didrikksons, 2019; Haglöfs, 2019) providing information that it is easy to resell the clothing because of the quality (Isbjörn, 2019) and working to develop better ways of reusing or recycling (Ivanhoe, 2019).

5.16. CVR: culture, values and redistribution (2017 = 6, 2019 = 10)

What do the brands do to enlighten the consumers about what they can do when they have finished using the product? Do they redistribute products with minor faults or repairs? There is very little that is tangible in this regard, aside from good intentions about giving your used products away or selling them (Ulvang, 2019; 8848 Altitude, 2019; Isbjörn, 2019). Woolpower (2019) sell goods with minor mistakes for a discount. Peak (2019) state that test samples are given to charity. Tretorn (2019) point out that products should be recycled. Icebug (2019) intend to establish a system for recycling.

5.17. Summarized results

In 2017, 31 out of 44 (70.5%)brands had web pages where they wrote about either ethical and/or environmental issues. In 2019, the brands with information about sustainability and/or social responsibility had increased to 38 out of 44 (86.3%). In 2017, 63.6% of the brands cover at least one of the eight themes within nature, and four brands merely mention aspects within nature. A total of 61.4% cover at least one theme within culture, and three brands mention only aspects within culture. In 2019, both nature and culture are mentioned by 84.1% of the brands, and only 2 brands cover merely nature or culture (See Fig. 2).

Production is the subcategory that most brands have information about both years (Fig. 3). Distribution and consumption switch places in 2019 due to an increase in information about consumption, and redistribution is last, but relatively speaking represents the greatest increase.

Fig. 4 show all the subcategories. In 2017 4 brands covered all the subcategories, 9 covered 3; 10 covered 2 and 8 covered 1. In 2019, 6

brands covered all subcategories; 19 covered 3; 8 covered 2 and 5 covered 1. The average brand in 2017 wrote about 3.34 themes (N=44) or 4.74 themes (N=31) if we exclude those that did not give any information. All themes except NER were covered by at least two brands. In 2019, the number of brands had increased to 37 out of the 44 brands (84.1%) and all themes, except NER, were covered by at least 4 different brands. The average brand wrote about 4.93 themes (N=44) or 5.86 themes (N=38) if we exclude the 6 brands not giving information.

In 2017, the 44 brands profiled their efforts covering up to 12 themes (see Fig. 5); in 2019, the best brands covered 15 out of 16 themes (Fig. 5). Bold statements about sustainability can be found in brands on both sides of the spectrum. For example, the statement "sustainability is the core in everything we do" was found at a brand that covered 3 themes. "We live for and from outdoor life and see it as a natural part of our responsibility to take care of nature", was cited by one of the two companies with 15 themes.

In 2019, Brands are writing more and including more of their work in their presentations. Seven brands that wrote nothing about their work in 2017 have provided information about it in 2019.

6. Discussion

The information enabling interested consumers to either make an informed choice or enhance their knowledge is extensive, and it has increased in two years. The infrastructural capacity (Middlemiss, 2010) has increased, and it is easier for consumers who are interested to make an informed choice. The initiatives taken by the brands that cover many (8+) of the themes show that they have a perspective covering both social and environmental issues and try on their own to regulate their business activities to be better than what is required, in a sense following Sheehy's (2014) definition on CSR. It is interesting that information varies on a scale from hard and verifiable, like the certifications and labels, to small claims like Fairtrade coffee at HQ. It is clear that for some brands it is important to show that they care.

We can see an increase in two years in the number of brands covering 4 and 3 of the subcategories. Both years, most weight is placed on the beginning of the value chain and applies to production, NMP and CVP.

These are themes that are typical for what we normally would associate with CSR, decent working conditions and avoidance of pollution. The brands are trying to establish better guidelines than they would normally find at the production site. Compared to the ranking of Jung and Ha-Brookshire (2017), showing what customers are interested in, all the items under "Working conditions" fall under CVP. This may indicate that brands focus on what their customers are interested in. The other factors Jung and Ha-Brookshire (2017) have analysed are spread across several themes and are therefore not directly comparable. Most of what is written under NMP falls within the actions described by Parisi et al. (2015) and Rønning et al. (2002). Issues concerning how production affects nature are important and are areas that the brands are working on. Some have labelling and certification verifying their materials and chemicals, while others are giving information that enables the customer to understand. Both NMP and CVP are typically what people look for.

NED is highest among the distributive themes, and given the structure of the industry, transportation is the issue about which it is easiest to provide information. The ways of doing this differ, from producing close to the market, choice of transportation, reducing

¹ The efficiency of this could be questioned, since raw materials need to be transported to the closer facility.

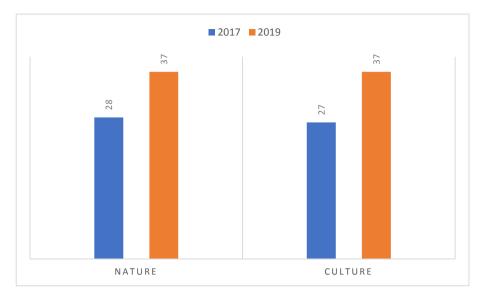


Fig. 2. Brands covering at least one theme within the main category in 2017 and 2019.

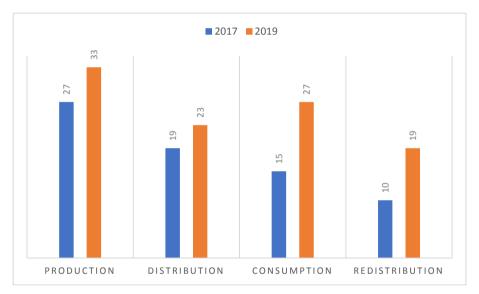


Fig. 3. Brands with information about one or more themes in the different subcategories.

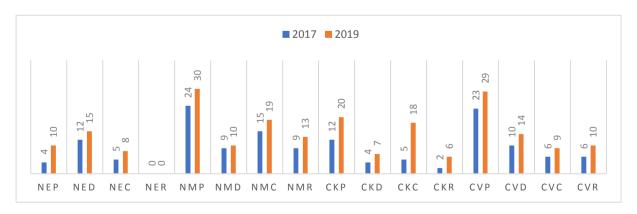


Fig. 4. Brands covering the different themes. First letter: N = nature, C = Culture, Second letter: E = Energy, M = Matter, K = Knowledge, V = Values. Third letter: P = Production, D = Distribution, C = Consumption, R = Redistribution.

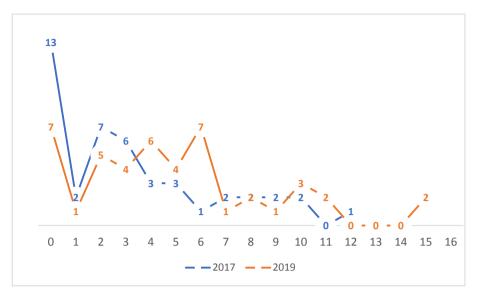


Fig. 5. Brands writing about number of themes in 2017 and 2019.

fuel in transportation and adapting surrounding energy use in the facilities. Few of them are specifically quantified. Knowledge issues here are concerned with certifications like ISO 14001, EMAS and the Norwegian Eco-lighthouse. Not many have declared this type of certification, which would be the easiest way to prove their claims.

Within consumption there is an increase in information about possibilities or issues that concern the consumer directly. This can also help the consumer in the everyday use of the product and thereby also have a potential for reducing the ecological footprint by increasing personal user skill. Half the brands give information on how they work to extend the life of the product, which is one of the real ways to improve sustainability, and part of circular economy - keeping products longer and buying less (Kirchherr et al., 2017). This information can help to create value, increasing cultural capacity by helping people to take choices to keep the products longer. Repairs and spare parts are concrete, and this service is something that would help consumers in a real way to extend the life of their product. But a long-lasting and timeless design is quite abstract when it is not compared to other similar products that have a shorter service life. Nevertheless, they fall within the downstream improvements described by Rønning et al. (2002). Knowledge issues mainly consist of advice to the consumer including typical do-it-yourself measures, e.g. small repairs that do not require specialists, but few have chosen to do this – this theme has potential. Renting out clothing is a very new idea and might be a way to overcome the paradoxical effect in the economic system whereby reduced consumption reduces profits and in parallel, on the social side, leads to increased unemployment. For the consumer who might need the clothing for a weekend or two every season and have easy access to the rental site, this can work. Information is crucial. Besides this, the values are the more abstract actions that are taken, and partly the image the brand wants to project to the consumer. If a brand succeeds in creating really sustainable and lasting products, information like this could help build cultural capacity that would increase the potential for an informed choice.

During the two years of the data collection, attention to circular models has increased and is often mentioned in the media in relation to terms such as the green shift, the new economy, and the like. If a value chain is to be circular, the use of inputs like energy and matter should be kept in the cycle as long as possible, reduced, reused or recycled (Kirrcherr et al., 2017). But this is still the subcategory that is given less attention. NER is not mentioned at all,

interestingly enough, since energy reuse has been a fundament in industrial ecology — but might be hard to implement in non-self-owned factories.

Knowledge about redistribution has increased as a theme, and a refund solution might ensure that clothing that still has useable value is re-used and not thrown away. Few companies are informing their consumers about what they can do with used products to ensure that others will continue to use the products or are providing information on how items can be returned for recycling. As we can see this is also clearly linked to how the products are produced. The possibilities for efficient redistribution are clearly linked to whether the product is made to be recyclable or made to last a long time.

7. Conclusion and implications

To the author's knowledge, this is the first study that has used a circular approach to categorize actual information in CSR — activities. The study shows that, in both years, information on themes related to production has received most focus, and redistribution least focus. Distribution is second in 2017, and third in 2019, consumption the converse. The amount of information on all themes has increased in two years, redistribution and consumption themes increase most, so this reflects an increase in interest in these. This indicates that there is an increased interest in providing information on responsibility covering a circular perspective but there is a potential for developing and extending information especially for redistributive issues. No brands provide information covering all the themes, but Bergans (2019) and Haglöfs (2019) are the brands that seem to have implemented most of the themes in their information outreach in 2019.

The model for circular responsibility conceptualized in this study has the potential to bolster awareness of what a brand should work on to improve their sustainability effort; the model is applicable both as an analytical tool for researchers and as a frame of reference for practitioners in developing and informing on policies and routines for CSR that customers can understand.

8. Further research

These findings are based on what the brands choose to market. There may be differences between what they showcase and what they actually do. The validity of what they write is not checked, nor whether what is claimed is verifiable. This would be a good way to continue and try to determine whether a brand can accomplish what they claim and communicate it to the customers. Research projects in the future could follow up the same type of analysis in a few years or use the same framework on a different industry. The model can be used as a framework for identifying challenges and reporting on work towards sustainability. Other aspects might include an analysis of the brands and different business models to compare various models, and an in-depth study on the use of different certification schemes.

Declaration of competing interest

None.

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