

Master Degree Project in Logistics and Transport Management

Combination of Sustainable Supply Chain Management and Green Marketing: Customer Expectations in Furniture Retail

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Abstract

Sustainable supply chain management contributes significantly to make a product more sustainable, like by the use of raw materials from more sustainable, decrease in carbon footprint due to lighter material weight or increased transport efficiency and new technologies, or recyclability. With the emergence of an increasing demand for sustainable performance in the corporate world, and thus more sustainability communication, surprisingly sustainable supply chain or logistics related information is rarely included into a green marketing strategy.

This research examines to which extent a customer values sustainable supply chain related information about a product or a company in retail furniture. Motivation is fill the mentioned gap in academic research that stresses a missing link between sustainable supply chain management and green marketing. The research is conducted to provide advice whether or not a customer communication strategy for sustainability is needed for the furniture retailer IKEA Deutschland GmbH & Co. KG at the retail store Hamburg-Moorfleet. It respects which information are interesting for the customer and through which medium it shall be communicated.

The 6Ps Hub-and-Spoke Integration Model provided by Liu, et al. (2012) forms basis for a customer survey executed at the retail location and online in order to examine the customer's attitude towards green supply chain management related information about products or the company while purchasing furniture.

The analysed data disclosed a profound interest in such information on product level specifically about material origin, recyclability and reverse logistics, and customers' own green benefits. Such information ought to be communicated prefereably in form of a product tag, as poster or on the webpage.

Keywords: sustainable supply chain management, green supply chain management, green marketing, sustainability, retail, furniture

Declaration

I declare that all materials in this project report that are not my own work have been acknowledged and I have kept all materials used in this research, including samples, research data, preliminary analysis, note and drafts, and can reproduce them on request.

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The 'don't be sad throw it away thing' would be completely incompatible with the IKEA of today."

Steve Howard, IKEA's chief sustainability officer

March 2015

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List of Abbreviations

B2B Business to Business

B2C Business to Customer

EM Environmental Marketing

GM Green Marketing

GSCM Green Supply Chain Management

IWAY IKEA Way on Purchasing Products, Materials and Services

SSCM Sustainable Supply Chain Management

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1 Introduction

This chapter will introduce the background of the study to the reader. It further provides a short presentation of the unit of analysis. Moreover it will explain the business problem of this company and thus the purpose of the research. The research questions will be stated, followed by a short description of the report structure.

It is evident that we are living in a world of limited resources that challenges us increasingly not only to start thinking about, but more importantly, living a more sustainable lifestyle. This is relevant for every individual but also any corporation. According to Piecyk and Björkund (2015) corporate social responsibility can be seen as a corporation's commitment to a sustainable development. However, sustainability in business environment has not always been like today. Only since the second half of the twentieth century, policies and programs emerged to prevent pollution and the depletion of natural resources such as air, water and soil. Moreover, labour practices violating human and social rights were added to the list, as well. These governmentally imposed laws, regulations and guidelines resulted from the criticism about companies merely focussing on economic performance and immediate profitability instead of society-integrative fair commercial behaviour with long-term vision (Piecyk & Björklund, 2015). Nowadays, the sustainability aspect has grown significantly, not just to make a contribution back to the society, but also as a result of economic considerations related to increased efficiency, cost-cutting or reputation (Banerjee, et al., 2003; Ko, et al., 2013; Sharma, et al., 2008)

In retail sector¹, environmentally conscious stakeholders commenced to demand more sustainable or greener products, which corporates need to respond to with a corresponding product portfolio respecting their environmental and social impact. As a reaction to this trend of 'greenification', innovation, the implementation of new technology, sophisticated product engineering or more efficient and sustainable operations have been developed to decrease both resource dependency and environmental harm. This is also the case for IKEA, which will be the discussed subject of this paper. To be more specific, sustainable supply chain management (SSCM) is an emerging and omnipresent phenomenon with increasing relevance to this trend. When it comes to the provision of any product SSCM integrates all operations that have impact on the final product's materials, transport and distribution and disposal, and will therefore be addressed in this research.

Particularly the grocery retail has experienced a strong demand for organic and ecological products (Edelmann & The Consumer View, 2011).

Although governmentally imposed regulations and a sub-set of environmentally conscious consumers have forced corporates to become less environmentally harming and that they should rethink their conventional business practices, still many people lack a profounder understanding of the importance to conserve our planet's resources for the sake of future generations. In order to support the previously mentioned two actors, to get the ball rolling and to have greater impact, it is argued, that large multinational companies have the power to educate all people beyond the "greenerthinking" part of the population (Deng & Huang, 2009). As a result, transparency has become crucial for both the corporate world and consumers. In a typical buyer-driven market, like the furniture market is, customers are increasingly aware of business practices due to the usage of the Internet and social media but also due to globalization. Bearing this in mind as a consequence as corporate, green marketing (GM) has become a crucial element to communicate one's sustainable business practices, and thus will be discussed in the pursuit of this research. Yet, these two business areas of SSCM and GM still seem to be hardly linked, which provides reason for this paper.

The first chapter introduces the furniture retailer IKEA with respect to its CSR actions. Further it states the business problem of IKEA and the subsequent purpose of this research in respect to sustainable supply chain management and green marketing. The research question is pointed out. The chapter concludes with the structure of the report.

1.1 IKEA and CSR

Ingvar Kamprad established IKEA AB in 1943 with the vision to create a better everyday life for the many people (IKEA, 2012a). Firstly, selling only pencils, wallets, picture frames and other rather small items, the company introduced furniture in 1948 manufactured locally, and expanded its range and business constantly from then on. Approximately ten years later, the first store opened with self-assembly furniture (IKEA, 2012b). The company expanded quickly into the Norwegian, Danish, Swiss and German market. Australia, Austria and the Netherlands followed in the end of the 1980s (IKEA, 2012b). Since retailing is an industry that is closely related to its environment, which is constantly subject to change, retail is of highly dynamic nature, as well. In line with the evolvement of CSR, in 1990, the first environmental policy was launched ensuring the company and its co-workers to take environmental responsibility since firms' were challenged to produce more ethically and reduce their environmental footprint for the first time. Already in 1993 IKEA becomes member of the Forest Stewardship Council (FSC), employing the first forestry manager in 1998 (IKEA, 2012c). Believing that good business can be done "while being a good business" 2000 the code of conduct *Ikea Way on Purchasing Products, Materials and Services (IWAY)* was published. Driven by the guiding principles of

"What is the best interest of the child, the worker and the environment?" IKEA claims compliance with the Fundamental Principles of Rights at Work, the International Labor Organization (ILO) declaration June 1998 and the Ten Principles of the UN Global Compact 2000. These fundamental rights comprise among others the prevention of child or forced labor, corruption, severe pollution and health or safety hazards and the provision of fair working conditions and worker's accident insurance (IKEA Services AB, 2012; IKEA, 2012d). Co-operation with NGOs like Greenpeace and World Wide Fund For Nature (WWF) for better cotton cultivation followed in 2005. Further to that, IKEA has launched climate projects with WWF to reduce emissions of greenhouse gases produced by IKEA and supplier's operations since 2007 (IKEA, 2012d). In 2011, IKEA Group published an approach to sustainability on how they manage sustainability in their business with focus on customers, environment, suppliers, coworkers and communities (IKEA Group, 2011). In the years of 2010 and 2011 the direction of sustainability was defined by five cornerstones. Firstly, to create a range of products that are more sustainable, secondly to be a leading role towards a low carbon society, thirdly to turn waste into resources, fourthly to reduce water footprint and lastly to take social responsibility (IKEA Group, 2010; IKEA Group, 2011). Based on these targets, IKEA succeeded in developing a People & Planet Positive strategy in 2012 (IKEA Group, 2012). The following years, the sustainability reports display a yearly improvement in the fields of the earlier mentioned five cornerstones. In line with these five bases, the Democratic Design was put into practice, which is embodiment of form, functionality, quality, sustainability and price in each product (IKEA, 2016; IKEA, 2014). In 2012, IKEA implemented a new practice that enhanced the repair of products instead of wasting them to foster its reverse logistics and recovery (IKEA Group, 2012). In 2013 a 100% IWAY approval was achieved of all home furnishing, components and goods transported and global food supply (IKEA Group, 2013). And in 2014 IKEA presented itself with a strong commitment for a "go all-in" approach towards sustainability, announcing a transformational change. That was explanatorily realized in 2015 by selling only LEDbulbs for lightning and completely phasing-out old-fashioned classic light bulbs, where IKEA achieved great scalability² (IKEA Group, 2014; IKEA Group, 2015). This was maybe the only example of sustainable supply chain management and green marketing that has been communicated sufficiently and successfully in store. Today, IKEA is working in a highly fragmented market with high spatial dispersion. In 2016, IKEA is operating in 43 countries having 328 stores in 26 countries offering 9,500 products with a net profit of 3.5 billion Euro which is an increase of 5.5% to the previous financial year 2014 (IKEA Group, 2015). The company has achieved 31.9 billion Euro total sales (14.9 in 2005) being 11.2% more than the previous year and a 1.6 billion Euro food turnover (IKEA Group, 2015).

See principles of the definition of CSR 2.0 by Visser (2008) under 2.1.1.

While this section provided a short overview of IKEA's global CSR development of the last decades, the next paragraph will focus on the recent challenge faced at the retail store Hamburg-Moorfleet in Germany.

1.2 Business Problem and Purpose of Research

Business problem

As one of many large companies, IKEA has developed and expanded its sustainability activities within the last decades in order to improve social equitability and environmental soundness while being economically feasible. This corporate behavior is called triple bottom line performance (IKEA Group, 2010-2015). However, various activities IKEA is engaging in are left unknown to the customer and even for some of its employees. Particularly supply chain operations and logistics have evolved and improved in terms of sustainability which is fundamental part of every single product's characteristics (IKEA Group, 2010-2015). Nevertheless, this 'supply chain-product' interrelatedness is hardly part of a structured external marketing strategy, which instead is more focussing on either storytelling about product engineering and design, or price. When walking through the retail store, price tag offers exceed the sustainability communication by far, and although IKEA is yearly publishing sustainability reports online for the last decade, topic-specific communication exists insufficiently in stores. As broached briefly, if employees are hardly aware of the sustainability reports themselves, how are they supposed to communicate this topic to the customer in store when they offer advice on products and shopping? Apart from that, it is also unclear which information the customer generally wants to know.

By its sustainability engagement, IKEA aims among others to achieve a transition in its general image perception of its customers (Hullinger, 2016). Therefore, it is in the need to modify customers' opinion that IKEA represents disposable consumerism, since some argue that IKEA is still rather recognized as a producer for throw-away than for long-lasting furniture (Kowitt, 2015; Hullinger, 2016). The sustainability manager Steve Howard forms proof of an existing internal awareness by stating in March 2015 that "the 'don't be sad throw it away thing' would be completely incompatible with the IKEA of today." (Kowitt, 2015). As listed by Ko, et al. (2013), there is plentiful studies proving evidence of a positive correlation between corporate image and purchase behavior or loyalty³. Since loyalty means long-term survival on the market place, this is of essential importance.

Studies were conducted by David et al. 2005; Kang & Yang, 2010; Keh & Xie, 2009; Lee et al. 2010; Miles & Covin, 2000 cited in Ko, et al. 2013.

So how can the image be changed in a constructive manner while leveraging information about sustainability in respect to the supply chain and the customers' needs? In order to answer this question, it is not just about pushing any sustainability-related information pro-actively to the customer. It demands a dialog with the consumer instead in order to investigate which type of information he or she values and wants to be informed about.

Purpose

Based on this area of concern outlined above, the purpose of this research is to investigate whether or not and what kind of sustainable supply chain related information is valued by the customer while purchasing furniture. The results will influence how a potential sustainability-focussed customer communication strategy in store will be designed. This study can help to provide IKEA with sufficient insights into customers' opinions in order to change their image perception on long-term. With this knowledge IKEA can demonstrate a clearer environmental position in the market, be cited as successful environmental marketing example, and can communicate the company's identity better to obtain a stronger ecological reputation, to gain advantages over its competitors (Sharma, et al., 2008). In-store communication not just opts to target the sub-set of environmentally conscious customers, that otherwise would have been ignored, but in fact all customers to foster everyone's commitment towards more sustainable living (Winsemius & Guntram, 1992 cited in Sharma, et al. 2008).

From the academic point of view researchers have identified a gap in literature. It is argued that links between supply chain management and marketing are insufficient, and need to be developed. Until now a practical implementation of sustainable supply chain management and green marketing in the corporate world in particular has not been addressed in literature. SSCM is responsible for the products green credentials and attributes. Still the marketing industry is not really refering to the processes and activities that are involved in the value adding procedures of the end-product. Consequently, it gives further motivation for this research that aims to do so (see 2.1.4). Since SCM contributes significantly to a product's attributes it is of utmost importance to link this knowledge with marketing, which gives further justification to bring them together.

Thus, objective is to build a bridge between the two practically rather unlinked business units supply chain management and marketing in order to communicate the sustainability aspect better within the retail store IKEA Deutschland GmbH & Co. KG at the business location Hamburg-Moorfleet to raise its sustainable pro-activeness, image and competitive advantage, as pointed out by the deputy store manager André Tecklenborg in spring 2016. It provides a practical solution by the usage of an exploratory survey on how to target the mentioned challenge.

1.3 Research Question and Potential Outcome

This research aims to investigate to which extent sustainable supply chain activities are perceived as relevant from the customer's point of view when buying furniture. The researcher wants to investigate, whether sustainable supply chain management and green marketing are still unlinked because there is no demand from the customers for it, because corporates haven't adapted to recent customers interests or are unable to promote sustainability correctly on product level. As a consequence the following research question shall be answered:

"To which extent do customers value sustainable supply chain management related information about a product or the company while purchasing furniture?"

Within this main research question there are three more questions that emerge:

- a) What has to be done in order the change the image perception from customers about IKEA?
- b) What sustainable supply chain related initiatives or information in particular matter to the customer? (procurement, distribution logistics, reverse logistics)
- c) How shall this information be communicated?

Potential Outcome

The outlined questions shall help to investigate which exact supply chain related information are relevant to the customer and how to implement green marketing in furniture retail more successfully. So, how does this knowledge help IKEA to be perceived as more sustainable and how can it be communicated that customers recognize IKEA today differently from the IKEA from 10 years ago? (throw-away society vs. sustainability)

If the customer perceives this information as relevant, then IKEA should certainly promote sustainable supply chain related information on product level. If the customer, however, does not perceive these information as relevant, then IKEA can either (a) discuss if they promote sustainability on product level anyway in order to have an educative role (as suggested in the introduction) and influence the customer for future generations sake or (b) try to communicate the aspect of sustainability differently only on superior level. (e.g. only per HFB, in sustainability report, ...).

Contrarily, another outcome could be that the customer is not interested at all in such type of information, and thus would rescind the relevance of a green marketing strategy implementation.

After all, the obtained information shall help to elaborate a more structured customer communication strategy in respect to sustainable supply chain management and marketing on product level at the store Moorfleet with the aim to foster transparency, reputation and customer loyalty on long-term. This could be in form of employee training and alternative marketing strategies than the sustainability report, which will be further elaborated under 4.3.

1.4 Structure of the Report

The structure of the report sketches out how the research questions are addressed. The second chapter Literature Review familiarizes with the main definitions, gaps in literature are pointed, and theoretical frameworks are introduced. The third chapter Methodology explains the research methods how the research questions are solved by focusing on data collection by the use of a survey, and the data analysis. The delimitations of the research design follow. The fourth chapter displays the results and their interpretation and discussion. Furthermore recommendations are given and challenges listed. The conclusion in chapter five summarizes the research results and its implications.

2 Literature Review

Since the research aims to build a bridge between sustainable supply chain management and green marketing, this literature review aims to approach the subject systematically by presenting the most influential previous research about the key terms. To obtain a versatile understanding, in the following section corporate social responsibility (CSR) and sustainability, sustainable supply chain management and logistics, and environmental/green marketing are explained and discussed, and their important features are going to be drawn out.

2.1 Evaluation of existing Body of Knowledge

The study begins with a comprehensive literature review on sustainability in relation to logistics and marketing. For the evaluation of the existing body of knowledge, journal articles, books, publications from IKEA, interviews and surveys have been consulted in the timespan from 1987 until 2014 that were both of qualitative and quantitative research nature. Research keywords inserted into data bases such as the one from Gothenburg University, Google Scholar and Zentralbibliothek für Wirtschaft in Hamburg were sustainability, sustainability in logistics, CSR, green logistics, retail marketing, environmental marketing, environmental marketing AND retail, customer communication. All articles were listed and categorized to keep track of the progress. Each reference was stored digitally and as hard copy according to author (digital) and chronologically according to date of reading (hard copy). A literature list was created separately based on citations in previously read articles. As a result, most important literature has been found through cross-references in journal articles.

2.1.1 Sustainability and CSR

Most research refers to the 'Brundtland Report' from 1987 from the World Commission on Environment and Development (WCED) that defines sustainability as the 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987, p. 41).

In addition, Dahlsrud analyzed in a threefold research (literature review, content analysis, and frequency counts) 37 definitions of Corporate Social Responsibility (CSR) in 2008. Although, he included only definitions of the timespan from 1980 to 2003 and from European, American, Canadian and Indian origin, the result of this research has been broadly acknowledged as independent and as valid definition nowadays. Dahlsrud defined CSR as a phenomenon by the use of five criteria, which

are dimensions related to environmental, social and economic behavior, stakeholder relationship and voluntariness (2008, p. 4) (see Appendix 1). Surprisingly, the elaborated dimension scores and ratios concluded, that the social and stakeholder dimension ratio appeared to be the most important ones with 88%, while the environmental dimension ratio only counted for 59%. Dahlsrud (2008) explained that environmental responsibility was not included in the CSR definitions from the very beginning and was later defined separately as 'corporate environmental responsibility' by the World Business Council for Sustainable Development (WBCSD). However, all dimensions of Dahlsrud's definition exceed the ratio of 50% and are generally acknowledged and used in literature and practice. It can be assumed that the environmental dimension has evolved to a much more important dimension than it was in 2008. Although not directly refuted, the remaining supposition that the definition of CSR might have changed over the last decade is made concrete in Visser's research from 2014 "CSR 2.0 Transforming Corporate Sustainability and Responsibility" in which he further developed the characterization of CSR. In contrast to Dahlsrud's definition (2008), Visser (2014) explains the failure of CSR 1.0 (based on Dahlsrud), developed a new typology and offers guidance on how to manage the challenges of sustainability in the context of today's globalized business world. CSR 2.0 is characterized by innovative partnerships and stakeholder involvement (Visser, 2008, p. 38). The principles of CSR 2.0 are creativity, scalability, responsiveness, glocality⁴, circularity that are all explained in detail under Appendix 2. Fact is the environmental compound still plays a significant role in the definition of CSR.

Complementary to Dahlsrud and Visser, Baumgärtner and Quaas (2007) said that the 'imperative of sustainability' is an 'intergenerational fairness' by which today's resources are not exploited but maintained for the use of both present and future generations (p. 2). In accordance with Neumayer (2003), both researchers distinguish between weak and strong sustainability (cited in Baumgärtner & Quaas, 2007). Findings from Daly and Cobb (1989), Ekins et al. (2003), Ott and Döring (2004) and Pearce et al. (1989) suggest that weak sustainability encompasses the preservation of aggregated natural resources, hence a non-diminishing prosperity of our resources. Strong sustainability in contrast makes a difference between raw and value-added/manufactured resources (cited in Baumgärtner & Quaas, 2007). It claims that these two types of resources shall be conserved separately which means that a decrease in natural resources cannot be compensated by economic resources (Baumgärtner & Quaas, 2007, p. 2). In the lack of precise knowledge about next generations' preferences, strong sustainability proponents believe that we have a 'precautionary responsibility' towards next generations (Baumgärtner & Quaas, 2007, p. 2).

⁴ Glocality is a portemanteau of global and local (Visser, 2008, p. 58).

Dahlsrud and Visser give complementing definitions and provide a full picture of what sustainability and CSR entails. These two terms will be used equivalently in the course of this research. These explanations shall help to better understand the meaning and scope of sustainability in general and shall form the foundation for further analysis of IKEA's business in chapter four.

2.1.2 Sustainable Supply Chain Management

This section explains the term sustainable supply chain management.

The term supply chain management (SCM) has become increasingly common in a business context (Touboulic & Walker, 2015). According to Stock and Lamber (2001) SCM is 'the integration of key business processes from end user through original suppliers that provide products, services, and information that add value for customers and other stakeholders' (cited in Larson & Halldorsson, 2004, p. 18). A supply chain is comprised of three or more directly linked companies that stand in interaction to each other. Sustainable supply chain management (SSCM) or also green supply chain management (GSCM) is, as per Carter & Rogers (2008), 'the strategic, transparent integration and achievement of an organizations' environmental, social and economic goal in the systematic co-ordination of key interorganizational business processes for improving the long-term economic performance of the individual company and its chains' (p. 368). Touboulic and Walker (2015) found in their literature review an increasing amount of literature about SSCM since 2008, which shows the growing relevance of the topic. In literature SSCM is also referred to as closed-loop supply chain management or green supply chain management (Chan, et al. 2010; Wong, et al. 2015). In the pursuit of this research the term SSCM will be used, since it is in accordance with the theoretical framework being discussed under 2.2.2. Closed-loop SCM integrates the backward logistics of items that are not desired any longer. This is also reflected by Wong, et al. (2015), who discusses the integration of environmental management into supply chains, claiming that green supply chain management or integration consists of the integration of 'environmental concerns into the inter-organizational practices of SCM including reverse logistics' (Sarkis, et al. 2011 cited in Wong et al. 2015, p. 50). Wong, et al. (2015) promote a clear connection between sustainability and supply chain management. By mentioning that it is possible to be 'green and efficient', they confirm that enhanced environmental actions can improve both operational and financial performance (Wong, et al., 2015, p. 58). These actions include for instance the reduction of energy consumption and hazardous materials, consolidation of transport or the integration of reverse logistics.

Based on Larson and Halldorsson's research from 2004 logistics is perceived as part of supply chain management (Larson & Halldorsson, 2004). *Unionists*⁵ see logistics as a part of the SCM whereas SCM is characterized as more complex. According to Konezny and Beskow (1999), SCM bundles the components of logistics, strategic planning, information technology, marketing and sales (cited in Larson & Halldorsson, 2004, p. 20). Since the research aims to combine SSCM and GM, it is more suitable if logistics is perceived as a sub-set of SCM.

Logistics is the planning, organisation, coordination and control of material-, information- and service flows respecting the aim of providing right quantity and quality of the right good at right time and place at right price (Arnold, et al., 2008, p. 1f.; BVL, 2016; Beyer, n.a., p. 2f.). Logistics is subdivided into the five common areas information, procurement, production, distribution and disposal (Beyer, n.a., p. 2f.). Information logistics ensures proper information exchange within the company, between company and suppliers or company and customers. It has become increasingly important since approximately 75% of all employees rather work with information than with materials in producing industries. Procurement logistics copes with optimal provision of raw, auxiliary and operating materials from market into production (Arnold, et al. 2008, p. 1f.; BVL, 2016). Distribution logistics takes care of internal and external processes regarding the goods flow within the value chain. Disposal or reverse logistics is responsible for the environmentally friendly and economic disposal or reclamation of waste products. Less prominent, but still relevant additional logistics areas are personal, spare parts, warehouse and service/ maintenance logistics.

As mentioned in the paragraph about SSCM, reverse logistics plays a crucial role in greener logistics (Soosay, 2013). In contrast to traditional forward logistics from manufacturing to distribution, reverse logistics copes with the processes and resources involved in up-stream movements from customer to manufacturer and suppliers like in the case of 'returns, repairs, remanufacture, refurbishing, and recycling' (Soosay, 2013, p. 65). Soosay (2013) mentions that reverse logistics is a 'recent and growing concern' and proves that it has become increasingly common in organizations to emphasize social responsibility, and to maintain customer satisfaction and loyalty (p. 66). Reasons are increased amounts of returned goods and the need for investment to establish appropriate processes to be in place. Customer returns appear due to change in mind, wrong functionality, safety and health issues, in-store reimbursement options and warranty issues or end-of-use of a product's life. Contrary to previous literature, Soosay (2013) found out that the return policy is rather a result of socially responsible than profitability-driven behavior, which is confirmed by Liu et al. (2012) who states, that

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Traditionalist see SCM as a part of Logistics. Intersectionist see Logistics and SCM as two concepts that have an area in common. Intersectionists do not define SCM as the union of marketing, operations management, logistics, purchasing and other functional areas but as the integration of 'strategic, integrative elements from all of these disciplines' (Larson & Halldorsson, 2004).

increasing legislation, producer responsibility and take-back obligations are reasons for the set-up of collection and recycling systems leading to closed-loop SCM. Within this research the logistical subgroups of procurement, distribution and reverse logistics will be of relevance, since these aspects can be analyzed and later promoted to the customer in the retail store.

Summarizing, especially logistics and transport is responsible for many kinds of negative externalities such as visual intrusion, noise, air pollution, accidents, vibration and soil sealing, that diminish the prosperity of our resources and environment. Consequently, the scope is broad for logistical improvement. According to Bretzke and Barkawi (2010), opportunities in green logistics are an increasing efficiency, transferring freight towards other modes than road, avoiding transport, adaption and restructuring of logistics systems or process architecture and implementing corporate business models (cited in Haider and Aschauer, 2013, p. 4f.). Complementing academic research and proved by González-Benito and González-Benito (2006), an increased stakeholder pressure has impacted companies' contribution to environmental logistics practices. Based on the literature, sustainability is wanted from customers, and needed from companies in order to become more efficient. It mutually is demand and imperative or necessity. If customers really demand more sustainable logistics actions will be investigated in this research.

A company's commitment to all these aspects can be promoted and communicated to customers in order to gain trust from stakeholders, while commitment and reputation can be leveraged (Wong, et al., 2015). How this is going to be done, is explained in the next paragraph.

2.1.3 Environmental Marketing

It can clearly be pointed out, that sustainability in SCM is not only meant to be good for a company's performance but also for brand and business reputation (see SSCM). However, this needs to be communicated somehow, where marketing plays a crucial role to communicate one's business commitment to greener operations and commerce to the end-customer. However, Wong, et al. (2015) already mentioned in their research a lack of the integration of environmental marketing and customer communication in order to include external stakeholders like customers better.

As previously stated, increased institutional regulations and stakeholder pressure and customer demand enhanced not just SSCM but also the emergence of environmental marketing (EM) (Liu, et al., 2012; Sharma, et al., 2008). Whereas the official academic definition of marketing defined by The Chartered Institute of Marketing is that 'marketing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably', the essence of EM is the 'holistic management process responsible for identifying, anticipating, and satisfying the requirements

of the (green) consumers and society, in a profitable and sustainable way' (CIM, 2016; Peattie, 1995 cited in Nair & Ganesh, 2013, p.77). EM is synonymous to green, ecological, sustainable or enviropreuneurial marketing (Charter 1992; Ottman, 1993; Apaiwongse, 1994; Van Dam and Apeldoorn, 1996; Nenon and Nenon, 1997 cited in Nair and Ndubisi, 2011). In the pursuit of this research the term 'Green Marketing' (GM) will be used, since it is in accordance with the theoretical framework being discussed under 2.2.2. The core aspect of GM, sustainability in business, aims to enhance internal environmental strategy building and performance, and therefore shall have a positive impact on external corporate reputation, as found out by Menon and Menon (1997). This viewpoint also leads to the philiosophy of corporate environmentalism, as defined by Banerjee, Iyer, and Kashyap (2003). According to Ottman, et al. (2006), GM has the twofold aim to communicate the environmental as well as the functional benefits of green products (cited in Nair & Ganesh, 2013). While Ottman et al. (2006) seem to acknowledge only the communication of the supply side, new functions of green marketing arise like the 'demand stimulation for recycled and remanufactured products', introduction of sustainability labeling schemes and the education of consumers to consume "greener" (Sharma, et al., 2008; De Boer, 2003; Polonsky, 2011).

Despite all the new emerging marketing schemes, consumer behavior still remains partly unclear. De Boer (2003) says that although many consumers make an environmentally conscious purchasing decision on one product, there is no guarantee of a similarly 'motivated choice in the context of' another product group (p. 259). The food industry seems to be the most analyzed industry in that sense which can be argues with the daily consumption of the products and the direct effect on health. A survey conducted by Edelmann and The Consumer View in the food industry in 2011 revealed that sustainability-conscious consumers (404 people asked) would rather do something good for themselves at first place than for the planet (Edelmann & The Consumer View, 2011). This consumer behavior reveals a rather egoistic than altruistic sustainable consumption (Edelmann & The Consumer View, 2011). Based on Russell and Russell's research from 2009 about consumers' egocentric tendencies, Polonsky (2011) defines these egoistic consumers as 'micro-focused individuals' (p. 1312). Fact is, consumption of a greener product only takes place, when the consumer knows that he or she is better off and is not forced to make a trade-off between sustainability and quality or functionally. Although only focusing on the wood industry (but therefore relevant for furniture retail), Anderson and Hansen (2004) support that statement by identifying the relative importance of wood certification based on a survey. It showed, that environmental certification is a favorable product attribute, however is outweighed by other attributes. Nevertheless, this survey and also research from O'Brien and Teisl (2004) and Aguilar and Vlosky (2007) showed an increased willingness to pay for certified forest products, which could be of importance when it comes to market segmentation and targeting particular consumers. Chouinard also fortifies that idea in a feature from Yale Insights in 2010 by stating that a product today has to be a win-win situation of getting performance and lower costs, that and it is the company's responsibility to offer such a better product (Dhar, et al., 2010). The provision of such products does not suffice, but has to be complemented by adequate labeling. This is emphasized by De Boer (2003) who claims that product labeling shall combine 'functional and aesthetical features, together with distinctive environmental and moral advantages', which forms an indication for quality and a 'benchmark of excellence' (p. 257). In a series of studies from Walker, Reczek and Zane from Fisher College of Business and Irwin from McCombs School of Business about what information they would like to know when purchasing a pair of jeans, giving the answer options of price, style, wash, child labor practices. They found, "that people will use ethical information if it's right in front of them, but they won't seek it out. It's a coping mechanism to avoid having to deal with the bad feelings that will arise if you discover horrible practices" (Torres, 2016). This gives evidence that product labeling seems important.

Further to that, Deng and Huang (2009) argue, that it's the government's role to educate consumers, like making them understand the essence of better purchasing green products and improving on consumer's knowledge on environmental protection and society responsibility. Although both consumers and corporates mostly lack macro-focus on environment which 'is core of the dilemma' of a proper sustainability implementation, Polonsky (2011) however contradicts Deng and Huang (2009) by stating, that this challenge is scope of corporations, and that marketers should encourage individuals to embed environmental issues in their values and therefor change their purchasing behavior (p. 1312f.). Hart (2005) has additionally argued that environmental sustainability is best guided by business, since it 'leads to superior financial performance' (cited in Sharma, et al.a 2008, p. 2).

In order to persist as a consistent market player, green marketing is of essential need to keep customers, attract new ones and adapt to emerging demands of them based on constant interaction. It is a medium of transparency that shall support positive reputation, loyalty and permit long-term growth. It is thus of extreme importance for information exchange between corporate and customers.

2.1.4 Gaps in Literature

The first three sub-sections demonstrate how sustainability is defined, which aspects of supply chain management are relevant for the pursuit of the research and why external green marketing is of importance. However, Piecyk and Björklund (2015) or Touboulic and Walker (2015) pointed out that deficiencies remain in literature about CSR and logistics since the first recognition by Carter and Jennings in 2002. Touboulic and Walker (2015) have shown in their research that the term SSCM has never been found in a marketing related journals (p. 27). This implicates that although SSCM is

responsible for the products green credentials and attributes, the marketing industry is not really referring to the processes and activities that are involved in the value adding process of the end-product.

Furthermore, research has been done in order to strengthen green marketing. Nevertheless, Chan, et al. (2012) argue, that 'green supply chain management and green marketing cannot be considered separately' and that interfaces between the two are rather unclear (p. 558). Moreover as being pointed out in Sharma, et al.'s research from 2008, external green marketing has never been emphasized in reverse supply chain (remanufacturing and recycling), although there needs to be a higher end-customer participation in recycling and recovery. He argues that enhanced 'relationship orientation and commitment with the customers', and a creation of incentives will foster an effective implementation of reverse logistics (Sharma, et al., 2008, p. 9). Looking at green marketing in retail, mainly organic food has been subject to a strong CSR and sustainability promotion recently, which is mainly due to the obligatory labelling policy in Germany (Foodwatch, 2011). This might be because food is a frequently bought consumer good that has direct effect on the consumer's health and is consumed by anybody. Other than that it has been subject to negative publicity related to fertilizer misuse, gen manipulation and pesticide (Verbraucherzentrale, 2015; Bundesregierung, 2016).

To foster GM in other industries, Liu et al. (2012) firstly introduced a hub-and-spoke model for a multidimensional integration of green marketing and sustainable supply chain management. However, the work of Liu et al. (2012) is only focussing on a B2B context and leaves out precise solutions for the retail market. It can clearly be pointed out that there is a lack of literature in combining these two topics sufficiently.

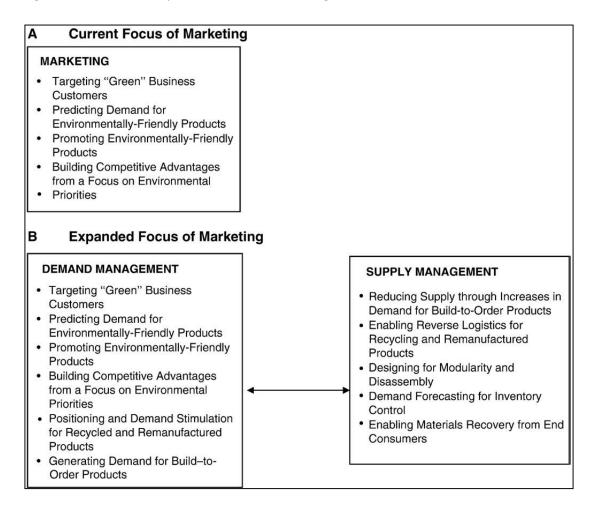
2.2 Theoretical Framework

In the following section two theoretical frameworks will be described that have complementing perspectives on environmental marketing. The second framework shall form guideline for the pursuit of this research paper because it is the only framework, which respects both GM and SSCM in a closer context to another, and is most suitable for the establishment for the exploratory survey, which will be presented under 3.2.1. Additionally to this outline, some communication channels are presented which will be relevant for later retail communication under 4.3.

2.2.1 Expanded Focus in Marketing

Sharma, et al. (2008) expand the classical focus of marketing in respect to the emergence of green marketing. They argue that "green" customers have to be targeted. Therefore, demand for environmentally friendly, recycled, and remanufactured products need to be predicted, and simultaneously promoted in order to react to the emerging demand. From supply side operational tools have to be in place to support the greener demand by implementing processes like build-to-order, reverse logistics, material recovery, design products for modularity and disassembly, and adequate inventory management to avoid over production. Figure 1 gives an overview of the description.

Figure 1 Classical and Expanded Focus of Marketing



Source: Sharma, et al. 2008, p. 8

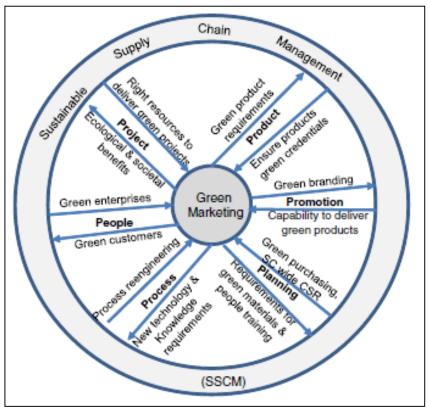
This expanded focus on marketing does not offer sufficient guidance and relevance for IKEA because it is too general. Nevertheless, it was a starting point that yielded in the discovery of another framework which will be explained in detail in the next abstract.

2.2.2 6Ps Hub-and-Spoke Integration Model

Liu, et al. (2012) developed the 6Ps hub-and-spoke integration model as a refinement to the thoughts of Sharma, et al. (2008) from 2.2.1, which will be explained in this section and which is used as guideline for the elaboration and evaluation of the survey in the pursuit of this research (see 3.2.1 and 3.2.2). Based on the preliminary findings this framework is also used to outline a potential communication strategy under suggestions (see 4.3). With the help of this model it shall be identified what is demanded from the customers and what is provided from sustainable supply chain management's side in order to establish a green marketing strategy, which is in line with customer's expectations and IKEA's capabilities. It therefore creates a practical bridge between SSCM and GM.

The traditional marketing mix defined by the 4Ps, standing for product, price, promotion and place is further developed by Violeta and Gheorghe (2009) (cited in Liu, et al. 2012, p. 582). Violeta and Gheorghe (2009) suggest the Green Strategy Mix with six instead of four dimensions, including product, promotion, planning, process, people and project that shall result in eco-efficiency (cited in Liu, et al. 2012, p. 582). Even though, these dimensions bring together the scopes of the triple bottom line of sustainability (economy, social aspects and environment), Liu, et al. (2012) claim that marketing is only either implemented in the beginning of the supply chain through product design or at the end through pure advertisement but the constant interaction of SCM and marketing is rather underdeveloped. Therefore, they suggest a new theoretical framework with six dimensions, standing for product, promotion, planning, process, people and project. Figure 2 visualizes the interaction of the six dimensions, which will be explained in the following.

Figure 2 6Ps Hub-and-Spoke Integration Model



Source: Liu, et al. 2012

By the use of the hub-and-spoke model, green marketing⁶ (hub) is constantly interacting with sustainable supply chain management through the usage of the six multi-dimensional perspectives, the spokes. The hub-and-spoke acknowledges the classical marketing mix by integrating the two most renowned dimensions product and promotion. Further, it builds a bridge to the SSCM by integrating the dimensions planning and process that are crucial success factors at strategic and operational level. The people dimension is representative for the social compound, and the project dimensions aims to materialize, populate and illustrate the other five dimensions. Liu, et al. (2012) tested how these parameters have been implemented in practice, and concluded that integration of green marketing and sustainable supply chain management needs a multiple dimensional approach, which is given by the usage of the elaborated framework.

The term 'green marketing' is used equivalently to environmental marketing (EM) (see 2.1.3).

The **product-based** integration focuses on knowing which green benefits from products really matter to the customer. Products shall be innovative to help customers live a greener life. This can be products consuming less energy, have less emissions, are recyclable, are made from reusable materials, have less product packaging, or have minimized or no hazardous materials. Product life cycle management strategies like product recovery services form part of this integration level. As to be seen in Figure 2, green marketing and SSCM can be combined by investigating which of the green product requirements are essential. This can only be ascertained by asking the customer directly.

The second spoke focuses on **promotion-based integration** including product labelling on environmentalism and disposal, advertisement on greener products in justifiable, self-explanatory, clear way, communicating company's green credentials to stakeholders using "organic" and "energy-efficient". The communication shall be as truthfulness as possible, reflecting the green benefits in the products' prices and offers, so that customers know exactly what they are paying for.

The **planning-based integration** consist of the long-term ambition and commitment in sustainability, presenting a clear vision and plans, setting clear environmental and social measures with related KPIs and long-term budgeting to change bad into good or better practises. With the help of this spoke and in accordance with the findings from the survey about customers' attitude, suggestions can be made for the future.

The strategic and operational **process-based integration** combines key capabilities, recycling, reuse, refurbish, remanufacturing, manufacturing processes for energy efficiency, lean production, quality improvement and waste elimination. This demands not only a sophisticated forward, but also a well organised backwards supply chain management.

The **people-based integration** emphasizes that green customers are not left behind but form an important target group, as also mentioned by Sharma, et al. (2008). Complementing their work, it also points out the importance of top management involvement and that as much staff as possible work together as team both from supply chain and marketing side.

The **project-based integration** besides the promotion of the previously mentioned five scopes, it promotes environmental and community projects, has responsibility to set up environmental projects, invest in community projects but also in national and governmental environmental and social projects. This spoke is not directly integrated in the survey. However it will be reconsidered under 4.3 in respect to a communication strategy, since it combines the other five dimensions.

2.2.3 Communication Channels

Although Liu, et al. (2012) show that it is relevant to combine SSCM and GM, and give indication which parameters have to be respected in order to do so, they do not provide sufficient guidance in which way sustainability can be communicated in a retail store. As argued under 2.1.3, GM is not just linking the green customer with the marketing mix it also bundles objectives such as satisfaction of green customers, green product promotion or image improvement (Liu, et al., 2012). Generally speaking green marketing can be perceived on product wrappings, in shelves, as information in media or as worth-of-mouth.

So, what exactly is wanted to be achieved with green marketing is presented in the following. In the case of IKEA, it clearly is a transition of the image perception, as outlined in 1.2. Studies on corporate image show a positive correlation between corporate image and purchase behavior or loyalty (Ko, et al., 2013). It is about promoting longer life and durability, so Sharma, et al. (2008). Fact is, differentiation makes green marketing more successful and in order to be fruitful and effective, the need of a win-win situation emerges. This means, that the eco-aspects shall complement the needed functionality for an overall added value, as ascertained by Sharma, et al. (2008, p. 8). Hence, a combination of functionality with sustainability-related information must be given to the customer.

There are various communication channels, which can be used in marketing. Customers can be attracted in a written, visual and oral manner (Collis & Hussey, 2014, p. 28). In the retail all three media can be used depending on what kind of information customers expect and are willing to be informed.

Talking about written advertising, product labels form part of written advertising. De Boer (2003) argues, that labels are claims that state 'particular properties or features' (p. 255). Sustainability labeling is meant to be a disclosure of features and kind of 'quality assurance in the marketplace' (De Boer, 2003, p. 255f.). The usage of multi-sector labels help to distinguish organic or fair trade products from others. IKEA, for instance, uses FSC-certification for its wood. These eco-labels declare the top 5-30% of the products in a certain category from the perspective of environmental performance (OECD, 1997, p. 14 cited in De Boer, p. 257). So, why not integrating them in retail communication?

After all, pushing the right information to the customers can only be done, when knowing what they want and need. Now, in order to become more specific for future activities and implementation steps, the next section will present the research questions that will focus on IKEA's customers in respect to SSCM and GM.

The insights from the literature review will be of essential importance for the next chapter where this knowledge will be applied to develop a survey.

3 Methodology

In this chapter the underlying research paradigm and methods are described that are used to investigate the research question "To which extent do customers value sustainable supply chain management related information about a product or the company while purchasing furniture?". This includes the presentation of the data collection process, the detailed explanation of the survey's questions with their link to the introduced framework, and the method of data analysis. The delimitations of the research are listed afterwards.

3.1 Identification of Paradigm

Positivism is a philosophy, which originates from the natural sciences, and thus is of quantitative nature. Theories are developed based on empirical research, such as observation, experiments or surveys, under the ontological assumption that 'social reality is singular and objective' (Collis & Hussey, 2014, p. 43). In order to understand and explain social phenomena and behaviour rationally, the deductive process involves mathematical analysis, like statistics. Furthermore, the deductive approach refers to empirical observations, which are tested against a theoretical framework, which is the case here. The method suggests going from general to particular. (Collis & Hussey, 2014) The hub and spoke model is the theoretical framework from where a general perspective is used and applied to the particular case of IKEA.

However, positivism is subject to some critique, which should be acknowledged and not left out. The first claim is that the observer never can be separated from the context he or she is investigating (Collis & Hussey, 2014, p. 45). As a consequence, the researcher is never objective and independent but will tend to bring in own values and interests to the research. While conducting research under positivism complex phenomena are tried to be captured by collecting data and interpreting it. However, a single measure can still lead to incorrect outcomes (Collis & Hussey, 2014, p. 45). It is not excluded that this might be the case in this research as well due to the amount of respondents. Even though it is always better to ask as many people as possible to decrease the likelihood of wrong results, it is claimed in Collis and Hussey (2014) that people still cannot be understood without examining their perception of their own activities (p. 45). This means, that every individual's behaviour is influenced by various parameters like age, income, values or education. In this research however, the customers' attitude toward SSCM at IKEA is elaborated without including demographic information for simplicity sake. This includes, that constraints are imposed on the results and other relevant findings might be

ignored. Such findings could be eventually related to why the customer is behaving or deciding in a particular manner.

3.2 Method Approach

There are four main methodologies associated with positivism, that are experimental studies, surveys, cross-sectional and longitudinal studies (Collis & Hussey, 2014, pp. 60- 64).

Experimental studies investigate the relationship between variables by observing their interdependence (Collis & Hussey, 2014, p. 60). According to Collis and Hussey (2014), surveys collect data with the aim to generalize this view (p. 62). Cross-sectional studies collect data in different contexts at the same time, while longitudinal studies gather data over a long amount of time (p. 63f.).

Visser (2008) suggested stakeholder involvement to integrate their needs (p. 38). To investigate customers' attitude toward sustainability, it seems to be the most suitable to ask customers about their preferences directly. Since the context is set to be the retail store IKEA-Moorfleet and time limitations are given, the cross-sectional and longitudinal studies do not seem appropriate for this type of study. However, the analysis of the survey's questions will partly be of experimental nature in that sense that the research aims to investigate potential connection between certain questions, which will be discussed more in detail under chapter four. Although a limited amount of questions might result in a lack of profound and detailed information about the topic, which an interview may provide, it makes it easier to analyse the results numerically. In order to achieve valid results that are comparable and of equal value, it is argued that all questions are pre-defined and are asked to all respondents equally (Collis & Hussey, 2014, p. 133f.)

Probably the research question could have also been approached under interpretivist paradigm with a qualitative nature. Already carried out research about people's opinion regarding similar topics could have been analysed. However, as previously mentioned under 2.1.4 there is no research available about sustainable purchasing behaviour and preferences in furniture retail specifically. Furthermore food retail is different from furniture in that sense, that food is a fast moving consumer good and a daily product with direct effect on health. This is not the case with furniture. Consequently, purchase decision-making processes might differ. This excludes the possibility for a qualitative research model. Conducting interviews could be another potential option to gather data (Collis & Hussey, 2014, p. 134ff.). Semi-structured (partly pre-defined and partly spontaneous questions) interviews can provide more detailed information and give more insights about an interviewee's attitude than qualitative-oriented surveys. However, interviews are time-consuming and tend to be applied for a smaller sample

in comparison to surveys. This would result in a non-satisfactory representation of customers' opinions. Thus in contrast to interviews, surveys (in this case with pre-defined questions and answers) permit to represent a wider range of a population and is therefore evaluated to be the most appropriate in this case. This research will use an exploratory survey, which means that first insights can be obtained. Detailed analysis of *why* respondents answer certain questions the way they do will not be subject of the analysis. The exploratory survey ought to ensure a higher validity in the interest of IKEA. This is of essential importance in this case, since the findings may be generalized to other retail stores within Germany. Whether respondents' answers are affected by the research (e.g. not being honest, answering in the interest of the survey or unsure about answers) is ignored in this research.

3.2.1 Data Collection Process

In this positivist study an exploratory survey methodology is chosen to collect primary data, which is analysed numerically. The exploratory survey studies and investigates the topic and provides information for first indication for improvement. The survey instrument is a questionnaire with ten questions in order to investigate the customers' attitude toward sustainability in furniture retail. Appendix 3 illustrates all questions and answer possibilities both in German (original version) and an English translation.

Since the retail store Hamburg-Moorfleet mainly attracts local or regional customers, it is assumed that most of them are Germans or speak German which explains why the questionnaire was in German. Since the aims of this research are to investigate in the interest of the retail store Hamburg-Moorfleet and how to improve its in-store communication, it was of importance to retrieve feedback from regional or at least national customers. Hamburg is attracting many people from different regions from Germany thanks to its size, employment and education possibilities (Statistikamt Nord, 2016). These circumstances foster intra-national migration and gave reason why the survey was sent out online Germany-wide to retrieve a high scale and a diverse set of respondents. The online portal *QuestionPro®* was used. At the same time, the same version of the questionnaire was handed out as printed version to some customers directly in store. Direct interaction with shop customers made it possible to target elder people in particular that eventually do not have access to Internet, and people with immigration background due to a lack of them in the circle of friends and acquaintances, who were primarily contacted for the online survey participation.

Beforehand the questionnaire was tested on a sample size of four people to check whether it is self-explaining. The piloting of the survey resulted in feedback, which stated the self-explanation of the survey and its simplicity. Consequently, only a very short introduction and description of the topic was given online and verbally to the addressed customers in store. In total a number of 127 people

were asked randomly to provide an unbiased subset of the customers of which 83 persons responded online and 44 in store. The survey was conducted over a time period of three weeks from 21.03.2016 until the 07.04.2016. Permission was granted by the deputy store manager in accordance with the employee organization beforehand. In the store, customers were addressed in the first home furnishing area where sofas and armchairs are presented, that customers could sit down comfortably. The advantage of asking them in the very beginning was also based on the assumption that store visitors are more relaxed in the beginning of the shopping, thus more willing to participate. A coffee voucher served as reward, which they could redeem after the furniture exhibition in the restaurant. Within both the online and the face-to-face survey it was mandatory to answer all questions besides the two open questions six and ten. The online survey could not be submitted without having answered the remaining other questions. In store it was told the participants beforehand.

Key task of the survey and the purpose of its questions is to provide information to answer the research questions. The ten questions were developed with reference to the hub-and-spoke framework presented under 2.2.2. Hence, they focus on all integration spokes and the integrity of GM and SSCM. They collect information whether the consumers consider themselves as environmentally conscious and how they perceive IKEA, if they pay attention to sustainability reports and what kind of sustainability information is actually relevant for them. The survey also respects the SSCM compounds of procurement, distribution/logistics and reverse logistics. In addition, it integrates IKEA's Democratic Design, which is the embodiment of a compromise of five bases, and asks the customer about IKEA's return policy (possibility to return old furniture) and potential communication channels.

3.2.2 Purpose of Survey's Questions

The questions are now presented in detail, and their purpose explained.

Questions one, two, three, four and eight were restricted to one possible answer out of three options. Questions five, seven and nine had to be answered by scoring the importance of each suggestion by the use of an ordinal scale using stars. While five stars are symbolic for a very high importance, four stars stand for a moderate or fair importance, three stars represent a neutral opinion, two stars signify a moderate unimportance and one star is an indicator for no importance. Table 1 provides a summary of all questions. Appendix 3 presents the entire survey both in German and in English translation.

Table 1 Overview Survey Questions

Nr.	Question	Answer Options
1	Do you pay attention to sustainability during your daily shopping?	1 out of 3
2	Do you perceive IKEA as a sustainability-conscious company?	1 out of 3
3	According to you, does it suffice when IKEA mentions how it is acting sustainably/responsibly in a yearly-published sustainability report?	1 out of 3
4	Would you appreciate sustainability related information about products?	1 out of 3
5	Which information would you value the most?	Score 9
6	Space for other options.	open
7	What is the most important to you when purchasing a piece of furniture or product?	score 5
8	What do you think about the return policy of IKEA?	1 out of 4
9	How does a customer want to retrieve information?	Score 7
10	Space for other options.	open

The first question: Do you pay attention to sustainability during your daily shopping? (Purchase of organic/ fair trade products, only purchase when real necessity, no plastic bags, country of production or origin)

The purpose of this question is twofold. As suggested by Sharma, et al. (2008) in the expanded focus of marketing it is important to categorize the customers into groups. Target groups are formed according to strong, medium or little sustainability-consciousness. Secondly, the answers automatically provide insight into the customers' convictions regarding sustainability and in concrete how the percentage-wise proportion of the different target groups look like.

The second question: Do you perceive IKEA as a sustainability-conscious company?

With the help of this question the current image perception is elaborated. The customers can fully, partly or not agree. It will give first indication how important the (additional) implementation of sustainability marketing will be.

The third question: According to you, does it suffice when IKEA mentions how it is acting sustainably/responsibly in a yearly-published sustainability report?

The answers will make clear whether a sustainability report is mainly sufficient for most of the customers or whether they demand further information. In combination with the first question, it can

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be made transparent which customer group would like to see more SSCM information than provided

in the sustainability report.

The fourth question: Would you appreciate sustainability related information about products?

While the third question elaborates whether the sustainability report suffices or not, it does not

exclude, if the customer still wishes to receive additional facts about each product's characteristics.

The reflection is, that some customers might say 'yes, it suffice however it still would be interesting to

know more about the products' while another portion might say 'no, a sustainability report does not

suffice, therefore I would like to know more about the products'. The ratio of question three to four

displays the percentage of customers who would like to see more SSCM information of the product

independently from the provision of the sustainability report. IKEA would see whether or not the

sustainability report matters more than product related information, which is relevant for future

marketing strategies. Furthermore, it also makes clear which customer group is demanding such facts.

The survey facilitates identification whether only environmentally conscious customers want to see

more product information or if this demand is an interest independently from customers' attitude. Let

us assume:

a) Only environmentally conscious customers demand product specific information.

With this knowledge IKEA can decide if it wants to implement such a marketing strategy. This would

improve and foster the relationship to environmentally conscious customers although they are a

minority. IKEA would additionally take over a role in educating less environmentally conscious

customers and become more transparent to become an environmental marketing example, as

mentioned in the paragraph or the purpose of this research (see 1.1)

b) Many customers independently from their personal attitude demand product specific

information.

This outcome has a stronger impact on the need of a green marketing strategy. IKEA does not have

the option but is in urge to implement a marketing strategy incorporating SSCM related product

information.

c) Customers do not ask for such information.

The fifth question: Which information would you value the most?

Since the fourth question seems to focus on the group of respondents, the fifth question aims to obtain

more precise knowledge about which SSCM related information that are interesting to the customers.

Five options (products material origin, carbon footprint, improved characteristics related to logistics,

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recycled, recyclable, remanufactured material, customers green benefits, certification labels) and a

field for additional input is given. Particularly, the selection options of raw material origin and

certification labels of wood will additional investigate whether the research conducted by Anderson

and Hansen (2004) and Aguilar and Vlosky (2007) is still of importance ten years later and relevant for

German customers since the research was conducted in the U.S. and China (see 2.1.3).

Whatever the responses look like, it will provide insights whether the customer values

procurement/sourcing, logistics/distribution or reverse logistics related information most or if he or

she is rather interested in the own benefits. Particularly the fifth option (own green benefits) provides

understandings of the purchasing behaviour and whether it is driven by egoism or altruism, as

presented in chapter 2.1.3.

The sixth question: Space for other options.

According to Visser (2008) CSR 2.0 is about integrating the "collective intelligence of its stakeholders"

in order to find new solutions (p.48). This option permits to get additional insights, which suggestion

are not mentioned in the survey but are still of relevance.

The seventh question: What is the most important to you when purchasing a piece of furniture or

product?

The last question forms a break to the previous questions, asking the hard facts. Anderson's and

Hansen's survey from 2004 showed that environmental certification, thus sustainability, is outweighed

by other products' attributes. This questions aims to explore how important sustainability is valued in

ratio to other product related characteristics today, and whether the German customer cares more

about it than the American twelve years ago. The given options are in line with IKEA's Democratic

Design cornerstones design, functionality, quality, sustainability and price (IKEA, 2016). Each

cornerstone is defined more in detail in the survey to be clear and specific what it entails. Maybe a

customer really wants to know more about SSCM related information but in reality actually focuses

more on price or other characteristics. It will provide insight on how sustainability is ranked and how

relevant it is when purchasing a product. This knowledge will make transparent how much the

furniture industry differs from research done in food industry as mentioned in 2.1.4. Furthermore, it

will provide understandings how the Democratic Design compounds are ranked.

The eighth question: What do you think about the return policy of IKEA?

These aspects where pre-defined as logistics focus of supply chain management under 2.1.2.

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It is assumed that particularly very green-aware customers answer the question with the first option. Depending on the customers' attitude, the backward logistics is emphasized in order to strengthen the green communication and change the current image perception as wished.

The ninth question: How does a customer want to retrieve information?

Since in the beginning of the survey customer's opinions were gathered about the sustainability report, this option was left out under this question. This question is meant to investigate which customer communication is the most appropriate in store by respecting the customer's opinion. Furthermore, the result will show whether the statement about the importance of product labelling made by De Boer (2003) is of importance to the customer in furniture retail or not (see 2.1.3).

The tenth question: Space for other options.

This option permits to get additional insights, which suggestion are not mentioned in the survey but are still of relevance.

The purpose of the survey questions was explained in this section. In which way the questions correspond to the already introduced framework in clarified in the next section.

3.2.3 Link to Hub-and-Spoke Framework

This part focuses on how each spoke of the hub and spoke model from 2.2.2 was integrated and respected in the questionnaire.

As part of the hub-and-spoke model one spoke corresponds to the people-based integration. In order to see how big the sub-group of green customers is, this spoke is integrated into the questionnaire in the first question. Independent of its findings about the total amount of green customers, the people-based integration will have profound impact on the daily work for the store managers and most of the employees, particularly those in sales, since any process from planning until realization is highly linked to the people.

With reference to the hub-and-spoke-model question four is in accordance with the product-based spoke to get to the bottom of what customers value in furniture retail. Knowing what matters to the customers most will have impact not only on marketing but also on product design engineering and logistics, and therefore to SSCM to ensure products green credentials.

The fifth and sixth question also matches to the product-related dimension of the framework, since it ensures the product's green credentials by exactly identifying which green characteristics the customer appreciates. Furthermore the fifth question also corresponds to the planning-based spoke

because according to the outcomes of this question the importance of green materials and training of people will be affected. Depending on the results, the outcome will also have impact on a green purchasing of raw materials and supply chain wide CSR practises. For instance, if the customer is very interested in the origin of raw materials, it may affect where certain materials are sourced from.

This planning-based spoke can be also applied to the seventh question. Depending on how the compounds of the Democratic Design are ranked it will have impact on what the sales people have to promote in store preferably.

Question eight refers to the process-based integration spoke which is respecting new technologies and process reengineering, which is understood as reverse logistics in the context of this research. Based on this spoke, the survey aims to detect what the customer additionally expects and which impact this knowledge will have on IKEA internal processes, like the usage of recycled material, and how to promote reverse logistics in store, which is a rather new concept applied at IKEA.

The ninth and tenth question corresponds to the planning-based integration spoke from the hub-and-spoke model. Depending on the results from the survey, IKEA can either focus on product-based green marketing with integrating labelling or on more general marketing about CSR practices within its supply chain in form of banners and posters, for instance. The planning-based integration is essential before operationalization. It respects the training of people, the planning of new implementation steps, like the design of a potential marketing campaign. This will automatically relate to the promotion-based spoke that is about green branding and the capabilities to deliver green products.

3.2.4 Methods of Analysis

This section explains by which methods are used and how the retrieved data was analysed.

The scaling of the answer score possibilities of five stars was preferred over a three stars approach (equivalent to very important, important, not important) in order to present a more diverse, nuanced picture of the outcome instead of just showing a "black-and-white" representation. Furthermore the number of stars was kept throughout the survey for simplicity sake and to avoid any confusion.

The option "other ideas" under the fifth and the ninth question made it possible to rank and additionally present own further thoughts about the topic. If no suggestion was done, this answer possibility was reduced to one star both in the online and the offline survey. Since the online survey was designed in that way, that a minimum of one star had to be given at each answer, the data was adjusted in both offline and online survey accordingly to achieve equilibrium between both of them.

The data was processed by the usage of the Microsoft Office program Excel by the usage of inferential statistics, which is a group of statistical methods in order to draw conclusions based on a random population sample (Collis & Hussey, 2014, p. 261). The analysis will be of non-parametric nature, since data from the population is measured in interval scale and it is assumed that answers given by the respondents are influenced from each other and are not completely independent from each other. These two facts consequently do not correspond with the four basic assumptions drawn by Field (2000 cited in Collis & Hussey, 2014, p. 261). By the usage of non-parametric analysis data is processed according to frequencies in size and order. After that calculation is rather done based on ranks than on data value (Collis & Hussey, 2014, p. 261).

The variables are measured on a ratio and interval scale. Using binary code and ranking code made it possible to process the data. Hence, the figure "0" stands for an absence of the characteristic and "1" that the characteristic is present. With the help of frequency distribution the array of frequencies was summarized for all the data values in a particular variable. Percentage frequencies helped to visualize the distribution better.

3.3 Delimitation of Research Design

Delimitations define the scope of the research. This section explains to which extent the research can be generalized. Validity and reliability are shortly presented and the limitations of the research are pointed out more specifically.

3.3.1 Generalizability

Generalizability explains to which extent research findings (often based on a sample) can be extended to other cases like population or other companies (Collis & Hussey, 2014, p. 54). More generally, speaking the results of the research allow to be generalized from the sample to the population with the constraint given under limitations. Visser (2008) identified local drivers that can have strong impact on a society. These factors are culture, politics, socio-economic priorities, governance gaps and crisis response, which influence a population's behavior; also for purchasing (p. 60). Since the research is conducted based on the case study of IKEA Moorfleet, generalization might be possible for other IKEA retail stores in Germany given the assumption that customers in entire Germany have a similar purchasing behavior due to same local drivers. Particularly the other two stores in Hamburg Schnelsen and Altona could profit from the findings and recommendations. The questionnaire can be used in other countries in order to investigate, whether customer expectations

regarding sustainability differ from those in Germany and marketing campaigns can be homogenous in Europe or not. The hub-and-spoke model can be a guiding help for companies to develop their own questionnaire depending on their industry characteristics.

Moreover this research can be basis for further combining research in field of SCM and marketing in other industries. It may be a guideline for similar industries like car, fashion or decoration industry that most likely face also more green customers and sustainability related issues. Additionally, the research and its outcome underline the relevance of closing the gap in literature, and that SCM and marketing shall and can be combined in practice. It emphasizes research collaboration and knowledge exchange in both industries, and stands for an example of successful combination and integration of the two mentioned departments in a company.

3.3.2 Validity

Validity is the extent to which a test measures what the researcher wants to measure and the results reflect the phenomena under study (Collis & Hussey, 2014, p. 53).

As mentioned previously any demographic information are not asked in the survey. This certainly would give additional insights, however only when the sample size is big and representative enough. With increasing amount of respondents the survey would certainly have more validity. Other than the scope of this thesis defines indirectly the validity and generalizability of the results. Results are valid for the retail store Hamburg-Moorfleet and have to be treated with caution for other stores particularly in other countries. The results are valid for furniture retail and are only applicable to a limited extent to other retail industries, such as clothing for instance.

3.3.3 Reliability

Reliability refers to the accuracy and precision of the measurements and absence of difference in the result if the research were repeated (Collis & Hussey, 2014, p. 52).

For the literature review data triangulation was used to obtain data from different sources and times to obtain higher reliability (see 2.1). In order to be representative to the daily amount of visitors in the retail store of Hamburg-Moorfleet, the sample must have been much higher (IKEA, 2016). Amount of daily visitors is approximately four to five thousand customers. Sampling size from given population need to be 351 (Collis & Hussey, 2014, p. 199). The sample size until 172 respondents is reliable for a representation of not more than 200 people in a population.

3.3.4 Limitation of Methodology

Limitation of research describes the weaknesses or deficiencies in the research. As with any study, the current one has limitations.

Investigator triangulation was not realized since only one researcher wrote this thesis. However, continuous feedback sessions both from university and the company ensured an exchange of ideas, perceptions and ideas.

The research is limited to the unit of analysis IKEA Deutschland GmbH & Co. KG at the geographical location Hamburg–Moorfleet. The business sector is furniture retailing, whereas a communication strategy is elaborated to promote Moorfleet more in regards to sustainability. The time of research is limited to five months. Sampling method is a single questionnaire, which consists of ten questions that are asked to 127 customers over a time span of three weeks. Yet, the research results are limited to the application at IKEA Moorfleet. The research offers insights into customers' expectations, however the sample size is not sufficient to be fully representative to the daily amount of store visitors and their attitude toward IKEA, as pointed out in the previous section. The study can become more precise and representative when the amount of survey participants increases.

Although customers consider themselves as environmentally conscious there is no benchmark how to evaluate this information. Some may be strict with themselves; some are not. However, this self-evaluation is important in that sense that it gives an indication about customers general attitude about sustainability, which will give an idea on how many are actively aware of this topic and may have adapted a more mindful lifestyle. Yet, this information can hardly be assigned to a numerical value. Whether respondents answer the survey's questions differently when asked in person or when they fill out the online survey anonymously is not of relevance, since the evaluation of the results does not segment into online and offline group but according to sustainability-consciousness. The likelihood is ignored that simultaneously responding participants influence each other's answers and thus survey results due to personal interaction. Customer segmentation according to age, gender, employment or other social factors is not respected in the research for reasons of simplicity. This is mainly since the sample size would not suffice to draw representative conclusions on a population and would lack reliability. If research had only been done on people of a certain age group for instance, it would have discriminated other target group. If this research is conducted further in future, it is room for more detailed investigation.

4 Results and Discussion

In this chapter the findings of the survey are presented in the first section, and interpreted and discussed in connection with the earlier introduced literature in the second part. It will provide the reader with recommendations in the third section of this chapter. Some challenges of the implementation are mentioned.

4.1 Results

The examined literature from chapter two is found to be suitable and applicable for the case of IKEA Moorfleet and its area of improvement. On the one side this is because this globally acting company has a large supply chain network, which is subject to constant improvement to guarantee reasonable prices for the customer, and on the other side because IKEA is in permanent contact with the customer, who according to literature, has started to demand and appreciate more sustainable practices.

Moreover according to the sustainability reports, IKEA is improving its supply chain activities constantly. Looking at IKEA's sustainability reports (IKEA, 2010-2015), the company commits to sustainability in all scopes as defined by both Dahlsrud (2008) and Visser (2014). In line with Visser's increased attention to the definition of environmental sustainability, IKEA has focused increasingly on environmental awareness throughout its supply chain in recent years since climate change and stakeholder pressure made this scope a sensitive topic that should not be ignored any longer (IKEA, 2010-2015). However, it is not evident that IKEA follows the stricter definition of 'strong sustainability' since it transfers raw materials into manufactured goods and recovers that captured energy only by recycling or incinerating (IKEA, 2010-2015). Yet, furniture is largely made from the renewable resource wood. IKEA's wood is FSC-certified, which means that wood harvesting is done in a sustainable manner by which neither the availability of the resource diminishes nor protected or non-FSC-certified forests are touched upon. Nevertheless, it is essential to keep in mind, a large variety of products are not made from renewable resources like wood or cotton but are transformed materials like aluminum, glass, and plastic. With its implemented a People & Planet Positive strategy in 2012, IKEA proves compliance with the definition of sustainable supply chain management presented under 2.1.2, since it defines environmental, social and economic goals while respecting transparency (e.g. by publishing sustainability reports) and supplier integration and improvement through auditing (IKEA Group, 2012). Since it takes back old furniture, it integrates backward logistics into its business practices in order to foster the closed-loop supply chain management (Chan, et al. 2010; Wong, et al. 2015).

The following section presents the findings from the survey that discloses how customers perceive IKEAs corporate behavior.

4.1.1 Customer segmentation, their image perceptions and opinions about the company

To what extent a person is assessing himself or herself as a sustainable purchaser, how he or she experiences IKEA as sustainable market actor, if they think that a sustainability report is enough and if they would like to receive sustainability related information about products are the first four questions. They were grouped because all of them had three answer options from which one could have been chosen. Apart from this, they set out broad parameters that provide general insights about the customer's self-evaluation, opinion, perception and wishes.

Most of the customers (47%) consider themselves as moderate "green customers", and 37% see themselves very much as a person who is having sustainability constantly in mind while shopping. Both numbers exceed the non-conscious customers that are represented with circa 16%. The current image perception of IKEA regarding sustainability is moderate (48%) tending to not very good (44%). A minority of 8% of the respondents perceives IKEA as sustainable. With respect to the first subordinate research question about what has to be done in order the change the image perception form customers about IKEA, the majority of the respondents with 48% agreed that it does not suffice to publish a sustainability report yearly. However, 21% claim that it suffices, while 31% doubt that it is enough. These results are illustrated in Figure 3, Figure 4 and Figure 5. No matter if a customer considered his daily shopping behavior sustainably driven or not, in each of the three target groups the majority agreed that a sustainability report is not sufficient for a good image. Question four⁸ provides helps to answer to which extent a customer values sustainable related information. The survey revealed that in furniture retail both environmental-conscious and non-conscious customers are very much interested in the provision of more detailed supply chain related product information. No matter if a customer considers himself environmentally conscious or not approximately 96% of the respondents say that they value sustainable supply chain management related information about a product or the company while purchasing furniture. Whether each respondent knows exactly what supply chain related information means in particular is unclear but the given examples in the fifths question make him or her understand what it entails. Almost 34% of all customers would like to receive sustainability related information about every single product. Less demanding and less extreme are most of the customers (62%) that think it would be nice to receive product related information for at

⁸ Would you appreciate sustainability related information about products?

least some products. A proportion of 4% of all consumers state that they do not need sustainability information because they value other facts (see Figure 6).

Interesting is, that for 21% of the customers it suffices, that IKEA is publishing a sustainability report, however still more than 93% out of these 21% would be interested in knowing more about the products (3a & 4a+4b). Therefore, almost 99% of those that said it does not suffice to publish a sustainability report, strongly and moderately claim for more sustainability information about product (3c & 4a+4b). Reference to the assumptions made under the forth question in 3.2.1, it can be stated that out of the very environmentally conscious customers, 98% demand more specifically supplementary product specific information. Additionally 85% of non-environmentally conscious customers would also appreciate such information.

Figure 3, 4 and 5 illustrate these findings with the usage of traffic light coloring. The green color corresponds to green customers, a positive attitude or a strong agreement with the question. Yellow signifies a moderation and red a disagreement with the question respectively.

Figure 3 Question 1



Figure 4 Question 2

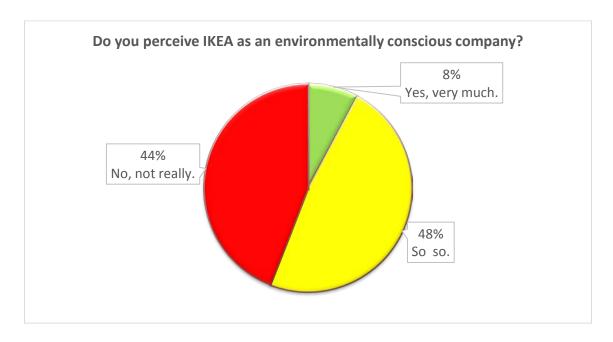


Figure 5 Question 3

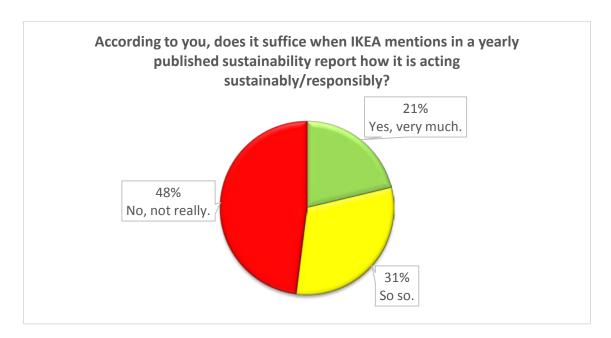
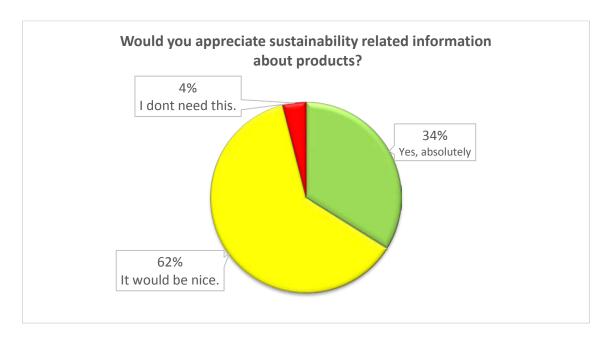


Figure 6 Question 4



4.1.2 Customer's expectations and values related to products and services

The next group of questions refers more precisely to the supply chain related information. Which information are the more important to a customer? Which suggestions do they have additionally? Is price or sustainability more important? And what do they think about the return possibility of old furniture?

The fifth question provides answers to the second sub-ordinate research question about what sustainable supply chain related initiatives or information in particular matter to the customer. Do buyers look for sustainable supply chain information linked to procurement, distribution and reverse logistics. Results show that the products' material origin is the most important information with almost 14%. Reverse logistics related information about recyclability and the return possibility of products enjoy a strong interest as well with 13.8%. Furthermore at third place, most of the customers value information about their own green benefits with 13.6%. Further facts ranked in decreasing importance are info about recycled, recyclable, remanufactured material (13.3%), carbon footprint (12%), production through community projects in developing countries (11.7%), certification labels (11.1%), and improved characteristics related to logistics (10.7%) (see Figure 7). The percentage is given with decimal place to display the precise result and avoid rounding errors. Rounding the results would not have any impact in the order however would not give a similar precise picture like when the actual percentage numbers remain. Respondents indicated among others which other information they would appreciate to be informed about. Since response rate of this question was very low (only 10

valuable topic-related comments) the ranking of these answers was not found suitable. One person suggested a scoring model by the usage of an independent, superordinate system to compare several products more easily. The practicability of this suggestion is further explained in implementation suggestions under 4.3. Another customer introduced an idea by asking two questions. What can an individual additionally do and how can someone engage to support sustainability within and with IKEA. Various customers wanted to know in which way and how much the wrapping and packaging material had been minimized and whether it is from recyclable material. The packaging aspect was mentioned three times, which gives it a higher significance in comparison to the other suggestions. One argued, that it would be of value to show whether a certain product is from small producers that could be supported by the purchase of an explicitly labeled product. Looking at the Democratic Design, quality is the most important driver with 22.2% closely followed by functionality (21.5), design (19.9%), price (18.3%) and on fifth rank sustainability (18.2%) (see Figure 8). In this figure there is no red color because three product attributes enjoy equal popularity (green), while the other two are both moderately important (yellow). The color scheme also expresses that all attributes are about same importance. The mode distribution displays a five star ranking for the first three ranks, while four stars where given to price and sustainability. A bit more than 10% even marked all five cornerstones equivalently.

The clear majority of 55% is convinced that the return policy from IKEA is a good thing, although most of the people are not really using it. While a quarter of the respondents argue that it is a wonderful idea and it was about time to implement it, only 13% claim that this particular customer service has nothing to do with sustainability. Most of the customers who think that they pay very much attention to sustainability during their daily shopping think the return policy is a good action from IKEA although they are not using it. Among all participants, this group however states dominantly that it has nothing to do with sustainability. An indifference attitude can be observed with 7%. This is illustrated in Figure 9.

Figure 7 Question 5

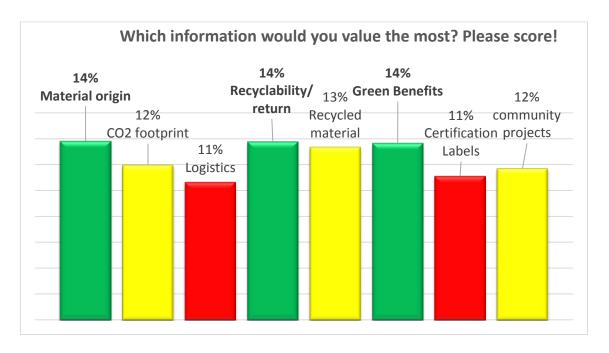


Figure 8 Question 7

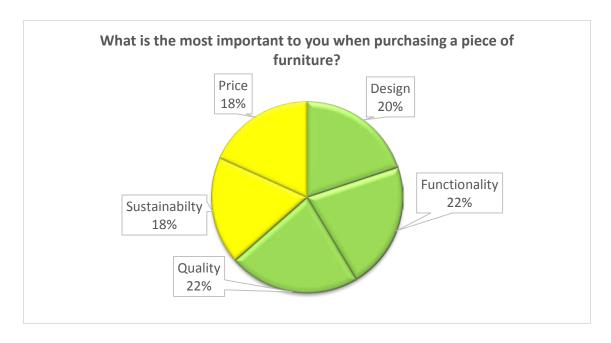
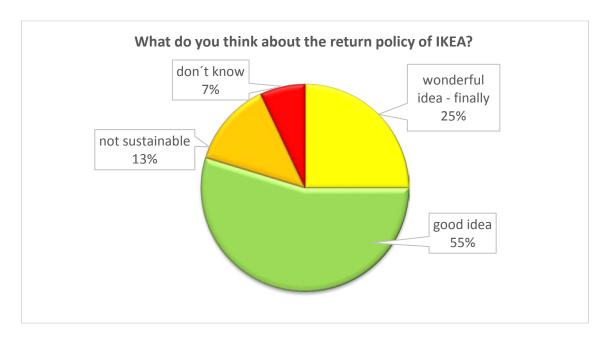


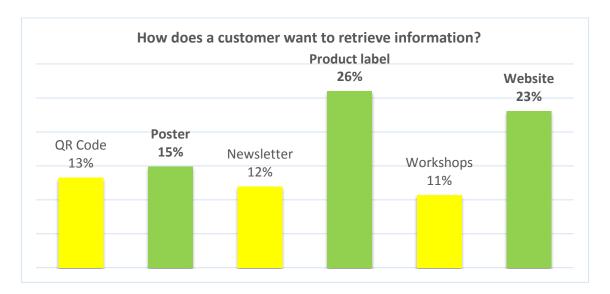
Figure 9 Question 8



4.1.3 Communication media

The ninth and tenth question stand in in reference with the third subordinate research question that helps to investigate how sustainability related information from previous sections shall be communicated. Which is the best medium to communicate the relevant information preferably. The majority of 26% appreciates information provided on a product label, followed by website (23%) and poster (15%). QR codes (13.3%), newsletters (12%), and workshops (10.7%) are less appreciated (see Figure 10). As emphasized by De Boer (2003) under 2.1.3 product labels are ought to be the combination of 'functional and aesthetical features, together with distinctive environmental and moral advantages. Apart from the proposed media additional suggestions done by the respondents on how information could be transmitted, multiple times emphasize was done on qualified service and sales personnel that shall be capable to inform the customer about the products and the referring sustainability features. Multimedia advertisement on TV, radio but also social networks like Pinterest, Instagram, and Facebook formed part of the propositions. Further ideas corresponded to IKEA's own smartphone application, which could be used to show topic-related facts conveniently. Some respondents would appreciate information to be sent in paper form via post, or on request as catalogue, while another participant pointed out the usefulness of information transfer by the use of topic specific campaigns or at innovation congresses to show latest improvements and novelties with respect to the environment. Beyond proposing media channels on how to transmit product characteristics, ideas about eye-catcher or call outs on product labels as additional hint were submitted, too. Similar to the fifth question, these suggestions were taken out of the scoring model but considered as additional idea input.

Figure 10 Question 9



4.2 Interpretation and Discussion

The results of the survey data are interpreted and discussed in this section.

A reason why most of the customers consider themselves as moderately green might be because Germany generally is a country, which emphasizes sustainability due to recycling legislation, the supply of many organic products and by the non-provision of complimentary plastic bags for instance. Moreover one might take into consideration that a self-evaluated green customer is socially more accepted than one who didn't, and therefore the respondents tended to say that they belong to the moderate group. It is also assumed that respondents are not homogenously strict and honest with their self-evaluation. Nevertheless and despite of the lack of precisely given parameters, the first question still supports the idea of customer segmentation based on individual evaluation. Independently whether a given response is absolutely correct or false, it remains interesting and helpful to distinguish between a target group that does not care about sustainability at all and one who bears it in mind. Furthermore, it discloses the ratio of them to another. Looking at the current image perception of IKEA that is rather tending to the negative, the company IKEA is in the need to change this general opinion. Although not particularly having asked the participants why such an image perception exists, one reason could be a lack of sufficient sustainability marketing or that people think that a low-cost capitalist driven multinational company is not able to be sustainable. Since IKEA is a globally-acting multinational company with direct contact to the end-customer and remarkable scale of production, consumers are much more aware of its tremendous raw material utilization and business practices compared to smaller, rather unknown companies. IKEA is very present in the market and consequently very exposed to research and criticism of various parties. Thus, criticizing publicity in former years (taxation, horse meat balls, wood from native forests or no external surveys) might have had negative impact on the image perception of IKEA (Economist, 2011; Süddeutsche, 2013; Spiegel, 2011). However, this critic has forced IKEA to improve business practices according to its sustainability reports of the last decade. Such public pressure would probably not have existed to such an extent for smaller sized companies. With its size IKEA has much more bargaining power, importance and thus relevance in the market to change old practices, where smaller companies could only comply with in order to survive at the market. This already transforms IKEA into an active player with influence and control. This expertise mainly deployed in collaborations with suppliers and global organizations like the WFP can be applied on customer level as well. With reference to the first subordinated research question and looking at the outcome of question two and three, it can be stated that an improvement of IKEA's image perception will not be achieved by only publishing a yearly sustainability report. Since the sustainability report is only published online, it can even be assumed that most of the customers are not even aware of its existence. Moreover, the results of question three and four have indicated that the sustainability report matters not as much as every products green credentials, which now should be pointed out more specifically in order to provide sufficient information for the customer. How the information provision could look like in specific will be discussed more in detail under 4.3. The fifth question reveals that customers appreciate particularly the supply chain management integrated activity of procurement by showing strong relevance of information provision about product's origin. This is probably the case because customers are used to such information from the food industry. As mentioned earlier, products that have been produced in an ethical way need to be declared. The customer should not be forced to seek out that information, because they won't look for it. They will only use this information, when it's there (Torres, 2016).

It is interesting to detect that Sharma, et al. (2008) claimed for a higher end-customer participation in recycling and recovery (see 2.1.4), although from the survey it can be seen, that the German customers are very interested in facts about recycling, and are apparentely willing to recycle better. This leads to the thinking, that it is not the customer who lacks enthusiasm to recycle, and that he or she should therfeore be better provided with such information but also with a suitable waste disposal option. Information about recyclability is probably of enormous importance, since Germany generally provides a decent infrastructure to dispose waste properly.

Own green benefits are ranked on third place. This is very much in line with Polonsky's research (2011) as presented under 2.1.3, where consumption of a greener product only occurs when there is no tradeoff between sustainability and quality or functionality. The results from question seven will display that explicitly. With regards to the own green benefits, the purchase making decision in furniture retail is thus similar to the one in food because the customer is more driven by egoistic advantages of the own purchase acquisition than by an altruistic thinking of what is good for the common.⁹ Other than that, it has to be stated, that the importance of certification labels in comparison to other information is minor, and therefore goes in line with Anderson and Hansen (2004) who identified the relative importance of wood certification based on a survey in U.S. in China. It showed, that environmental certification is a favorable product attribute, however is outweighed by other attributes, which is also the case based on this survey. Traditional logistics related information are not specific interesting to the customer, however the embodiment of the logistical transport improvements described as a decrease of carbon footprint is valued. That is somehow biased. It seems that the customer hardly wants to know by which methods and implications the CO2 emission reductions are achieved, but only that they are reduced. Although the customer has not specifically been asked how IKEA can improve its image, some concluding assumptions still can be drawn from the survey. The statistical mode of all

⁹ It remains to be discussed whether any type of altruistic behaviour exists in the world at all.

answer options shows that general demand for the provision of most information is considered very high since all options are ranked with five stars, while only the last two ranked options received three out of five stars.

Question six reveals that even other aspects of sustainable information are appreciated that is a much bigger range of information than suggested in the survey. Although response rate of this open question was rather small, it still provides indication of which other aspects could be included into IKEAs potential marketing strategies. One aspect that has been mentioned multiple times is the reduction of wrapping material, which goes in line with the recyclability of wrapping materials and reverse logistics. Promoting how packing material has successfully been reduced could be taken into consideration. While the customer was only focusing on the reduction of packaging material, this idea can also be applied for any material. A classic example is the product introduction of the shelf KALLAX, which is the replacement for the traditional EXPEDID (IKEA, 2014). KALLAX kept functionality although the product was redesigned with thinner outer walls and smaller compounds to decrease raw materials (IKEA, 2014). The precise changes can be seen under Appendix 4. Other suggestions were to show explicitly the region and seasonality of produce and products in the IKEA Food restaurant, to provide more detailed information about used materials, binder, plasticizer and softener and in which way IKEA is involved in research and development project of alternative materials to plastic, the reduction of plastic assortment recycling, rectification of recent pollution (in oceans for instance), and the combat and avoidance of root causes of new pollution.

One principle of CSR 2.0 was among other creativity and creative solution finding. The questions from one respondent "What can an individual additionally do and how can someone engage to support sustainability within and with IKEA?" is new approach for IKEA which could be translated into a potential CSR practice where an IKEA customer is sponsoring a family or a worker from a community project from IKEA.

The food industry can be acknowledged as an industry from which some parallel to the furniture industry can be drawn. Although it is not quite the same, it can be learned from it. Although, the purchase decision-making process of sustainable food consumption was subject to the research of Edelmann and The Consumer View (2011), some parallels can be drawn to the furniture industry. The Democratic Design is meant to be a compromise of all compounds and that is what the customer also expects and values. It was assumed that consumers favor buying a convenient or optical-appealing item more than a sustainable one, which has been proven by the survey. The Consumer View (2014) found out, that sustainability is after price the second most important reason, why a product is bought in food retail. This is not directly the case in furniture retail, where functionality and quality count more. Nevertheless, price is also ranked more important than sustainability, which is identic in the

food industry. Since the return policy of all items is a rather new service at IKEA and is of increasing importance in sustainable supply chain management, it was integrated into the survey. The reason why customers say that the return policy has nothing to do with sustainability might be because they follow a stricter definition of sustainability according to which recovery of manufactured goods through recycling or incinerating does not go in line with their perception, and that better solutions have to be found (see 'strong sustainability' under 2.1.1). Mainly the very green customers think so. They also claim that it was about time to implement such a return policy. A reason for this general conviction may be that people are taking such material recovery implementations for granted and that it is no longer an activity to improve a corporate's image. It is possible that some respondents do not even see a direct link between returning old furniture and sustainable business operations. The product tag is the preferred communication medium because it is easy to use. When a customer walks through the retail store he or she can easily look at the product of interest and retrieve a lot of information without using the mobile phone or being asked to look it up online back at home. It is user friendly for all ages and avoids that one has to look for exact product facts online which is time consuming and annoying. Thanks to the elaborated knowledge from this survey, it was revealed what the customer values, and that the communication medium is preferably the product tag which is in line with argumentations from De Boer (2003).

Each item of furniture is the embodiment of form, functionality, quality, sustainability and price. Of course a decent quality product is the result of innovative design engineering and functionality, however it also is the embodiment of sophisticated supply chain management. This incorporates thoughtful procurement of sustainable resources, lean production and systematic distribution to reduce waste like unnecessary costs and emissions in order to make the final product affordable to the customer. Consequently, supply chain management including reverse logistics, product promotion, and sustainable awareness can be tied up together. Therefore Nair and Ganesh (2013) suggest promoting environmental and functional benefits more together in future that customers understand these environmental related benefits better. Having analysed the outcome of all the questions, it remains however unclear whether the provision of product specific information regarding sustainable supply chain management really affects the purchase decision. Nonetheless, this stated insecurity does not exclude that customer still appreciate information about procurement and recyclability of the item which thus can influence the purchase decision (at least) indirectly.

Apart from product tags, in the next section it is explained which communication channels can be taken into consideration to promote IKEA's sustainability activities.

Table 2 Research Questions and Main Findings

Research questions	Main findings
To which extent does a customer value	Large majority values sustainability information
sustainable supply chain management related	
information about a product or the company	
while purchasing furniture?	
What has to be done in order the change the	Urgently start communicating such information,
image perception from customers about IKEA?	become active and creative about sustainability
	communication, make internally known
	knowledge more transparent to end-customer,
	educate customer through well-informed
	employees (see 4.3 Recommendations)
What sustainable supply chain related	material origin,
initiatives or information in particular matter to	recyclability and return option for products
the customer?	own green benefits
How shall this information be communicated	product label
	poster
	website

4.3 Recommendations

The survey showed that many customers independently from their personal attitude demand product specific information, which corresponds to the second assumption stated in 3.2.1 under question four. Therefore, it has to be emphasized that the need of green marketing is urgent. IKEA does not have the option but is in urge to implement a marketing strategy incorporating SSCM related product information with the provision of the demanded information. Although, sustainable consumption appears to be rather for the good own conscience than for the good cause, and sustainability conscious consumers appear to like doing something good but prefer to do something good for themselves at first place, IKEA might has the power to convince and educate particularly the less conscious customers to act differently by promoting products which have become better or greener due to the backstage supply chain operations. How such education can look like and how sustainability can be transferred better is explained in the next section.

4.3.1 Employee Education

At first glance, the survey results lead to the thinking, that it seems to be easier to market a product than supply chain related actions and activities to generate a value-added product. With respect to the findings of the seventh question, it is suggested that sales personnel in stores shall highlighted the functionality and quality of the products, and the green characteristics of the product and benefits for the customers in each store division. Visser (2008) also underscored that CSR 2.0 is about "embedding CSR across the organisation", which means that not just operational managers but particularly the shop floor workers are fully involved into the CSR practises (p. 38).

As pointed out under 2.1.2 information logistics is highly important in SSCM, since 75% of all employees rather work with information than with materials in producing industries. In the context of IKEA and suggested by some respondents, the sales personnel should be able to answer customers' questions about sustainability professionally, which is only possible when they are trained accordingly. Educated employees can talk about more general sustainability characteristics of the supply chain like the reduced amount of traditional wood pallets, sustainably harvested and certified raw materials, and integration of recycled materials in certain products, or production through community projects.

4.3.2 Product Specific Communication

The analysis of the survey disclosed a solid demand for more product-specific information. The best way, as addressed by De Boer (2003) at earlier stage, is to promote information on product level.

a) Product Labeling

Consequently, products can be labeled according to their sustainability. At the moment the price is the most prevalent information given (see 1.1) and green promotion is, if at all, only given on the backside of the price tag. In each Home Furnishing Business area (HFB) certain products can be marked with a call out that functions as an eye-catcher to attract customer's attention. Information can be related to materials origin, customer benefits or reverse logistics. As mentioned under 2.2.2, the promotion-based integration includes product labeling about environmentalism and disposal. Since the customer asks for recyclability related information, it is essential to provide such information.

Furthermore, fabrics can be labeled with remarks about the cotton's origin, whether it's organic, or where it was processed. Sofas (HFB 1) do not have to be replaced completely when the color is out of fashion, but a new cover can be bought instead. Electronic devices, like a refrigerator in the kitchen HFB could be labeled with an additional sustainability tag, which states "energy efficiency" and that ewaste can be brought back to IKEA. Consequently the customer does not have to take care of the disposal and IKEA takes over responsibility for appropriate waste management, which forms part of its reverse logistics. In literature it is argued that bringing back old products back to the producer or seller fosters sustainable acting and can be perceived as interface between SSCM and the end customer (Sharma et al, 2008). Plastic utensils tags could show that material is to a certain amount from recycled material and can be recycled easily. Some products have become lighter like KALLAX or the best know shelf BILLY, which was reduced in material and thus weight by 30% (IKEA, 2015). Such changes can be translated into customer benefits such as less to carry, easier to assemble, less emissions in transport or less space consuming in the trunk of a car or easier to transport by bike. LED lightning bulbs information tags can disclose how much energy a consumer can reduce by using such lightning at home and how the bulb can be recycled. Many more examples are listed under Appendix 5 where HFB, product name, sustainable attributes, customer benefits and the link to SCM are listed.

b) Product Scorecard

One respondent suggested a comparable superordinate system by which products can be compared better. IKEA internally is using the so-called Product Scorecard, which helps to evaluate products' green attributes according to eleven criteria, presented under Appendix 6. The Product Scorecard is a measuring and evaluation tool to weight defined product criteria against each other resulting in a score. A total score of at least 120 combined with fully IWAY approved production is required to classify a product as "more sustainable" (Strandh, 2014). In line with this already established evaluation system within IKEA, a communication strategy could be developed. Suggestion is to make the scores transparent to the customer. Since each product gets a final value of an absolute number, it is even easier for the customer to compare products with each other. It might be not an independent system, however it is superordinate and already put into practice, which facilitates an implementation due to the information availability.

c) Promotion of Locally Sourced Products

Certification labels do not seem to be of significant importance to the customer nowadays. This is in line with the research of Anderson and Hansen (2004), who argued that it is a good product attribute but often outweighed by other characteristics. However, this information can be of certain importance in a market strategy. Visser (2008) claimed for the idea of "glocality" (thinking global, acting local) in his explanation about CSR 2.0, which can be used in this suggestion (p. 40). Since the customer values the products origin to the most and research from Anderson and Hansen (2004), O'Brien and Teisl (2004), and Aguilar and Vlosky (2007) showed that a customer is willing to pay more for certified wood, local or regionally close harvested or produced wood products could be promoted more specifically on product level by the usage of product labels with a call-out or any eye-catcher in order to influence the purchase decision, and to ask for a price premium even. This means that regionally sourced wood products could outweigh price, promote sustainability and even have a decreased carbon footprint in comparison to globally sourced wood. Russell and Russell also found out, that when companies' CSR efforts are local, consumers' actual behavior towards the company increases, although these consumers perceive distant CSR activities as more important (Russell and Russell, 2009, p. 75). IKEA has started to use cork from Portugal in their SINNERLIG product line, which is composed of cork benches or glass containers, lidded with cork. The advantage of cork over traditional wood products is that the tree is not chopped but the bark is harvested every nine years. Cork is light, water repellent, durable, good to touch and an alternative to traditional wooden products (SINNERLIG - IKEA Product Stories, 2015).

4.3.3 Poster

Market communication via poster was the second most important medium according to the survey. Poster and banner are a rather uncomplicated way to foster store communication. Nevertheless, it should be acknowledged that too much of them will result in 'information war'.

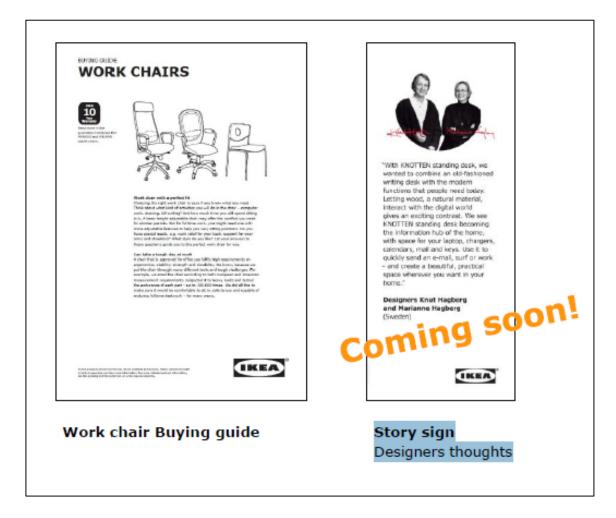
a) Internal Information

As the retail store at IKEA is subdivided into Home Furnishing Business units (HFB) (see Appendix 5), each HFB could be equipped with visual advertisement with information that is rather internally communicated until now. These are for instance the Democratic Design of IKEA products, which was already introduced in the survey. IKEA is also promoting their mission of *Growing 2020 IKEA together*. This mission composes of four cornerstones that focus on growth of IKEA, their people, sustainability and keeping low prices (IKEA Services B.V., 2012). A "Did you know" or "WE CARE" campaign could help to promote constantly targets, improvements and achievements of each financial year in form of posters. The restaurant could be a place, where large stickers on the table or tablets could list summarized information from the sustainability report of the adequate financial year, and would thus be easy to implement just by the usage of another communication medium. To foster communication about disposal logistics it could be talked about how much percent of reverse items are recycled or used for remanufacturing. This would keep track and support additional engagement to keep waste low and recycling high.

b) Story Telling

By the usage of storytelling, as exemplarily shown in Figure 11 on a work chair, innovative products are introduced to the customer either in form of a video in the World Wide Web or as printed version in the stores. In such short stories however mostly the designer's thoughts about the product creation built the focus. Moreover, arguments and thoughts of designers about functionality and innovation aspects outweigh sustainability in these presentations. Alternative to the current marketing strategy, this story telling idea could be developed to match the customers' expectations toward the provision of sustainability-related information. They could accentuate why they used particular fabrics or materials, and why the new design or characteristic of the product carries certain advantages for the customer.

Figure 11 Store Communication and Storytelling



Source: IKEA, 2016

4.3.4 Further Ideas

a) Local Waste Collection Points

In the section 2.2.2 the project-based integration was introduced as part of the hub-and-spoke model. Corporate responsibility can be displayed by promoting environmental and community projects. Given the context of supply chain management, it might be an idea to set up projects where waste is reduced or recycling is facilitated. IKEA could engage in a beach or park cleaning projects.

To avoid long travels to and from IKEA for returning old furniture, it would be customer friendly to set up waste collection points from where trucks could pick up waste. It would be like an outsourced or out-located disposal area within the city that makes it more feasible to dispose old furniture more closely and by bike. Such infrastructure would facilitate the recycling much more by supporting the customer. He or she could leave the car at home, does not need to travel until the suburbs, would not leave broken furniture on the street and people like carpenters who enjoy doing arts and crafts could use parts of the disassembled furniture to create their own new things.

b) Oral Advertisement

In the section 2.2.3 three media groups were presented through which information can be communicated. The survey only covered visual and written advertisement, because during the development of the survey oral advertisement was not considered to be very common or usual. However, during the course of this research oral advertisement has been observed in various retail stores like the food retailer EDEKA or the clothing retailer H&M. Loudspeaker announcements are a tool that is easy-to-implement and reaches many customers.

c) Food

Since IKEA offers food products as well, some interesting facts about the food industry can be of help to communicate them to the customer in the food areas, like the bistro, the café and the restaurant. This year's theme is food and how to be more sustainable with food, cooking and kitchen.

d) Eco-lifestyle Products

Although the focus of this research was on how to promote sustainability in store, the webpage still is an important medium, which has been shown by the survey. The idea is to sell the 100 most sustainable products within IKEA under a special "eco-lifestyle" category online (Ko, et al., 2013). These ranked as "most sustainable products" could easily also promoted in store, of course.

4.4 Challenges

Implementation of the introduced suggestions has to be in accordance with IKEAs corporate design. Therefore the recommendations have to be discussed with and approved by the head quarter, which can be time-consuming due to the size of this large company. Multinational highly structured companies tend to have long approval processes and implementation times. Once confirmed the operational implementation has to be executed by the store design department, called Communication and Interior Design. It may take a while to fully implement the recommendations. There is no right or wrong about which recommendation should be implemented first. However, it is emphasized that it is more practicable to implement a combination of product labelling and posters on superior level to attract as many customers as possible according to the survey findings. The implementation progress is dependent on labour and financial resources. Whether a multi-channel strategy or an all-in approach for only one marketing recommendation is better cannot be elaborated at this point and will be left as subject for further discussions.

5 Conclusion

The aim of this research was to provide answers to the question to which extent a customer values sustainable supply chain management related information about a product or the company while purchasing furniture. Therefore it corresponds to the first two tasks of the traditional marketing definition, which is the identification and anticipation of customer requirements. It further respects sustainable supply chain aspects of procurement, distribution and reverse logistics. The knowledge from this research minimizes the gap mentioned in literature that criticizes a missing link between green marketing and sustainable supply chain management in both academic research and practise.

Since IKEA wants to change its image perception from a throw-away furniture retailer to a sustainable producer, it does not suffice to promote IKEA's sustainable business practices and behaviour in a yearly-published sustainability report online only. The executed survey proofed that a strong majority of customers in furniture retail wants to receive SSCM-related information. The outcome of the survey revealed that customers, no matter if strongly, moderately or hardly sustainability-conscious demand particularly information related to material origin, recyclability and return possibilities of the products, and their own green benefits. Thus, the supply chain activity of procurement is of strong relevance to the customer, being followed by reverse logistics. Corresponding to this deduction and according to the findings of the questionnaire, in most cases the customer will only buy a 'greener' piece of furniture or product when it offers an advantage for the buyer, such as water or electricity saving potential or any other kind of convenience like lighter weight, smaller package or no hazardous material in the product. Traditionally considered logistics information like how the carbon footprint has been decreased, however are not of great importance.

While purchasing products in the store, customers dominantly look for quality, functionality and then design, whereas price and sustainability are less important in comparison to the other three products attributes. In this industry price is outweighing sustainability. Thus, a customer first cares about the price and then whether the product includes sustainable attributes or advantages. With a leaner supply chain that permits cost cutting IKEA can offer better products at still reasonable price, which would influence the purchasing behaviour of the customer. Simultaneously IKEA would take over a role in educating the customer to buy greener products and to become more sustainable. Consequently, cost leadership (one of IKEA's competitive advantages) remains a driving force that can only be combined with sustainability when the supply chain is lean and efficient.

As pointed out in the introduction the findings of *to which extent* and *what kind of* sustainable supply chain related information is valued by the customer while purchasing furniture will influence

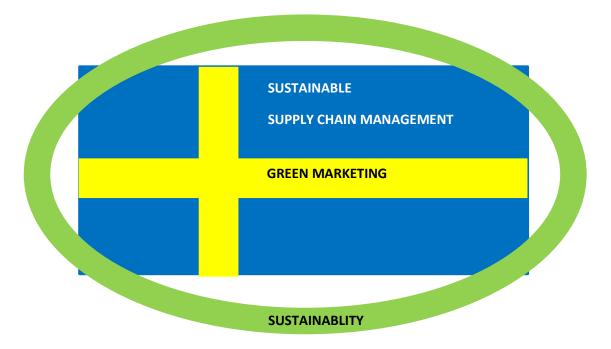
how a potential sustainability-focussed customer communication strategy in store has to be designed that it is perceived as more sustainable today than from the IKEA from 10 years ago. In the first chapter it was still unclear whether and why sustainable supply chain management and green marketing are still unlinked. Clear is that almost unanimously, the majority of the respondents agreed that the provision of a sustainability report does not suffice generally to improve IKEA's image perception. Preferred communication media instead are product labels, posters and the company's website. Accentuating sustainability information on these media could have positive impact on the change in image perception.

The research helped to disclose that the lack of sustainability communication is not due to customer's disinterest in sustainability. Instead it is an inability or non-willingness on part of IKEA to promote green supply chain activities on product level. IKEA hasn't adapted to recent customers interests yet and is unable to promote sustainability correctly on product level until now. Not communicating more sustainability than within the online report cannot be considered as a potential option. It would disrespect the customer's needs. Moreover, it would ignore the knowledge from plentiful studies proving evidence of a positive correlation between corporate image and purchase behavior or loyalty. This would contradict IKEA's long-term strategy and vision of becoming a more sustainable player in the market.

So, the image can be changed in a constructive manner by leveraging information about sustainability in respect to the supply chain and the customers' needs. The missing link between GSCM and GM as pointed out as a gap in literature and practise, thus can be closed on operational level within IKEA's retail store(s) when applying one or some of the suggestions. These are for instance an emphasized focus on employee education, product specific communication with the help of the product scorecard model to compare products more easily, and highlight locally sourced products and their attributes. Non-product, but more general sustainability-related information can be communicated through posters. Using this medium to communicated yet only internally published information can be as helpful as more story telling notices with accentuation on sustainability. Loudspeaker announcements in addition are easy to implement and would address any customer in store.

The successful and profitable satisfaction of customer requirements is IKEA's responsibility for its long-term survival at the market, and in order to be cited as a pro-active sustainable player in the corporate world. That the image perception of "the 'don't be sad throw it away thing' [is] completely incompatible with the IKEA of today" according to Steve Howard can at least partly be changed when the insights and recommendations from this research are respected and implemented with committed activeness.

And one day the on the Swedish flag based blue-yellow-colored company logo from IKEA will be associated with a green company as if the two complementary primary colors blue and yellow standing for sustainable supply chain management and green marketing are mixed, and then result into the perfect secondary color green, which symbolizes green business activities and sustainability.



Additionally, the research and its outcome underline the relevance of closing the gap in literature, and that SCM and marketing shall and can be combined in practice. It emphasizes research collaboration and knowledge exchange in both industries, and stands for an example of successful combination and integration of the two mentioned departments in a company.

5.1 Limitations of Research

The research provides IKEA with the findings of the survey, and gives some recommendations, however will not suggest a detailed operational steps on how to implement the provided information. As Visser (2008) pointed out about glocality, every country has its own local aspects, which also effects the demand for sustainability. While this research has identified the needs and demands from Germany, results may differ if conducted somewhere else. Therefore it is essential to born in mind that outcomes are subject to change according to the country where the survey is conducted. In order to make this research more valuable the survey can be continued to an amount of at least 351 respondents that would represent the average daily amount of visitors in the store. With regards to consumer education, it remains unclear if a company can change the purchasing behavior from microfocused individuals to holistic and a macro perspective.

5.2 Implications of Research

This section will present some general implications for the logistics industry.

Marketing is very much about the customer. Supply chain management and logistics instead are a unity of activities that rather happen backstage with less customer focus in comparison to classic marketing. Logistics is pragmatic. It is efficient and less colorful and attractive, which are more attributes of marketing. Logistics has to work, and has not to be pretty. Nevertheless, the research has shown that customers are increasingly interested in the provision of these yet rather hidden activities and processes. That is probably partly due to globalization where it is not any more obvious where a product comes from. Additionally, the infrastructure of transparency-supporting media and increasing information provision of social actions by the corporate world have led the customer become increasingly aware of business undertakings. As a consequence, the customer has become more mature and thus has more demands to be satisfied.

Traditionally SCM and logistics were mainly exposed to pressure for performance increase. They were challenged to cope with constant change in regards to new technology, waste and cost cutting and new techniques and processes. Today however information provision is not only scope of the marketing department. Customers demand more than just track and trace information of their deliveries today. They need more details. As a consequence SSCM is challenged to bundle more information and make them easy to access for the customers in order to achieve a new stage of transparency, customer acceptance and loyalty. These circumstances demand for experienced people that have cross-sectional expertise from both SSCM and green marketing. This also implicates that they

are involved both in B2B and in B2C industries, and that they have to cope with both ends (up and downstream) of the supply chain. As revealed by the research, material origin is located at the very upstream of the supply chain and ultimately is the most wanted information according to customers. It seems ironic, that the most wanted information seems to be the most distant and obscure product attribute for the customer.

Disassembling, recycling, and disposal have usually been the responsibilities of the end-customer after the end of life of a product. With the introduction of return policies, SSCM is increasingly challenged to cope with back stream operations. The linear approach from supplier, over producer to end-customer is obsolete and is being replaced by a circular model. This so called cradle-to-cradle approach will certainly emphasize waste consolidation at the retailer and not the end-customer, and thus will give reason to the emergence of a waste management that is mainly managed by producers and retailers, and will release the customer from his responsibility to take care of his private waste properly. Companies therefore need to collaborate much more with the disposal and recovery industry and with logistics providers that have specialized in his market. For this industry new challenges are emerging with increasing customer requirements that will give opportunity for innovative ideas and job possibilities.

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7 Appendices

7.1 Appendix 1

Five Dimensions of Dahlsrud's CSR Definition

Dimensions	The definition is coded to the dimension if it refers to	Example phrases
The environmental dimension	The natural environment	'a cleaner environment' 'environmental stewardship' 'environmental concerns in business operations'
The social dimension	The relationship between business and society	'contribute to a better society' 'integrate social concerns in their business operations' 'consider the full scope of their impact on communities'
The economic dimension	Socio-economic or financial aspects, including describing CSR in terms of a business operation	'contribute to economic development' 'preserving the profitability' 'business operations'
The stakeholder dimension	Stakeholders or stakeholder groups	'interaction with their stakeholders' 'how organizations interact with their employees, suppliers, customers and communities' 'treating the stakeholders of the firm'
The voluntariness dimension	Actions not prescribed by law	'based on ethical values' 'beyond legal obligations' 'voluntary'

Source: Dahlsrud, 2008, p. 4

7.2 Appendix 2

"It quickly became clear, however, that a metaphor can only take us so far. What was needed was a set of principles against which we could test CSR. These went through a few iterations, but I eventually settled on five, which form a kind of mnemonic for CSR 2.0: Creativity (C), Scalability (S), Responsiveness (R), Glocality (2) and Circularity (0). These principles, which will be explored in detail in a later section, can be described briefly as follows:

Creativity (C)—The problem with the current obsession with CSR codes and standards (including the new ISO 26000 standard) is that it encourages a tick-box approach to CSR. But our social and environmental problems are complex and intractable. They need creative solutions, like Freeplay Energy's wind-up tech- nology or Vodafone's M-Pesa money transfer scheme (Visser 2013).

Scalability (S)—The CSR literature is liberally sprinkled with charming case studies of truly responsible and sustainable projects. The problem is that so few of them ever go to scale. We need more examples like Wal-Mart 'choice editing' by converting to sustainable fish, Tata creating the affordable eco-efficient Nano car or Muhammad Yunus's Grameen microfinance model (Beard 2012).

Ш

Responsiveness (R)—More cross-sector partnerships and stakeholder-driven approaches are

needed at every level, as well as more uncomfortable, transformative responsiveness, which questions

whether particular industries, or the business model itself, are part of the solution or part of the

problem. A good example of responsiveness is the Corporate Leaders Group on Climate Change (Adey

and Visser 2007).

Glocality (2)—This means 'think global, act local'. In a complex, interconnected, globalizing world,

companies (and their critics) will have to become far more sophisticated in combining international

norms with local contexts, finding local solutions that are culturally appropriate, without forsaking

universal principles. We are moving from an 'either-or' one-size-fits-all world to a 'both-and' strength-

in-diversity world.

Circularity (0)—Our global economic and commercial system is based on a fundamentally flawed

design, which acts as if there are no limits on resource consumption or waste disposal. Instead, we

need a cradle-to-cradle approach, closing the loop on production and designing products and

processes to be inherently 'good', rather than 'less bad', as Shaw Carpets does."

Source: Visser (2008), p. 40.

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6.3 DNA of CSR 2.0

The CSR 2.0 DNA model—comprising value creation, good governance, societal contribution and environmental integrity—was introduced and described in some detail in Chap. 1. As a reminder, the DNA elements are summarised in Table 6.13. The self-assessment scores against the DNA elements are shown in Fig. 6.3.

Table 6.13 DNA of CSR 2.0

DNA bases	Strategic goals	Example indicators	Description
Value creation	Economic development	Capital investment	Economic, social, human and natural capital
		Beneficial products	Sustainable and responsible goods and services
		Inclusive business	Wealth distribution, bottom of the pyramid markets
Good governance	Institutional effectiveness	Leadership	Strategic commitment to sustainability and responsibility
		Transparency	Sustainability and responsibility reporting, government payments
		Ethical practices	Bribery and corruption prevention, values in business
Societal contribution	Stakeholder orientation	Philanthropy	Charitable donations, provision of public goods andservices
		Fair labour practices	Working conditions, employee rights, health and safety
		Supply chain integrity	SME empowerment, labour and environmental standards
Environmental integrity	Sustainable ecosystems	Ecosystem protection	Biodiversity conservation & ecosystem restoration
		Renewable resources	Tackling climate change, renewable energy and materials
		Zero waste production	Cradle-to-cradle processes, waste elimination

Source: Visser, 2014, p. 77

7.3 Appendix 3

Survey Questions – German Version

NACHHALTIGKEITSUMFRAGE

	en Sie bei Ihrem alltäglichen Kaufverhalten auf Nachhaltigkeit? (Kauf von Bio/Fair Trade- kten, nur Kauf bei tatsächlichem Nutzen, keine Plastiktüten, Produktions- oder Ursprungsland)
	Ja, sehr.
	Geht so.
	Nein, nicht wirklich.
2. Neh	men Sie IKEA als Nachhaltigkeits-bewusstes Unternehmen wahr?
	Ja, sehr.
	Geht so.
	Nein, nicht wirklich.
	ht es Ihrer Meinung nach aus, wenn IKEA in einem jährlich veröffentlichten altigkeitsbericht Auskunft gibt, inwiefern es umweltbewusst agiert?
	Ja, sehr.
	Geht so.
	Nein, nicht wirklich.
	de Sie Nachhaltigkeits-bezogene Informationen über einzelne Produkte haben wollen? Sind vichtig für den Kaufentscheid?
	Ja unbedingt, ich möchte solche Informationen über jedes Produkt erhalten!
	Grundsätzlich wäre es prima, wenn man solche Information bei einigen Produkten auffinden würde.
	Nein, ich benötige Nachhaltigkeitsinformationen beim Produktkauf nicht. Für mich sind

	ne Informationen würden Sie sich am ehesten wünschen? Bitte ranken Sie! (5 Sterne = sehr 1 Stern = nicht wichtig) Bitte Zutreffend ausmalen!					
***	Herkunft der Materialien					
***	Co2-Fußabdruck					
***	Verbesserte Eigenschaften in Bezug auf Logistik (mehr Teile pro Palette oder Container, Transport mittels Schiff/Flugzeug/Zug/LKW, Transport mit alternative Kraftstoffe, Produktion mit erneuerbarer Energie)					
***	Recycelbarkeit/ Rückgabemöglichkeit alter Produkte					
***	recyceltes, recycelbares, oder wiederverwendetes Material					
***	eigene "grüne" Vorzüge (Energieeinsparungen,)					
***	Zertifizierungs-Label (bio, fair trade)					
***	Herstellung durch Förderungsprojekte in Entwicklungsländern					
	anderes (wenn kein Vorschlag, dann mit 1 bewerten, sonst definieren bei Frage 6)					
6. Defini	eren Sie "anderes":					
7. Beim	Kauf eines Möbelstücks oder Produktes was erachten Sie als am Wichtigsten?					
***	Design = Schönheit und Formvollendung des Gegenstandes					
****	Funktionalität = Alltagsverbesserungen und Funktionsfähigkeit					
	Qualität = Langlebigkeit und Haltbarkeit im Alltag					
***	Nachhaltigkeit = Gut für den Planeten und grüneres Wohnen/Leben					
***	Preis = Erschwinglichkeit					
8. Was h	nalten Sie von IKEA's Rückgabemöglichkeit von Produkten?					
	Eine wundervolle Idee. Das wurde aber auch Zeit!					
	Finde ich gut, nutze ich aber eher weniger.					
	Für mich hat das überhaupt nichts mit Nachhaltigkeit zu tun.					
	Ist mir egal.					

9. Auf v	velche Art und Weise möchten Sie gern die Informationen erhalten?
***	QR Code
***	Poster
***	Newsletter Newsletter
***	Produkt-Etikett
***	Workshops im Store
***	Unternehmenswebsite
***	anderweitig
10. Def	inieren Sie "anderweitig":
Eng	lish Translation
1. Do y	ou pay attention to sustainability during your daily shopping? (purchase of organic/ fair trade
-	ts, only purchase when real necessity, no plastic bags, country of production or origin)
	Yes, very much.
	So-So.
	No, not really.
2. Do ye	ou perceive IKEA as an environmentally conscious company?
	Yes, very much.
	So-So.
	No, not really.
3. Acco	rding to you, does it suffice when IKEA mentions in a yearly-published sustainability report how
it is act	ing sustainably/responsibly?
	Yes, very much.
	So-So.
	No, not really.

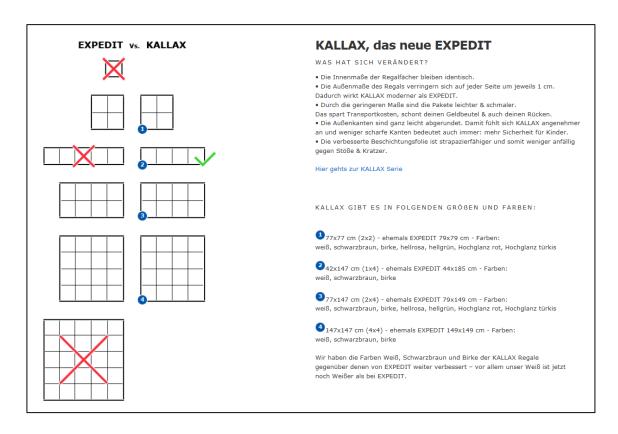
4. Would you appreciate sustainability related information about products?							
Yes, absolutely, I would like to know this type of information about every product.							
Generally speaking, this would be nice to find such information at least for some products.							
☐ No, I don't no	eed sustainability information while purchasing. I value other information.						
5. Which informa	ation would you value the most? Please score!						
₩₩₩₩ P	Products Material Origin						
क्रिक्रेक्रिकेक्रिक	Carbon footprint						
	mproved Characteristics Related To Logistics						
**************************************	Recyclability/ return possibilities of old products						
**************************************	Recycled, Recyclable, Remanufactured Material						
क्रेक्केक्केक्के व	Customers Green Benefits						
	Certification Labels						
ANAMA P	Production through community projects in developing countries						
	others						
6. Please define '	"others"!						
7. What is the mo	ost important to you when purchasing a piece of furniture? Please rank!						
	Design = beauty and form of product						
********* F	unctionality = improvement of daily life and functionality						
	Quality = long lasting and durability in daily life						
S SANGER	Sustainability = good for planet and greener living						
AAAAAA P	Price = affordability						

8. What do you think about the return policy of IKEA?								
	What a wonderful idea. It was about time.							
	I think that is good, although I am not really using it.							
	To me, this has nothing to do with sustainability.							
	I don't care.							
9. How	does a customer want to retrieve information?							
***	QR Code							
***	Poster							
***	Newsletter Newsletter							
	Product label							
***	Workshops at Store							
	Company web site							
	Other option							

10. Please define "other option"!

7.4 Appendix 4

KALLAX vs. EXPEDID



Source: http://www.ikea.com/ms/de_DE/campaigns/expedit_kallax/, 2016

7.5 Appendix 5

Customer benefits

LEGEND

LEGEND	
	HFB
1	Living room seating
2	store and organise furniture
3	workspaces
4	bedroom furniture
5	mattresses
6	bathroom
7	kitchen
8	Dining
9	Children's IKEA
10	Lightning
11	Bed and Bath textiles
12	Home textiles
13	Rugs
14	Cooking
15	Eating
16	Decoration
17	Outdoor
18	Home organisation
19	secondary storage
92	IKEA Family
96	IKEA Food
·	

HFB	product	product number	description	sustainability &	customer profits	information
5	HOVÄG	202.445.11	mattress	rolled up mattress> less carbon footprint	Easier to transport, 25 years guarantee	distribution
9	Baby Design Line			100 recycled material	open box with one click doable with elbow when you don't have a spare hand,	innovation, product design, light weight emission
18	HUMLARE	902.373.81	recycling bin		recycling bin with straps to carry until recycling bin recycle better	
6	RAGRUND	902.530.74	bathroom furniture	Made from bamboo, withstand a lot of water, fast growing, strong and durable material	Good against moist und humidity	procurement/ sourcing
3	HILVER	802.782.87	table	withstand a lot of water, fast growing raw material, strong and durable material bamboo not just a funny word to say		procurement/ sourcing
	SINNERLIG Series	303.147.49	cork	cork from Portugal	lightweight, durable	procurement/ sourcing, emissions
				every nine years cork is harvested from trees without cutting them down	warmth and tactility to the collection, water repellent	
13	TANUM	302.126.75	rug	use old rugs, produced in a remote village in Bangladesh by women to support them make something new from something old	recycled material	recycling

11	DAGGVIDE	303.147.49	pillow case	regrowing raw material material of product can be reused cotton is from more sustainable sources		reverse procurement/ sourcing
4	GJÖRA	691.563.05	bed	80% (weight) from this product is a renewable raw material	for individualization, material can be oiled, varnished, or waxed head and bed part can be installed, as you want the higher part can be used to hang on clothing or decorated with cloth the lower part at the feet can help to hold on for putting on sox from solid timber, the adjustable bed sides enable the usage of any type of mattress	
16	KARMSUND	202.949.83	table mirror	no lead used while production		
12	DOFTRANKA	403.089.22	cloth	Lyocell is cellulose extracted from wood fiber. Wood is a regrowing resource and need much less water, fertilizer and pesticides than traditional cotton. Not bleached with chlorine. Many additional compounds are recycled or reused. No use of optical brightener.	Mixture of cotton and lyocell absorbs water humidity better and helps to vaporize it more easily which leaves the body dry and warm. Two-sided different coloring allows more variation in bed room, hidden buttons avoid that blanket slips out of the sheets.	
2	KALLAX	302.758.61	shelf	smaller outer walls, more products fit into a container, smaller wooden pegs> reduction of raw material with same functionality	lighter weight, same functionality, old boxed of EXPEDID still fit into new KALLAX	
8	LISABO	302.990.70	table	Less material needed for screws	unique fitting need to fit one screw per leg and done, perfect additional table	

15	365+	702.783.63	wine glass	how many glasses fit into a container	easy to stack for little space, wide opening makes it suitable for dessert serving, also for hot beverages, thick glass more resistant	
18	GADDIS	502.894.09	basket	from rattan and bamboo, renewable resources, no plastic at all		
130	TERNSLEV, SATTRUP	402.852.56 002.852.58	rug	TERNSLEV is a durable jute rug, twist and turn to make different shapes until perfect spot in your home SATTRUP, made of sisal and jute, wool added softness and created something totally unique without changing the production technically skilled craftspeople hand spin white jute rugs.	durable, bring nature pack to concrete jungle, . It's as comfortable in front of corner and L-shaped sofas as it is in front of a two-seat sofa bed. Jute is grown organically and is 100% recyclable, and sisal is a fiber taken from the agave plant that is durable and naturally resistant to stain	a step closer to nature: http://toolbox.inter- ikea.com/sites/Prod uctrange/SalesStartP ackages/201604_Rug s/Documents/SSP_2 01604_Rugs_HFB13. pdf made by people!> project
1	SNÄPP		bin	more on each pallet, stackable, recycled postindustrial plastic except for the small handle bar in steel	lower price, in two sizes, stackable and more on each pallet, easy to assemble, for bathroom or kitchen, tested with 20000 open/close cycles =	
	PAHL	991.289.43	adjustable table	not throw away furniture	adjustable table for children, grows with children, funny colorful combinations	

7.6 Appendix 6

Product Score Card - Criteria



Our 11 criteria to evaluate products

1 Less material

Have we used a lightweight construction in the product?

2 Renewable materials

How much of the product is made from renewable materials?

3 Recycled materials

How much of the product is made from recycled materials?

4 Environmentally better materials

How much of the material in the product comes from well managed sources or has a proven lower environmental impact than the "normal material"?

5 Separable and recyclable

Is the product separable and recyclable at end of life?

6 Quality

How low is the COPQ?

7 Transport efficient

Is the product more transport efficient than the predecessor, i.e. can we fit more in to the container?

8 Energy efficient production

Are the suppliers producing this product more energy efficient than comparable suppliers in the category?

9 Renewable energy in production

Do the suppliers producing this product use energy from renewable sources?

10 Raw-material utilization

How is the raw-material utilization (yield) at the suppliers producing this product compared to other suppliers on the market?

11 Product use

Does this product help our customers to reduce energy, water or waste in their homes?





Source: Strandh, 2014

Crite	ria	Intention	
1.	More from less (lightweight)	To stimulate an efficient use of raw material	
		resources for our products, enabled by down	
		gauging design/construction improvement and	
		material selection, which secures function, style,	
		price, safety/health and quality requirements.	
2.	Renewable material	To stimulate the use of renewable materials	
		within the IKEA range, enabled by material	
		selection and sourcing, which secures	
		function, style, price, safety/health and quality	
		requirements	
3.	Reused recycled material	To stimulate the use of recycled materials within	
		the IKEA range, enabled by material selection	
		and sourcing, which secures function, style,	
		price, safety/health and quality requirements	

4	Matarial from mara sustainable saures	To stimulate the use of materials that arisins to
4.	Material from more sustainable sources	To stimulate the use of materials that originate from a responsibly managed source or have a proven significantly low environmental impact, enabled by material selection and sourcing, which secures function, style, price, safety/health and quality requirements.
5.	Recyclability at life-end	To stimulate the recyclability of our products, enabled by design/construction improvement and material selection, which secures function, style, price, safety/health and quality requirements
6.	Quality	To stimulate the quality and durability of our products, enabled by design/construction improvement, material selection and supplier selection/support, which secures function, style, price and safety/health requirements as well
7.	Transport efficiency	To stimulate transport efficient packaging of our products, enabled by design/construction improvement and packaging improvement, which protects product quality and secures userfriendliness, all the way to the customer's home
8.	Energy use in production	To stimulate energy efficient production of our products, enabled by design/construction improvement and supplier selection/support, which secures function, style, price, safety/health and quality requirements
9.	Renewable energy in production	To stimulate the use of renewable energy sources for the production of our products, enabled by supplier selection and support, which secures function, style, price, safety/health and quality requirements
10.	Raw material utilization in production	To stimulate a raw material efficient production of our products, enabled by design/construction improvement and supplier selection/support, which secures function, style, price, safety/health and quality requirements
11.	Sustainable life @home (reduce water, energy, waste, healthier life)	To stimulate an increase in efficiency of IKEA products that consume energy, water or help customers minimize their waste volumes, enabled by technological, design and/or constructional improvement, which secures function, style, price, safety/health and quality requirements

Source: Strandh, 2014