



BUILDING AN ATTRACTIVE E-COMMERCE PLATFORM

Information Studies
Master's Thesis

Project author:
Lauri Seppälä

Project supervisor:
Mette Skov

Number of pages: 60
146 275 characters with spaces

Submission date:
June 2020

Preface

Nowadays, the ever growing number of internet users is driving more and more businesses towards online solutions and especially, for those who are in the market for selling products, towards e-commerce implementations. Though, for these businesses to differentiate from one another and thrive towards success they should be able to do more than simply copy-paste already existing concepts. Instead, these new e-commerce websites could benefit from focusing on user experience and usability over traditional designs and functionalities. New web-based projects fail all the time because they are unable to overcome these initial steps of differentiation, which is why HCI (Human-Computer Interaction) and usability practitioners who seek to understand these issues are becoming more and more necessary

Keywords: contextual design, web usability, persuasive technology, behaviour change.

Introduction	4
The project	4
Problem area	4
Problem description	4
Problem formulation	5
Delimitations	5
Project structure	6
Theory and Methodology	7
User-centered Design	7
Contextual Design	8
The Cool Concepts	8
Contextual Design Models	10
Web Usability	11
Principles of Web Usability	12
Persuasive Technology	14
Behaviour Change	15
Understanding the Decision-making	16
Ethical Considerations	18
Data Collection Methods	19
Interviews	20
NVivo	20
Research	20
Contextual Inquiry	21
Interpretation Session	23
NVivo	24
Data Consolidation	25
The Affinity Diagram	25
Contextual Design Models	28
The Day-in-the-Life Model	29
The Identity Model	37
The Sequence Model	44
Ideation	49
Creativity	50
The Wall Walk	50
Visioning	51
Evaluation of initial ideas	51
Combined product concept	54
Home page	54
Catalogue page	55
Product page	57

Shopping cart page	58
Account page	59
The Cool Drilldown	60
Design	61
Mock-ups	62
Applying the Persuasive Technology	65
Ethical analysis	71
Validation	72
Discussion	74
The customized Contextual Design process	74
The next steps	74
Reflections on ethics	75
Conclusion	75
References	77
Appendices	79

Introduction

This project describes the research, ideation and design processes for creating an attractive e-commerce platform. The main steps included in the process as well as the accompanying methods have been thoroughly investigated and examined within the scope of this project.

The project

This project has been conducted without an external collaboration partner. The decision has been made in order not to place unnecessary limitations for the project scope and the underlying methodology which has a big focus on creating innovative solutions. The e-commerce platform created during this project is an abstract multi-brand solution concentrating on the clothing industry. The project primarily follows a design process called Contextual Design while concepts from other theories, such as the web usability and persuasive technologies, have been applied. Contextual Design is a design process normally requiring a minimum number of two or three team members. In this project though, the process has been tackled with a one man team which has presented a unique set of obstacles and issues. The whole process consists of three phases: research, ideation and design being preceded by an introduction to the theories and methodologies used. In the scope of this project, questions regarding the use of Contextual Design without a team, the resulting personalized process and the collaboration of Contextual Design with web usability - and persuasive technology principles have been tried to be resolved.

Problem area

This chapter explains the problem description and the related problem formulation. Furthermore, the delimitations for the project have been presented as well as the project structure.

Problem description

Nowadays, the ever growing number of internet users is driving more and more businesses towards online solutions and especially, for those who are in the market for selling products, towards e-commerce implementations. Though, for these businesses to differentiate from one another and thrive towards success they should be able to do more than simply copy-paste already existing concepts. Instead, these new e-commerce websites could benefit from focusing on user experience and usability over traditional designs and functionalities (Deng & Poole, 2012) New web-based projects fail all the time because they are unable to overcome these initial steps of differentiation, which is why HCI (Human-Computer Interaction) and usability practitioners who seek to understand these issues are becoming more and more necessary (Wilson, 2010).

The research from Lavie and Tractinsky (2004) has found out that the users of websites care not only about the task efficiency of the website but also about the aesthetics justifying the

importance for a well grounded design-research process. Furthermore, they suggest that the aesthetics relate to the users' overall perception of the usability as it comes to these websites, contributing towards a more well-rounded user experience. Then, what would an e-commerce platform look like if it was designed by prioritizing usability and user experience over more traditional ways? According to Holtzblatt (2016, p. 4) *"To be successful in today's world, those who define and build hardware and software systems must know how to fit them into the fabric of everyday life"*. A system cannot be designed solely based on a singular activity but rather as part of the whole work practice and the everyday lives of the users. Furthermore, the system should bring the users joy and coolness while using it (Holtzblatt, 2016).

According to Menon and Kahn (2002) the aesthetics of the website can directly affect the user behaviour in both negative and positive ways. The question then is, how can a newly launched e-commerce service gain attraction within the masses and make them try it as well as keep coming back for a longer period of time? Fogg (2003) writes that computer systems have multiple advantages over human persuaders in these kinds of situations such as the abilities of being more persistent, managing more data, and scaling easier than their human counterparts. Unfortunately though, these topics are usually riddled with unethical practices as many websites do almost anything imaginable in order to push their services and products to the unsuspecting victims. Davis (2009, p. 1) writes that *"There is good reason to be concerned about information technology that is intended to change people's behaviour"*. Even when the technology designed for us helps us accomplish things, if they change our behaviour, the ethical questions should be considered and evaluated.

This project aims to answer the aforementioned questions with the help of Contextual Design mixed alongside a set of persuasive technology principles, based on the chosen literature, ending up to a user evaluated design for a new possible e-commerce site. Furthermore, the ethical considerations will be discussed as related to the chosen persuasive technology principles. As is with Contextual Design, The research will be heavily based on qualitative data collection methods.

Problem formulation

The project builds around and aims to find answers for the following three problem questions:

What are the pros and cons of using Contextual Design while not being part of a team?

How to tailor the Contextual Design process for building an attractive e-commerce?

How can the principles of web usability and persuasive technology improve an e-commerce platform?

Delimitations

In 2019, clothes and sports goods were ranked as the most popular online products and services for both genders (64% of women and 56% of men) in Great Britain (Most Popular Online Goods by Gender Great Britain 2019, n.d.). For this reason, the e-commerce website

designed during this project will be focusing on the online clothing market, targeting both men and women users. Furthermore, the stage of the designs as ended up within this project will not be considered to fit one purpose or one company for which reason the brand value of the website and the company strategies, budgets and anything included will not be discussed in the making. Also, because of not focusing on any single brand or company, the website will be considered as a multi-brand offering service, meaning that it could be able to provide and sell clothes from various distributors. This decision is also backed up by statistics showing that most of the biggest fashion e-commerce companies in the world in 2019 were multi-branded (Top Fashion E-Commerce Companies by Market Cap 2019, n.d.). Additional content of the website, including specific functionalities and services, will be chosen during the research and based on the gathered data and findings.

While often thought to be a solely team based process, this project uses Contextual Design altered for the purposes of an individual researcher. For this reason, some of the more “team-strict” areas of the methodology, such as the Interpretation Session, have been modified to fit such requirements. Additionally, no case partner has been chosen for the project as the vision of the outcome is to be purely based on the research, findings and innovation conducted during the process. As it usually happens, collaboration with external parties in such cases comes with requirements and limitations which goes directly against the principles of Contextual Design.

Because of time limitations, the final outcome of the project will not be presented as a fully functional website but instead as high-level designs, which will be evaluated with target users at the end of the design phase. Furthermore, the project does not include the use of Contextual Design, web usability principles and the chosen persuasive technology principles throughout the whole process but rather in separate stages. The beginning of the project is reserved to go through all the main steps of the Contextual Design process before moving on to applying the additional elements and changes based on both the web usability - and persuasive technology principles.

Project structure

As pointed out in the previous part, the project will be structured based on the steps of Contextual Design while extending the process by applying elements from web usability - and persuasive technology principles in order to maximise the attractiveness of the outcome as presented for the targeted users. These steps, while covering most of the ground within the project, are preceded by introducing the entirety of the theory and methodology used in the project, including Contextual Design. As per Holtzblatt (2016), the three main phases of Contextual Design as well as the project are:

1. **Research** - Immersion to the lives of individual users through Contextual Inquiry and interpretation of the gathered data through specifically chosen models in order to represent the big picture of the whole market.
2. **Ideation** - Using these newly created interpretations to drive ideation and innovation in order to develop new product concepts from the assessed user data.

3. **Design** - Designing complete user interfaces, experiences and behaviour for the new concepts and validating them with the help of the users.

The design phase of Contextual Design will also account in basic web usability principles as represented in the related literature. Furthermore, the process will then be extended by merging the persuasive technology principles with the design phase and applying them throughout the final iterations in order to evaluate them with the target audience. The ethicality of the chosen approach will also be evaluated during this phase once it becomes necessary. At the end of the project, some of the more important outcomes and choices done during the process will be discussed and further elaborated.

Theory and Methodology

This chapter presents the theories and methodologies used in this project. Contextual Design, the main main process in the project, has been explained as well as the theories about web usability and persuasive technologies. In the end, the data collection methods have been presented.

User-centered Design

This project will be following a design process called Contextual Design which has evolved from the field of user-centered design (Holtzblatt, 2016). In user-centered design, as the name says, the users as well as their needs and requirements are the main focus of the research. The research is usually done in multiple steps, iterating backwards as necessary while going through various research processes and producing models as well as tools to help with the ideation and design phases. The main goal is to come up with products and/or services which have been evaluated with and tailored for the users along the way. The three basic principle of user-centered approach to design processes set by Gould and Lewis (1985) are:

1. **Early Focus on Users and Tasks** - Understanding the users, their mindsets and the nature of their work.
2. **Empirical Measurement** - Observing, recording and analyzing the performance of the users.
3. **Iterative Design** - Designing, testing and measuring new solutions in an iterative manner.

These steps, or variations of them, are found in various user-centered design practices (Mao et al., 2005). Because of this similar nature of many user-centered processes, it can be easy to spot resemblances between one another. For example, the structure used in this project highly resembles that of interaction design in which the process has adapted the basic principles set by Gould and Lewis (1985) and expanded them to a four step model instead. As is usual in user-centered design, all these phases can iterate back and forth until successful evaluation has been reached (Preece et al., 2015).

Contextual Design

Contextual Design, the main process used in this project, is a user-centered design process which uses a wide variety of unique design models. The exact models used are chosen by the research team based on their needs as well as on the requirements of the research problem in hand. As Contextual Design is based on user-centered design it follows similar structure in the whole research and design process. The main steps of this process, as previously presented, are research, ideation and design. Furthermore, each Contextual Design process aims to follow the three main principles as presented by Holtzblatt (2016). These three principles are the following:

1. **Design for life** - The idea of Contextual Design is to not focus only on the tasks and activities which are being evaluated but instead to try and re-design the whole process in which the users could achieve the same results. By designing for life the project team aims to find the Cool Concepts in order to touch the core human motives and enhance the joy of life.
2. **Immersion** - By going to the users and the context of the activity, the researchers immerse themselves in the users' world. In this way, they will be able to tune their intuition on the same level with the users as well as their focus on the design thinking. As Holtzblatt (2016, p. 18) writes: "*We don't ask the user what they need or want*". This is because they users cannot tell us what they need when they are not even familiar with the possibilities of the technologies. Instead, it is the researchers' job to collect this knowledge and understand the lives of the users in order to successfully combine them.
3. **Design in teams** - The last principle of Contextual Design is to always design in teams. This is rationalized by pointing out that in the real world most projects happen in teams or otherwise in conjunction with other people. Also, by utilizing the skills of the other people in the teams, the projects are benefiting from the shared total knowledge of everyone included. This project, as is brought about individually, has tackled the issue of a missing team by instead conducting a thorough research on the main areas of interest as well as by limiting the scope of the project as presented in the delimitations.

Some of the important concepts of Contextual Design, which the team needs to consider during the initial project planning phase, are presented in the following chapters. These concepts include such topics as the Cool Concepts which help the team to follow the first principle of Contextual Design and create designs which will innovate the practice in context of the users' whole lives. Also, the Contextual Design Models will be presented which are one the main tools connecting the work of the researchers and the designers helping them to build a bridge between the data and the designs. These tools are utilized throughout many of the other stages within Contextual Design so it makes sense to have them presented at the earliest possible convenience.

The Cool Concepts

The Cool Concepts in Contextual Design are seven indicators of which purposes are to point out the key elements within the users' experiences and to help the researchers better design

for life as is the first main principle. According to Holtzblatt (2016, p. 11), “*Successful products must produce joy in life and use*”. Therefore, the team should keep their eyes open for things pointing towards the Cool Concepts as they are used in both research and design phases in guiding the team towards collecting more relevant data as well as designing more impactful products and services. The Cool Concepts are divided into two models based on their main drives: one defining the elements which can touch the core human motives and the other one elements which provide more content into the context of users’ lives. These models are the Wheel of Joy in Life (Figure 1) and the Triangle of Joy in Use (Figure 2). The four concepts in the Wheel of Joy in Life which drive towards enhancing users’ lives are:

1. **Accomplishment** - Accomplishment thrives from the users achieving their goals by filling their dead time, times without external distractions, with meaningful and joyful activities.
2. **Connection** - Users feel joy from connecting with their friends and other people in forms of conversations and shared activities.
3. **Identity** - The product or service can prove to be extremely valuable if it can help the users better express their chosen identities and beliefs.
4. **Sensation** - Joy can also come from pleasurable and cool sensations in the form of aesthetics designs, sounds and colors.



Figure 1 - Wheel of Joy in Life

Source: Holtzblatt, 2016, p. 11

The Cool Concepts in the Wheel of Joy in Life are meant to help the designers with creating products and services which can make the users’ lives more joyful. But while all of these concepts are important, it is not necessary to force aspects of them all into one solution. For example, according to Holtzblatt (2016), in most cases accomplishment is the most important concept to focus on while connection is only necessary in projects where connecting people is the main focus. The last three Cool Concepts in Contextual Design, as presented in the Triangle of Joy in Use, are:

1. **Direct into Action** - Creates joy by enabling the users to achieve their intended actions with minimal effort and guidance. Whenever possible, the users' should be provided with desired results without them having to ask.
2. **The Hassle Factor** - By removing unnecessary setup processes, obnoxious customization options and other hassle factors the product or service can create more satisfaction for the users.
3. **The Learning Delta** - The product or service should not have a steep learning curve and instead utilize already familiar functionalities and interface elements. The users could be persuaded into specific actions with easily consumable hints and pointers.

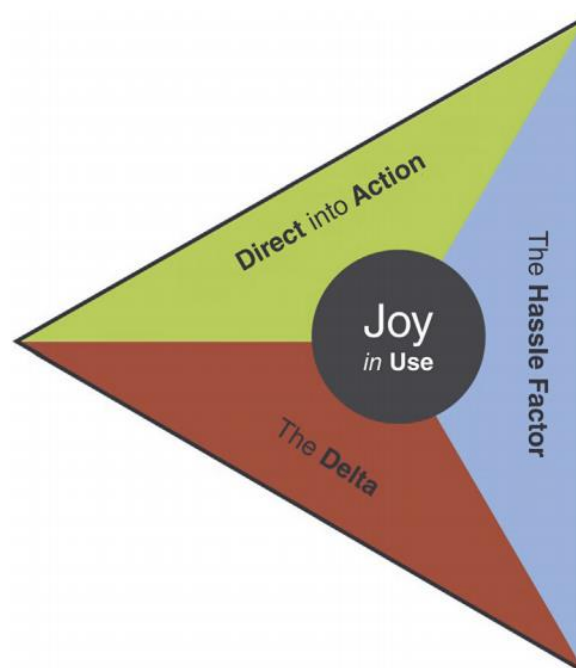


Figure 2 - Triangle of Joy in Use

Source: Holtzblatt, 2016, p. 13

Unlike the Cool Concepts in the Wheel of Joy in Life, the ones in the Triangle of Joy in Use do not focus on the context of the users' life as a whole, but instead on specific things in the provided solutions' user experience and interface. They aim to make the use of the product or service itself more enjoyable by encouraging the designers to come up with more straightforward and simple solutions. In Contextual Design, all of the Cool Concepts should be used as reminders when conducting interviews or coming up with design ideas in order to come up with life transforming solutions.

Contextual Design Models

Contextual Design Models are a set of design models used specifically within Contextual Design projects. Though these design models are built after the initial interviews, they are usually already chosen in the beginning of the project planning and are based on the type of the design problem itself as well as the information which the researchers and designers are poised to find out. They are one of the main tools for the designers to bring data from the

research into designs. These design models within modern Contextual Design are separated into two groups: Experience Models and Traditional Contextual Models. The latter are models which were created to work with users and their practices over 30 years ago which is why they resemble old programming models and are quite narrow on their focus. The Experience Models, on the other hand, are developed for modern day work environments and take inspiration from the Cool Concepts in order to innovate not only the users' practice but the whole way how it affects their everyday lives in different places, times and devices. For these reasons, the Experience Models are more applicable for most Contextual Design projects nowadays and, more often than not, make up the majority of the chosen models (Holtzblatt, 2016). In order to get the most useful and meaningful data for the project at hand, the following three Contextual Design models were chosen:

1. **The Day-in-the-Life Model** - An Experience Model which illustrates how the user's practice is allocated throughout the day, in which locations it happens and which devices the user utilizes in order to perform it.
2. **The Identity Model** - Though another Experience Model, this one focuses on the feelings aspect and the various identities the target users may value for themselves as well as helps the team to optimize their design positioning and messaging for the right audience.
3. **The Sequence Model** - This is a Traditional Contextual Design model which purpose is to analyze the various strategies and steps the users take to perform their tasks. By mapping out these steps the designers can find out which functionalities are necessary for the users and which ones could possibly be further optimized.

The exact models which were built on this project will be presented in more detail during their respective chapters. Furthermore, all the other presented concepts of Contextual Design as well as other main phases of research, ideation and design as being applied and as they become relevant are further examined throughout the rest of the project.

Web Usability

Usability is having a person of average skills and experience to be able to use a product without having to spend too much time in getting to know it. Web usability is essentially the same but in the context of websites (Krug, 2014). According to Krug (2014, p. 25) the most important thing to do in order to make a website easy to use is to: "not make me think", meaning that the website should above anything else be easily recognizable and understandable for the users. The elements and functionality on the website should not differ, to a large extent, from other similar websites. This includes the smallest details, such as the naming of various sections and the styling of links. For example, deciding to call the shopping cart page on an e-commerce website something else, such as "basket" or a "trolley", can cause unnecessary confusion for those who are not accustomed to these words. In an environment of hundreds of similar websites, the users will automatically move towards those that they find easiest to understand and use (Krug, 2014). Some of the other common characteristics and behaviour patterns within web users, according to Krug (2014), are:

- **Web users scan through pages instead of reading them** - Oftentimes, people do not have the time nor the patience to read through everything on a website. They have a certain task in mind that they want to accomplish in the shortest time possible. In these cases, they end up scanning the page for that information which is most useful for them while skipping the rest. Things that these web users might pay attention to are, for example, common keywords relating to the task at hand or things that have some kind of personal interest to them.
- **Web users choose the first satisfying option instead of scanning for the most optimal one** - While scanning through the pages, with a task in mind, the web users rarely go through the whole page and weigh their options in order to pick the most optimal choice to continue with. Instead, as soon as they find an option which to them seems reasonable enough, such as a link with a related topic to what they are looking for, they might decide to move on. Again, this is often due to people's limitations with time and patience. Furthermore, usually it is relatively quick to go back and forth between pages and the penalty for choosing a wrong option is relatively small.
- **Web users make their own reasoning about functionalities instead of taking the time to learn them** - This means that instead of reading through instructions in order to find out how a piece of new functionality works, the web users would more often than not do a trial-and-fail type of an experiment. In many cases, it is just not important enough for the users to understand how exactly something works as long as it helps them accomplish their current task. If they are unable to do that, they might instead just leave and try another website. For this reason, it is important for the web designers to base their design choices on commonly used practices or otherwise easily recognizable and understandable ideas.

Principles of Web Usability

As mentioned before, certain things in web design are to be avoided and the others to be thrived towards. There are certain norms of doing things which have been tested throughout the days of the internet and have been proven to work well in a wide array of possible situations. This is of course not to say that alternative methods of designing web sites could not be used. Rather, these are various tips and tricks which can be used to better understand the nature of typical web users and their behavioural patterns. Krug (2014) explains these tools as the principles of web usability. For this project, these principles have been utilized as the default narrative on which the design choices have been primarily based on when creating the initial designs. Some of these principles of web usability from Krug (2014) have been described below:

- **Conventions** - The first principle follows on track with the previously mentioned most important thing for making the websites easy to use. That is the way of requiring the web users to think less and, instead, have them do more. By utilizing elements and conventions which have been used numerous times before and been established as common practices, the web designers can make their websites more easily recognizable. Placings of elements, functionality and styling are some of the areas

where conventions can prove helpful. Though, it is important to note that different types of sites such as e-commerce and social media, and even more specific types within them, are likely to vary between their established conventions.

- **Visual hierarchies** - When the users are primarily scanning through a page quickly it might be a good idea to give them visual hints about where to look. This can be done in the way of visual hierarchies which basically means using different styles for the texts and elements in order to more visibly point out the most important ones. For example, changing the sizing and coloring of text can indicate its importance and the same can be done by nesting the less important element inside the more significant ones. Furthermore, related elements should be assigned similar styling to each other and be grouped together within the same section on the page.
- **Page sections** - Page sections are areas on a web page which have been separated according to their contents. For example, navigation and footer are clearly defined areas which can be found on many pages online. The separation on these areas is usually done with slight color differences, borders and otherwise changing the styling. Again, the meaning is to give the users effective indicators about how the content resides on the page and help them accomplish their tasks faster.
- **Clickable elements** - As is with the other things presented so far, also with clickable elements visual cues are absolutely important. If links, buttons and other clickable elements are not styled in various distinctive ways the users might completely miss their purpose and, in the worst case, never reach their desired destination. Things that can indicate clickability could be, for example, the shape, location and coloring choices which should of course differ from those given to other elements on the same page.
- **Visual noise** - Visual noise, meaning all the content on the web page of which are trying to ask for the users' attention as well as the layout and the density of the content. If a certain page is full of so-called shouting elements jumping out of the page with animations and other distracting styling choices it is very hard for the users to figure out where they should place their focus on. The same is true with pages where the content is not clearly organised or it is too cluttered which make the scanning of that given page much more difficult. Sometimes, instead of adding more content, it can make more sense to think which of the already included elements and text could be possibly removed.
- **Text formatting** - Text formatting, similarly to visual hierarchies points out how different choices regarding the text can help the users to better navigate around the website. Though, unlike visual hierarchies, text formatting is not explicitly about indicating the importance of various textual elements on the page. Rather, this principle is to remind that the web designers should use simple styling conventions such as headings, lists and short paragraphs with some space between each other. These styling conventions, just as the ones presented with the first principle of web usability, help the users by giving them recognizable layout and not forcing them to think too much about how the web page has been presented to them.

Web usability throughout this project has been used primarily for enhancing the general things and common practices relating to website and e-commerce designing. Therefore, while it has been applied in both the design and ideation phases of the project, the focus has not been in visioning. This is based on the fact that while it is important to be able to innovate and create novel idea concepts in order to separate from the masses, it is equally important to get the basic things right and provide a recognizable experience for the users as explained by Krug (2014). The innovation of new functionality has been instead left for the Contextual Design process itself as well as for the application of persuasive technology principles.

Persuasive Technology

Persuasive technology is a field within technology which aims to change people's attitudes and behaviour with the use of persuasion (Fogg, 2003). For example, web sites in themselves are a type of persuasive technology when used for persuasive purposes. In e-commerce specifically, persuasive technology is often used in order to get the users into buying more products. Different types of persuasive techniques include, for example: behaviour change, attitude change and motivation (Fogg, 2003). Furthermore, persuasion can be used in both ethical and unethical ways and these things should be taken into consideration always when deciding to use persuasion within the process of product development. The ethical considerations in the scope of this project will be further discussed in a later chapter.

Captology, the study of persuasive technologies as devised by Fogg (2003), examines the role of computers, or technology, in three areas of functional purposes: tools, media and social actors. Each one of these roles focuses on different ways of persuasion by increasing capabilities, providing experiences and creating relationships in the corresponding order. Understanding these three elements in the process of product design creates further opportunities for the designers to explore and helps them in realizing how exactly persuasive technologies can be implemented in practice. Fogg (2003) has described the three functional roles of computers in persuasion in the following ways:

1. **Computers as persuasive tools** - The purpose of this role is to help the users in better achieving their objectives by making the activity itself easier to perform. According to Fogg (2003), the role can be performed in a number of different ways such as reduction, the simplification of the given task, and tunneling, the step-by-step guidance of users through the activity. Some of these tools have been further examined during the ideation and design phases of the project as they have become more relevant. Fogg (2003) also notes that, when implementing tools for persuasion, usually a gentler intervention will go further than an unnecessary harsh one.
2. **Computers as persuasive media** - The role of media focuses on providing the users with experiences which can motivate them on changing behaviours and attitudes. These experiences, especially with the help of technology, could also be simulated in order to cover a wider spectrum of situations. For example, by using simulation the computers can demonstrate various cause-and-effect situations giving the users better idea how different choices can affect their outcomes. In the context

of e-commerce, simulation as a persuasive media could be used, for example, by placing products in the user's environment with the help of virtual reality.

3. **Computers as persuasive social actors** - Computers as social actors, or living beings, in the context of persuasion are used in order to build a relationship between the product and the user. Some of the ways to do this could be, for example, by providing positive feedback on the actions taken by the user or by providing support in completing the activity. Furthermore, computers can implement social influence with the help of various cues in the categories of physicality, psychology, language, social dynamics and social roles. While dealing with the likeness of living beings, these cues also have their unique considerations regarding the ethicality of the practice.

Though persuasion can include the attempt to change either one or both of the behaviour and attitudes of people, this project focuses specifically on the area of behaviour change. This is because the hypothesis has been that the attitudes of users visiting these e-commerce sites would naturally already be mostly positive towards the activity of shopping. This hypothesis has also been proven to be factual during the first round of the conducted interviews. In the following chapter, in order to really understand the practice of behaviour change and get inspiration on how to apply it for most benefit in the context of the product designs, the act of behaviour change from a more psychological standpoint has been examined.

Behaviour Change

Designing products with the focus on affecting or changing the users' behaviour is difficult. It requires a deep understanding into the psychology of how the minds of these users make decisions and how that process can be altered with the help of external design choices. Furthermore, a good product design should be able to help the users in taking their desired action and make their daily tasks easier to accomplish (Wendel, 2014). In his book, Wendel (2014) has divided the process of creating behaviour change into four phases, which are the following:

1. **Understand** - In the first part of creating behaviour change the research team needs to gain understanding about the minds of the users and how their decision making processes work. Usually, what the team is looking for within this phase is to find out what types of triggers can be used in order to initiate action in general. In his book, Wendel (2014) has provided deep insights regarding this phase based on his personal research which has also been used as a basis for the purposes of this project. This theory has been further examined in the following chapter.
2. **Discover** - In the second phase, the team discovers information about their users. Without a specific target action in mind the team would first have to focus on finding out what is the desired outcome, who are the actors doing the activity and what is the specific action that should be taken. Afterwards, the team should learn more about the users in the context of the activity, during which they will generate personas of the users in order to map out their various identity types. In cases such as this project, where the target activity is already a known variable (shopping), the team is

able to jump straight on the second step about gaining deeper understanding of the users. For this purpose, the Identity Model was included as part of the Contextual Design process.

3. **Design** - Designing for the behaviour change can be done in two separate stages. First team should focus on the design when visioning the concept of the product. In this stage the team should focus on visioning the steps of the desired action within the product, conceptualize the environment itself and prepare the users for taking the action by deciding to change how the users see themselves, the action or the world. The outcome of this process is called the behavioural plan and it will help map out the desired narrative for the product itself. For this part, the Day-in-the-Life Model and the Sequence Model were included as part of the Contextual Design process. The second part of designing for behaviour change includes the more traditional interface design in which the created behavioural plan of the first phase is applied to the product designs themselves. This has been done within the design phase when applying persuasive technology principles to the designs.
4. **Refine** - The last part of creating behaviour change takes the newly created designs to the users in order to be further evaluated. The users should be observed while testing the product and after the received data as well as their feedback can be used to create new insight and ideas for the product concept and designs. This way the team can optimally refine their solution to better fit the targeted behaviour and the desired change regarding it. This part of creating behaviour change has been included to the validation part of the project which comes at the end of the design phase.

Understanding the Decision-making

The research about psychology of mind has already been provided by Wendel (2014) in his book. He explains that, most of the time, our minds are on autopilot and the decisions we make happen unconsciously. This is unlike what we believe by ourselves that each decision would be the outcome of a careful decision-making process. In reality, it is the habits and intuition based on our previous experiences that guide our choices. To make conscious decisions we need to pay attention to our own thinking but it seems that in many cases we lack the sufficient willpower to do so. In these cases, we are looking for external guidance and easier ways to accomplish our targets which will naturally make us more susceptible for intentional persuasion. Furthermore, we naturally prefer things that are simple and familiar to us as well as we give higher importance to things which seem urgent at the given time. And while we make most of these decisions unconsciously, they are dependent on a number of external variables. These preconditions for taking an action, as listed by Wendel (2014), are the following:

- **Cue** - An external cue which gives the users the initial idea to take a specific action. The cue needs to be strong and visible enough that it does not go unnoticed or get overridden by other distractions.

- **Reaction** - The intuitive thinking process in the users mind should automatically pick up the cue and evaluate it for relevancy. This process should return a positive emotion or the action could get automatically discarded by the unconscious mind.
- **Evaluation** - Once evaluated by the users intuition, the cue for action could awake the conscious mind for further evaluation. Here the mind would evaluate the profitability of the action for the user during which instantaneous comparison would be made against other possible actions to take and the most optimal one would get preferred. On the other hand, the mind could also decide that the cost to take any of the considered actions is too high and discard all of the available options.
- **Ability** - Once considered worthy, the user should be able to take the considered action in the given circumstances. The ability to take the action with the given obstacles and self-doubt needs to be high enough in order to convince the user to take the first step and to make them believe they can accomplish the targeted outcome.
- **Timing** - Once all of the other steps have been considered with positive results the mind still requires a one last push. The urgency of the action is evaluated and unless it receives a high enough rating the mind can still choose to back down until the timing is more relevant.

The five mentioned preconditions for taking an action are called the Create Action Funnel. By passing all the tests a user can be successfully persuaded to take a specific action. Furthermore, Wendel (2014) has mentioned three strategies which the designers can use for their product in order to help the user get through the Create Action Funnel. Based on the used strategy, it is possible to give certain steps of the funnel more or less importance. The three strategies are:

1. **Cheat** - Automating the action within the product and reducing the effort required from the user as much as possible is one of the most effective ways of accomplishing certain tasks. If all that the users have to do is to give their consent the initial redundancy to take the action can be expected to become much smaller. Cheating can be used, for example, by defaulting an action, making the action incidental or by automating repeating actions. In general, once a consent from the users has been received, cheating helps to successfully skip most of the steps within the Create Action Funnel. Also, in the case of cheating, the ethical considerations should be taken into account and it should be ensured that the action taken by the user is one taken by their consent and not a completely hidden one.
2. **Make or change habits** - The habits of the users can be built and changed with the help of the product in order to more effectively support finishing certain actions. Once a habit has been established, the users are more likely to skip the evaluation and timing steps of the Create Action Funnel. This means that habits help the users take action more unconsciously and reduce the barrier of conscious resistance. To build a habit, the designers need to identify a repeatable routine and a reward which the users consider worthy enough of their time and effort. Next, a simple cue such as an email or text message notification should be prepared which can push the users to

take the first step. Once finished for the first time, the action will automatically help the users associate the received reward with the given cue. By repeating this process multiple times, a habit can be evolved. Similar strategy can also be used to modify already existing habits.

3. **Support conscious action** - Unlike the first two, the third strategy is instead used to support the user to take a conscious action. This strategy is generally less effective and more difficult to successfully accomplish as it requires more effort from the users. Indeed, the users are required to go through each step of the Create Action Funnel in order to make a conscious choice to act. Still, in many cases this could be considered as the most ethical way to create behaviour change which makes it an admirable tactic. Conscious action can be, for example, supported by breaking the action into short and easily understandable steps, motivating the user to take an action and by giving the users instantaneous feedback of their progress.

Ethical Considerations

When writing about persuasion, persuasive technologies and captology, Fogg (2003) acknowledges the possibility of using them in unethical ways but at the same time he puts pressure on the point that this is in no way what they are supposed to be used for. Instead, by identifying and understanding where these ethical considerations are raised, the designers are supposed to be better prepared in order to address such issues. Of course ethical considerations are also a subjective matter and in many cases they reside within the grey area in which cases addressing them will be more difficult. For example, the capabilities of computers and persuasive technologies over their human counterparts provides an especially complicated dilemma as to how the various aspects within them should be considered either ethical or unethical. Fogg (2003) has mentioned six areas within persuasive technologies which should be considered for their ethical implications:

1. **Novel technologies** - In some cases the novelty of the technologies mixed with the limited understanding of the users can lead to confusion and misunderstandings regarding the purposes of the said technology, which again leaves the users vulnerable to its influence.
2. **Positive reputation** - The positive reputation of computers can automatically associate them as credible resources within less experienced users who might, for example, end up believing all statements given by that computer as undisputed facts.
3. **Persitence** - Computers have an unlimited advantage in being persistent over their human counterparts because, unlike the humans, the computers never get tired. This can have some alarming use cases in situations where the purpose is to wear the users down or have them give in to the technology.
4. **Interactivity** - For the users, it is not possible to interact with computers in the sameway as they would with other people. Instead, most of the situations and the possibilities in these technologies are predetermined and the only options to take are either to pick one offered by the computer or to quit.

5. **Emotional cues** - When used by humans, persuasion can be more ethically modified for situations depending on the emotional cues given by the targeted users. This is because computers have no capabilities for reading emotional cues and no ways of applying real empathy to their persuasion attempts.
6. **Responsibility** - Computers are not capable of taking responsibility for their actions or the errors they might have caused. For this reason, situations where the implications of the persuasion are dealing with serious matters should be given an extra careful consideration.

Whenever persuasive technologies are used, it can be a good starting point to consider their ethical considerations regarding at least the areas mentioned above. Furthermore, special care should be taken in order to avoid systematically targeting certain groups which can be more vulnerable to persuasion such as children or old people in which cases the unethical implications are obvious. Fogg (2003) has also mentioned some tools which can be used to help analyze the ethicality of a product. A simple way to start analyzing the ethicality of a product would be to answer why was the product created in the first place. What were the intentions of the designers when they decided to implement certain persuasive techniques in their products? Are these persuasive techniques in themselves considered either good or bad? Furthermore, there are some techniques, such as punishing users for their behaviour or using surveillance against them, which can clearly indicate that unethical ways are being practiced. A complete ethical analysis of the product created during this project has been conducted as part of the design phase and the considerations will be further examined in the chapter including the final discussions.

Data Collection Methods

Data collection methods can be divided into groups of quantitative and qualitative methods based on the underlying nature of the data being collected. In all simplicity, quantitative methods more often than not involve measuring things and collecting numerical values while qualitative methods on the other hand encourage researchers on gathering robust, descriptive data with open-ended questions and additional probing. Though, in many research projects a mixture of both approaches is adopted in favor of gaining more fruitful data while cherry picking the best suitable methods for the given circumstances (Bryman, 2016). The main design process followed in this project, Contextual Design, is heavily leaning towards qualitative methods and employs semi-structured interviews as the main method of collecting data. These are conducted in two phases: once in the beginning to gather the initial data and again in the end to validate the created product and get valuable feedback. Both interview phases include the same four participants so that they will be able to connect the two separate sessions and provide feedback on how the product designs have addressed their initial concerns. Each of the participants have been chosen for the reason of expressing themselves as people who, on a regular basis, buy clothes online. This has been done for the reason that the project aims to target people who can associate shopping as an activity which they would actually perform regularly and in various environments and settings. The aim of the first interview phase is to receive data which the researchers can use to reveal the Cool Concepts and build the design models from the Contextual Design process. The questions included are generated specifically to reveal

insight within various themes associated with the Cool Concepts and the models. For example, when looking at data for the Day-in-the-Life model, questions have been included which specifically probe the users' habits regarding their use of time and various devices throughout the day as related to the activity. The interviews as a data collection method and as used throughout this project have been further explored in the following chapter.

Interviews

Interviews, in general, come in three variations which are structured, semi-structured and unstructured the latter two belonging to qualitative methods (Bryman, 2016). As mentioned, Contextual Design uses semi-structured interviews. This technique is especially well suited for the given purpose as, while the researchers want their users to talk about their practices and share the possible issues, they need to simultaneously guide the conversation towards previously determined topics such as the Cool Concepts which again will help them concentrate on the design problem at hand (Holtzblatt, 2016). This flexibility of interviewing allows the researchers to focus on the most important areas of interest while still giving the interviewees freedom to explain and clarify themselves. Furthermore, some of the benefits of qualitative interviewing especially include the possibility of departing to side issues for additional insights as well as changing the main direction of the interview in whole if necessary. When it comes to separating the two qualitative interview methods, unstructured and semi-structured, from each other the main differences concentrate around how the interviewer should lead the session. Unstructured interviews are usually more or less similar to regular conversations where the predetermined questions are few and the direction of the conversation is more free flowing. Semi-structured interviews, while still free in nature, have more specific topics and possibly an interview guide to follow through in order to keep the focus on certain areas of interests. Interview guides are lists of issues or topics which the interviewer tries to form the conversation around (Bryman, 2016). The specific interview guides created for - and used in this project as well as the reasoning for the chosen questions will be presented in their respective chapters.

NVivo

While Contextual Design has implemented its own ways of analyzing data collected from the interviews, unfortunately, these ways are strongly team oriented. For this reason, an additional tool has been brought in to assist with the data analyzing process. NVivo is a computer-assisted qualitative data analysis software (CAQDAS) which helps the research team with coding and retrieving data. This means marking parts of the data with relevant naming and grouping them together in order to point out, for example, issues or otherwise important areas which should be further evaluated. By interpreting the data and grouping them into these important areas of interest, it is easier for the team to focus on the most relevant things to discover (Bryman, 2016). The exact functionalities of NVivo have not been presented in this project but instead it is pointed out whenever this software has been used in order to assist with the data analyses.

Research

During this chapter, the Contextual Inquiry and Data Consolidation steps within the Contextual Design process have been explained and performed. Additionally, within the

latter mentioned, the Affinity Diagram and the three chosen design models have been created.

Contextual Inquiry

First part of Contextual Design is the Contextual Inquiry, a research method in which the research team goes to the field and into the context of the users and their everyday lives. The idea is to interview the users while they are performing the explored tasks and, at the same time, explaining their actions as well as the reasonings for them. The researchers can then probe the users with additional questions as necessary in order to more effectively sketch out the exact details of what is trying to be accomplished. Some of the other things, of which the researchers are trying to find out, are the desires and emotional cues of the users regarding the tasks as well as the locations and timings of when they were performed Holtzblatt (2016). As with the Contextual Design itself, also Contextual Inquiry has a set of principles defined by Holtzblatt (2016), which function as the basic guidelines of the process. These are the following:

1. **Context** - The very core of the Contextual Inquiry is the context itself. By going to the context of the users' everyday lives the researchers are able to get more robust data and look for the Cool Concepts in order to create truly innovative products.
2. **Partnership** - In each interview process, both the interviewer and the interviewee have their own specific roles which define the nature of the interaction. In Contextual Inquiry, this relationship is usually formed as a master/apprentice type of situation in which the interviewee functions as the master and teaches their "craft" for the interviewer.
3. **Interpretation** - One of the benefits of being in a real life situation with the users, is for the researchers to be able to either confirm or deny their interpretations as soon as they arrive and not let any part of the data rely on guesswork.
4. **Focus** - While generally open in focus, the Contextual Inquiry is not an unstructured interview. It is semi-structured by default and the researchers should by all means necessary keep their focus on the design problem at hand.

Contextual Inquiry is a semi-structured interview process which requires an interview guide. The guide should be formed in such a way that it focuses on areas connecting to the design problem, the planned design models as well as the cool concepts (Holtzblatt, 2016). Questions for the interview guide were specifically formed and grouped into various parts for the interview itself in order to capture data regarding the chosen Contextual Design Models. The guide consists of 30 questions and four separate parts which are: introduction, general idea, the Day-in-the-Life Model section and the Sequence model section. The introduction, shown below, has been made short and it only asks for general information regarding the gender, age and occupation of the interviewee.

1. *Is it okay if I record this conversation?*
2. *What are your gender, age and occupation?*

Next, the general idea section captures main points of the interviewees shopping habits, introduces them with the ideas of various identities (questions 4 and 5) as well as starts to characterize how the user practice is divided into chunks of times and locations throughout the day (questions 12 and 13). The questions within the general idea section are listed below.

3. *We are going to be talking about shopping and online shopping in general, what is your general opinion regarding this subject?*
4. *Everyone is a different kind of shopper with their own personality traits.. How would you identify yourself as a shopper in general when buying new clothes?*
5. *Do you get enjoyment out of shopping? In which ways?*
6. *Do you prefer to shop clothes online or in physical stores and why?*
7. *How often do you shop for clothes both online and in physical stores?*
8. *Which online platforms or apps do you use the most when shopping for new clothes?*
9. *What do you like about these platforms?*
10. *Do you use these platforms on your computer, mobile phone or other?*
11. *What do you like about using these specific devices? Are there any unique or cool features when using specific devices?*
12. *Is shopping clothes online something you plan for a specific time or do you prefer to do it during dead time when you have nothing else to do?*
13. *Where are you likely to be, and how much time and attention do you use for shopping clothes online?*
14. *In which other environments you might do your shopping?*
15. *What are you trying to accomplish when shopping for clothes online?*
16. *In your opinion, what kind of interface would give you the best possible shopping experience?*
17. *Can you think of any issues within online shopping platforms?*
18. *In your opinion, what kind of simple tweaks or additions could overcome the issues?*
19. *What kind of new features would you want from the platforms you are using?*
20. *Do you have any other comments or ideas about the functionality of any online platforms which have caused you issues or which would make the experience better?*

The questions between 21 and 27 are specifically concentrated towards revealing the rest of the data regarding the Day-in-the-Life Model by probing the replaying the last time interviewee bought clothes online. The questions, as shown below, focus around the location, times and devices used as well as which other people might have been involved.

21. *Think of the last time you bought clothes online. What did you set out to do and how did you accomplish it in the duration of the whole day?*

22. Was the activity divided into chunks of times and locations?
23. How long did the activity last in total?
24. Which times of the day was the activity performed?
25. Which devices and platforms did you use?
26. In what physical locations did the activity take place?
27. Did you do the activity with someone else? If so, why and how?

In the last part, between questions 28 and 30, a simulation with the interviewee was played out where they would illustrate themselves buying products on their favorite platforms. This part focused on mapping out the strategies and steps for the Sequence Model and was to reveal how the users would utilize them in order to accomplish the tasks within the researched practices. These questions have been listed below.

28. Could we simulate a typical shopping situation with your favorite platform?
29. Which items did you buy last time? Can you show me how you would run through this process from beginning to end?
30. Could you teach me how I would buy myself new jeans and shoes as a first time customer on that same platform?

The data for the Identity Model, once being introduced, was mainly gathered through the feelings and emotional cues shown by the interviewees and focused on words such as “like” or “hate” which would point out the specific identity types. The transcriptions from these interviews can be seen in Appendix 1.

Interpretation Session

Interpretation Session is a meeting within Contextual Design which takes place immediately after the interviews and in which the research team goes through the collected data in order to write down the main points from the interviews as well as their thoughts and ideas. So that one may give each type of novel and innovative idea an equal chance to flourish, all possible interpretations should be taken into consideration as long as they can be backed up by the collected data (Holtzblatt, 2016). Each point from the Interpretation Session was captured and written down as an individual note under an interviewee profile as shown in Appendix 2. Though, as this session could not have been performed in the traditional sense without other team members, the notes were instead imported from the interview transcriptions. Below is an example of how a direct quote from an interview is transformed into an interpretation note:

“I would like to see more options and products without having to go through too many pages. So it would be nice to have more things on less pages.” => S04-24 He would prefer to see more products and their variations while going through less pages.

Here the coding “S04-24” means that it is the fourth interviewee “Shopper 4” and this is their 24th note written down. A total number of 169 notes were captured during the Interpretation Session. Also during this phase, all data from the interviews were additionally processed and categorized with a qualitative data analysis software, NVivo. This was done in order to

support going through the following innovation steps without having other team members to discuss them with.

NVivo

By using Nvivo, it was possible to reveal common themes and areas of interest which might have otherwise gone completely unnoticed. Holtzblatt (2016), though, does not recommend categorizing data at all as it could distract the team from coming up with novel ideas and associations when grouping the individual notes for the Affinity Diagram in the following phase. This decision against Holtzblatt's recommendation was made in order to fill the void of a missing team when working as an individual researcher. By using NVivo, as well as the traditional process of creating an Affinity Diagram in Contextual Design, it was possible to come up with more design ideas and reveal issues and other areas of interest which were repeated over the interviews. The most important findings from the interviews as revealed with the help of NVivo were the following:

1. **Most of the users do their shopping activity on a laptop at home** - Three of the four interviewees did their shopping primarily on a laptop and even the fourth one would use laptop on a regular basis. Some of the interviewees would occasionally use their phone to scroll through products but not actually go as far as to purchase them. All of the interviewees did their shopping at home though the scrolling on a phone, as mentioned, could also happen from other locations such as when that person would be travelling.
2. **The users would shop both at the physical stores as well as online while using various platforms** - The interviews revealed that shopping at both the physical stores as well as online were common habits for all the users. When shopping online, a number of platforms were mentioned which, though, seemed to favor solutions with multiple brands on a single website.
3. **The users do not plan the time for their shopping** - All of the interviews pointed out that, most of the time, the users do not plan a specific time for their shopping. Instead, it could happen whenever they would feel like it or, for example, when they would get a notification from one of the platforms.
4. **Free shipping and a clear view of the product are important** - Basically all of the users mentioned free shipping and how important it was for them. Furthermore, many of the users mentioned how useful it is to see the product in a video, 360-view or being worn by a model in the pictures as such features make it easier to have a precise assessment of the said product.
5. **The users do not like cluttered views and jumping between pages** - Three of the four interviewees mentioned how much they dislike having too many things or too much information on a single page. Same number of interviewees also shared their concerns regarding the necessity of having too many different pages. In a sense, the users want more things on less pages without filling them up with unnecessary information.


These insights received from coding the data in NVivo would be used as supplementary data in the ideation phase next to the design models and the Affinity Diagram created as part of the Contextual Design's Data Consolidation session in the following chapter.

Data Consolidation

Data Consolidation in Contextual Design happens when the research team sits down to unite all collected data into presentations of design models as well as a hierarchical structure called the Affinity Diagram. With these models, it will be easier for the designers to look for common patterns within the data while also savouring unique differences between the interviewees. The creation of these models is an essential part of Contextual Design as it wraps off the research phase and gives the necessary tools and insight in order to continue into ideation and visioning of new product concepts. (Holtzblatt, 2016)

The Affinity Diagram

Affinity Diagram is a collection of data structured into a hierarchical model. This is initiated by arranging individual notes, created during the Interpretation Session, into a base level of mutual themes and issues. Once arranged, each group is assigned a blue label with an explanatory text of the contained notes. This text is a key detail written from the user's point of view, using language going straight to the point and addressing the research team directly, such as: *"I check my items several times before committing to buying them"*. An example of individual notes grouped into a blue label has been shown below:

 I might need to ask someone's opinion regarding the items that I am about to buy.

- S01-26 She thinks it would be "cool" to be able to share the sold items with her friends in order to have their opinions about those items.
- S02-31 If she is buying more expensive items, she might ask an opinion from someone by sending them a link or taking a screenshot of the item.
- S04-30 He often asks his girlfriend's opinion about the products he is about to buy.

The idea is not to make explicit design ideas, which would drain the teams' focus, but instead to make statements and worries as they would be represented by the users themselves. The Affinity Diagram itself deals with the Cool Concepts from the Triangle of Joy in Use as it tries to direct the users into action, reduce the hassle factor with the product and lower the learning process for new users. The initial grouping of notes ended up with 33 separate blue labels. Each of the blue labels represents a grouping of relatable observations or issues derived from the interviews. Though, as this process is a creative exercise it is important to note that the groupings are not necessarily based on anything else than the vision and associative skills of the researchers themselves as indulged by the interview data. Afterwards, the blue labels were once more grouped under pink labels representing wider areas of interest. In this stage, 10 different groups were generated. Finally, these labels were, for the very last time, grouped under three green labels which stand for complete themes of focus areas for the design thinking. (Holtzblatt, 2016) The finished Affinity Diagram, with all three groups of labels can be seen below:

▶ Having control of what I am doing is important in order to have a good experience.

▶ I want to shop at my own pace.

▶ I want to have enough time and space for myself when shopping.

▶ I prefer to have an easy sign up or no sign up process at all when shopping clothes online.

▶ I spend, on average, one hour shopping at a time.

▶ I want to be able to choose how many products I can see on a page so that I can speed up or slow down my search as necessary.

▶ I want to have less pages to go through.

▶ I want to have easy navigation and less steps to go through between the pages.

▶ I do not want to view the same products on multiple separate pages, categories and sections but rather group them under the same place.

▶ I want to have product variations such as colors grouped under one item on the catalogue page so that I have less pages to go through.

▶ I want to effectively control which items I am seeing.

▶ I want to have a variety of filters in order to more effectively specify my search.

▶ I do not want the website to push me certain products over others.

▶ I want to be able to sort the items in certain ways in order to see the more interesting options at first.

▶ I want to feel good when shopping.

▶ I usually do my online shopping from home because I need to be in the right environment for it.

▶ I do not plan my shopping but rather I do it whenever I feel like it.

▶ Shopping clothes online makes me feel good.

▶ Being fully aware of what I am looking at makes me more confident in making the right choice.

▶ I want to have a clear view of how the items look.

▶ I like to have free returns so that I can order and try items at home.

- ▶ I like to see a lot of pictures of the product as well as a video or a 360 view in order to get a better view of it.
- ▶ I want to see how the item looks with my own clothes.
- ▶ I want to have a lot of options to choose from.
 - ▶ I prefer to have a lot of options and buy all my clothes from one store rather than from separate ones.
 - ▶ I want to see recommendations of similar items so that I have more options to choose from.
 - ▶ When shopping online, I also look for new trends and inspiration on what to buy later on.
- ▶ I want to receive rich and transparent information regarding the products.
 - ▶ I like to add items on my wishlist to group interesting products in one place and get more information about them.
 - ▶ I want to receive notifications about the items on my wishlist.
 - ▶ I want to have clear information about the product being in stock or not.
 - ▶ I want to be able to see my previous activity clearly.
- ▶ It is very important for me to find the right size of items.
 - ▶ I find the right size and fit more easily if I can see a model wearing the item.
 - ▶ It can be difficult for me to find the right size of clothing.
 - ▶ It is important for me to find the right size of clothes.
- ▶ I need to be directed towards the right direction.
- ▶ I have difficulties deciding what to buy.
 - ▶ I check my items several times before committing to buying them.
 - ▶ I might need to ask someone's opinion regarding the items that I am about to buy.
 - ▶ I am not as spontaneous about shopping when I need to find something specific.
- ▶ I can be persuaded to buy more items.

- ▶ Free shipping is an important factor for me and it can make me buy more products in order to make it available.
- ▶ I look for items which are discounted and I am more likely to buy them.
- ▶ I might buy more items based on product suggestions and related items.

The three finalized design thinking themes from the green labels have been further explained below.

1. **“Having control of what I am doing is important in order to have a good experience”** - The interviews revealed that the users want to have enough time and space when shopping as well as some of them want simple navigations with less pages to go through. They want to have a full control of how and which products they are seeing at any specific time. Having this control over their shopping activities could possibly help enhance their overall experience and multiply the enjoyment they are getting out of shopping on the site. Furthermore, this point is directly related to reducing the hassle factor as part of the Cool Concepts and the Triangle of Joy in Use.
2. **“Being fully aware of what I am looking at makes me more confident in making the right choice”** - The users desire and utilize multiple ways in order to see and imagine how the product would look like in real life and if it would fit with the clothes they already own. They also want to see and receive rich information about these products as well as other important things, helping them to make the buying decision, such as their previous shopping activity. Some of the interviewees were also concerned about the product sizes and of ways which could help them in choosing the right fit. Furthermore, the users want to be able to see various other similar options and recommendations to help them find the right item.
3. **“I need to be directed towards the right direction”** - Many of the interviewees raised a concern about not always being able to decide exactly what to buy or not being able to comfortably continue through paying for their shoppings without asking for feedback from others, for example. On the other hand, the interviews seemed to point out that many of the users can also be persuaded to buy more items through benefits, discounts and product recommendations to name a few. These two areas combined an interesting opportunity to help both the users and the success of the e-commerce site at the same time as well as an excellent opportunity for the persuasive techniques.

As mentioned, the first theme has a clear and direct relation towards reducing the hassle factor for the product as part of the Cool Concepts. Furthermore, it has been the purpose that these three main themes of design thinking would combine in achieving all three of the Cool Concepts from Triangle of Joy in Use.

Contextual Design Models

Within usual projects of Contextual Design, the Data Consolidation process consists of between two to five people where the number of participants would also determine how

many design models would be created. As a result of transcribing the interviews and importing the notes directly from them, three design models were able to be produced whereas the suggested number of models for a team of up to three members would have otherwise been merely one or two. As explained before, two Experience Models and one Traditional Contextual Design Model were chosen for the project. The benefit of using Experience Models is that they do not focus on only the context of the workplace itself but instead on the users' lives as whole. Furthermore, where the Affinity Diagram considered Cool Concepts from Triangle of Joy in Use, the Experience Models focus on the Wheel of Joy in Life instead. In these models, it is possible to get insight into how users get the feeling of accomplishment, connection, identity and sensation within the given activity. (Holtzblatt, 2016). The created design models as well as the processes behind their creation have been explained in the following chapters.

The Day-in-the-Life Model

First model chosen for the project is the Day-in-the-Life Model, though, in a slightly modified manner. Normally, this model aims to illustrate how the users divide their activity throughout the day in various chunks of times plus which platforms and devices they use and in which locations. The main Cool Concept behind this model is the Accomplishment, revealing how the users go through the whole process of the target activity in their daily lives. (Holtzblatt, 2016) For this project, the model was altered to represent more of a Customer Journey Map than a typical Day-in-the-Life Model in a way that the overall structure shows how exactly the users become customers and how to keep them coming back. This change was made because the data from the interviews, especially after being grouped with NVivo, seemed to point out that, in most cases, the shopping activity happens from home, during dead time and by using laptops. Furthermore, shopping done outside of home usually consisted only of short workloads such as quickly browsing through new deals. These kinds of variations were still included in the model in order to keep elements from the original Day-in-the-Life Model's template. Also, Accomplishment as the main Cool Concept behind the model has been savoured by showing the different phases of the users' activity while they are reaching their goals. The created model can be seen in Figure 3. Furthermore, each of the three main elements in the model can be seen, in a zoomed view, under their relative explanations below. These elements include an explanation about the given phase as well as a few example situations, a quote from the interviews and a question to spark design thinking.

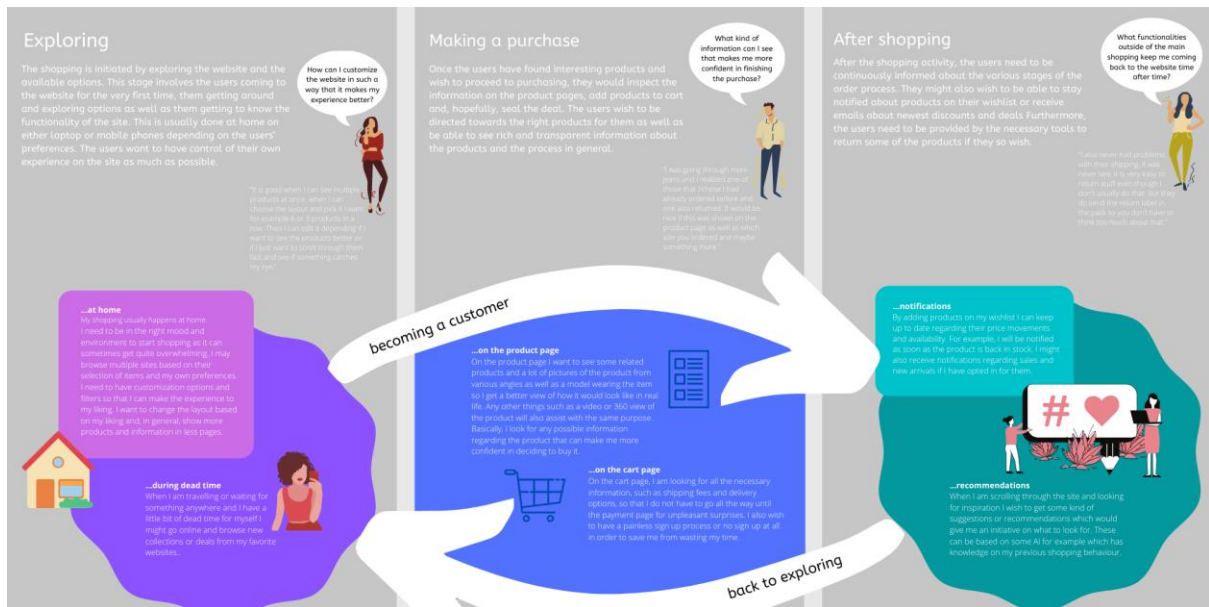


Figure 3 - The Day-in-the-Life Model

Source: The project (2020)

1. **Exploring** - This functions as the starting point for both new users as well as the returning ones. It includes both going through products as well as getting to know the functionality and can be done on both big - and small screens. For this phase, the users require a lot of customization options so that they can change the experience to their personal likings. The exploring can be done from home or on the move during any chance of dead-time. A zoomed view of the exploring part can be seen in Figure 4.

Exploring

The shopping is initiated by exploring the website and the available options. This stage involves the users coming to the website for the very first time, them getting around and exploring options as well as them getting to know the functionality of the site. This is usually done at home on either laptop or mobile phones depending on the users' preferences. The users want to have control of their own experience on the site as much as possible.

How can I customize the website in such a way that it makes my experience better?



"It is good when I can see multiple products at once, when I can choose the layout and pick if I want for example 6 or 3 products in a row. Then I can edit it depending if I want to see the products better or if I just want to scroll through them fast and see if something catches my eye."

...at home

My shopping usually happens at home. I need to be in the right mood and environment to start shopping as it can sometimes get quite overwhelming. I may browse multiple sites based on their selection of items and my own preferences. I need to have customization options and filters so that I can make the experience to my liking. I want to change the layout based on my liking and, in general, show more products and information in less pages.



...during dead time

When I am travelling or waiting for something anywhere and I have a little bit of dead time for myself I might go online and browse new collections or deals from my favorite websites..



beco

Figure 4 - The "Exploring"-part of the Day-in-the-Life Model

Source: The project (2020)

2. **Making a purchase** - The second phase includes finding the right products through, for example, recommendations as well as making a decision regarding them by comparing the available information on the website and the product page itself. Users want to have this information as well as quality pictures, videos or other such ways of seeing the product in a more realistic setting. They also want to be directed towards products which they might be interested about or otherwise get inspired from. The goal here is to get the users to make a decision about buying products as shown in. This part of the model can be seen in Figure 5.



Figure 5 - The "Making a purchase"-part of the Day-in-the-Life Model

Source: The project (2020)

3. **After shopping** - The third phase includes additional functionality that the users can use and benefit from in order to leave them with a positive experience as well as to encourage them to return back to the website and buy more products. The users need to be continuously updated regarding their orders and other products of interest, such as the ones on their wishlist. They might also wish to opt in for receiving newsletters and discounts or get new product recommendations in any other possible ways. Preferably, the users can be persuaded to return back to the browsing stage and make further purchases. This part of the model can be seen in Figure 6.

After shopping

After the shopping activity, the users need to be continuously informed about the various stages of the order process. They might also wish to be able to stay notified about products on their wishlist or receive emails about newest discounts and deals. Furthermore, the users need to be provided by the necessary tools to return some of the products if they so wish.

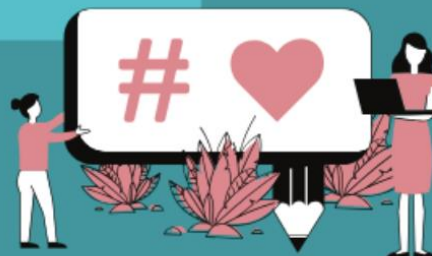
What functionalities outside of the main shopping keep me coming back to the website time after time?



"I also never had problems with their shipping, it was never late, it is very easy to return stuff even though I don't usually do that. But they do send the return label in the pack so you don't have to think too much about that."

...notifications

By adding products on my wishlist I can keep up to date regarding their price movements and availability. For example, I will be notified as soon as the product is back in stock. I might also receive notifications regarding sales and new arrivals if I have opted in for them.



...recommendations

When I am scrolling through the site and looking for inspiration I wish to get some kind of suggestions or recommendations which would give me an initiative on what to look for. These can be based on some AI for example which has knowledge on my previous shopping behaviour.

Figure 6 - The "After shopping"-part of the Day-in-the-Life Model

Source: The project (2020)

The Identity Model

The second model chosen for the project is the Identity Model. It helps in finding various types of identities within the users as well as in pointing out what are the general characteristics and needs of these customers. This said, the Identity Model provides a bigger picture towards market positioning and messaging as the designers will be more aware of what type of customers they are dealing with. As the name inclines, this model obviously targets the Cool Concept of Identity within the Wheel of Joy in Life (Holtzblatt, 2016). To initiate the idea of various identities for the interviewees, they were asked early on to identify themselves as shoppers as shown in question four of the interview guide. Afterwards, the idea was to keep an eye out for emotional queues and words, such as “like” and “hate”, which would give hints about specific identities. After the Data Consolidation session, the notes pointing towards various identities were searched for and used in building the Identity Model show in Figure 7. Furthermore, the identities are grouped in three separate sections, with a zoomed in figure of the model included in each section, in order to emphasize in which context these specific identities can be perceived. These three groups as well as the various identities established within them are explained below in more detail.

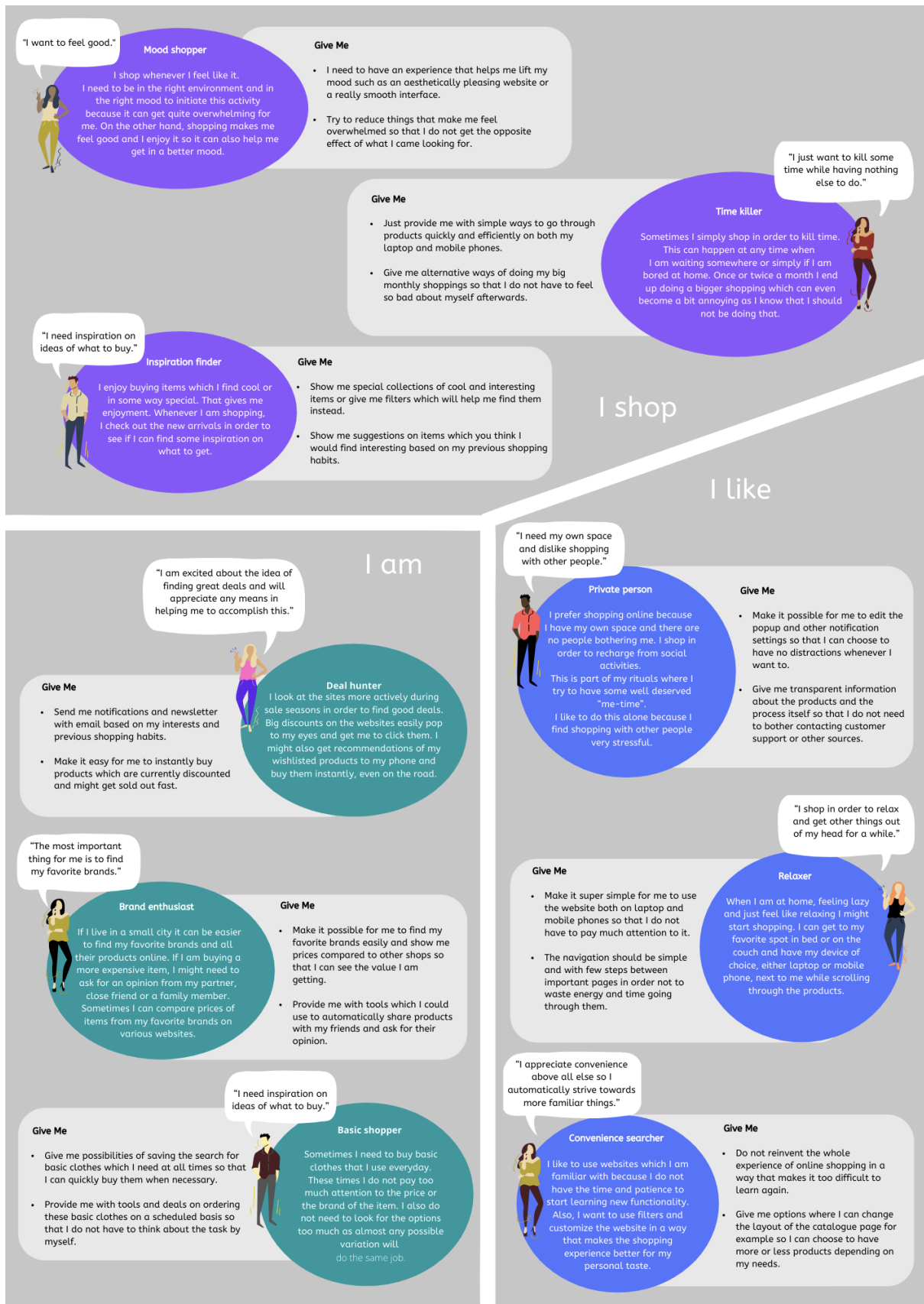


Figure 7 - The Identity Model

Source: The project (2020)

1. **I shop** - The identities within this first group explain what underlying purposes the users might have for their reason to initiate the shopping activity in the first place. For what reason did they decide to come and browse the products on the website?
 - 1.1. **Mood shopper** - These types of users need to be in the right mood in order to start or keep on shopping. Shopping in general makes them feel good. They want to avoid getting overwhelmed by the website so that it does not ruin their experience.
 - 1.2. **Time killer** - These people shop whenever they are bored and have some time to kill. They are looking for simple and quick ways of going through the products on both big - and small screens. Furthermore, they might do bigger shoppings when bored, which they would like to avoid and could appreciate getting alternative solutions for.
 - 1.3. **Inspiration finder** - These personalities are looking for something interesting and special which would inspire them and help them decide what else to get. They regularly check new arrivals and are interested in seeing product recommendations based on their previous shopping activities.

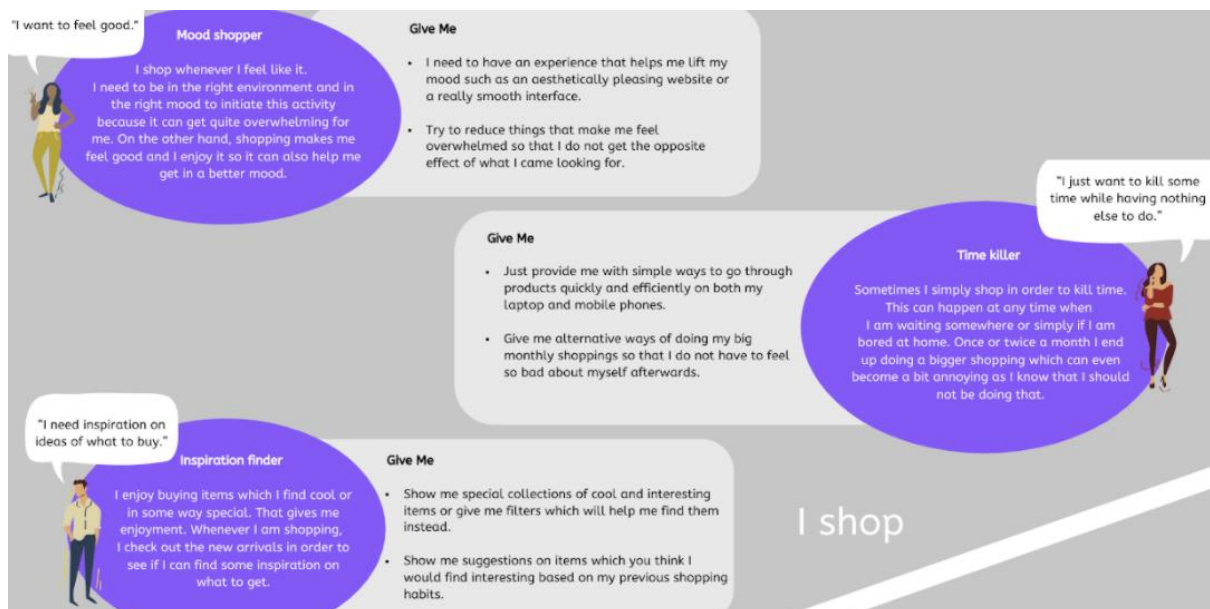


Figure 8 - The "I shop"-part of the Identity Model

Source: The project (2020)

2. **I am** - The second group identifies more of the requirements of the customers. What kind of products are they looking for and what kind of functionalities could help them in achieving their goals?
 - 2.1. **Deal hunter** - As the name implies, deal hunters are always on the lookout for great discounts, though they are more active during sale seasons. They are drawn towards these sections and products on the websites and even save some products on their wishlist and sign up for newsletters so that they can get notifications when the prices go down. Also, they want to have simple ways of instantly buying the products when the opportunity arises.
 - 2.2. **Brand enthusiast** - These users have their own favorite brands which they are very fond of. They shop online in order to easily find the brands and have a wide selection of products from them. For these users, the price does not have as big of an influence as the others, though, they might still need to ask for someone else's opinion when the products are very expensive.
 - 2.3. **Basic shopper** - They do not give much attention to either price or brand as they are looking for basic items worn in everyday situations. They just need to be able to find the product and do not even care about comparing the different options. They might be interested in buying often needed clothes on a scheduled basis if possible.

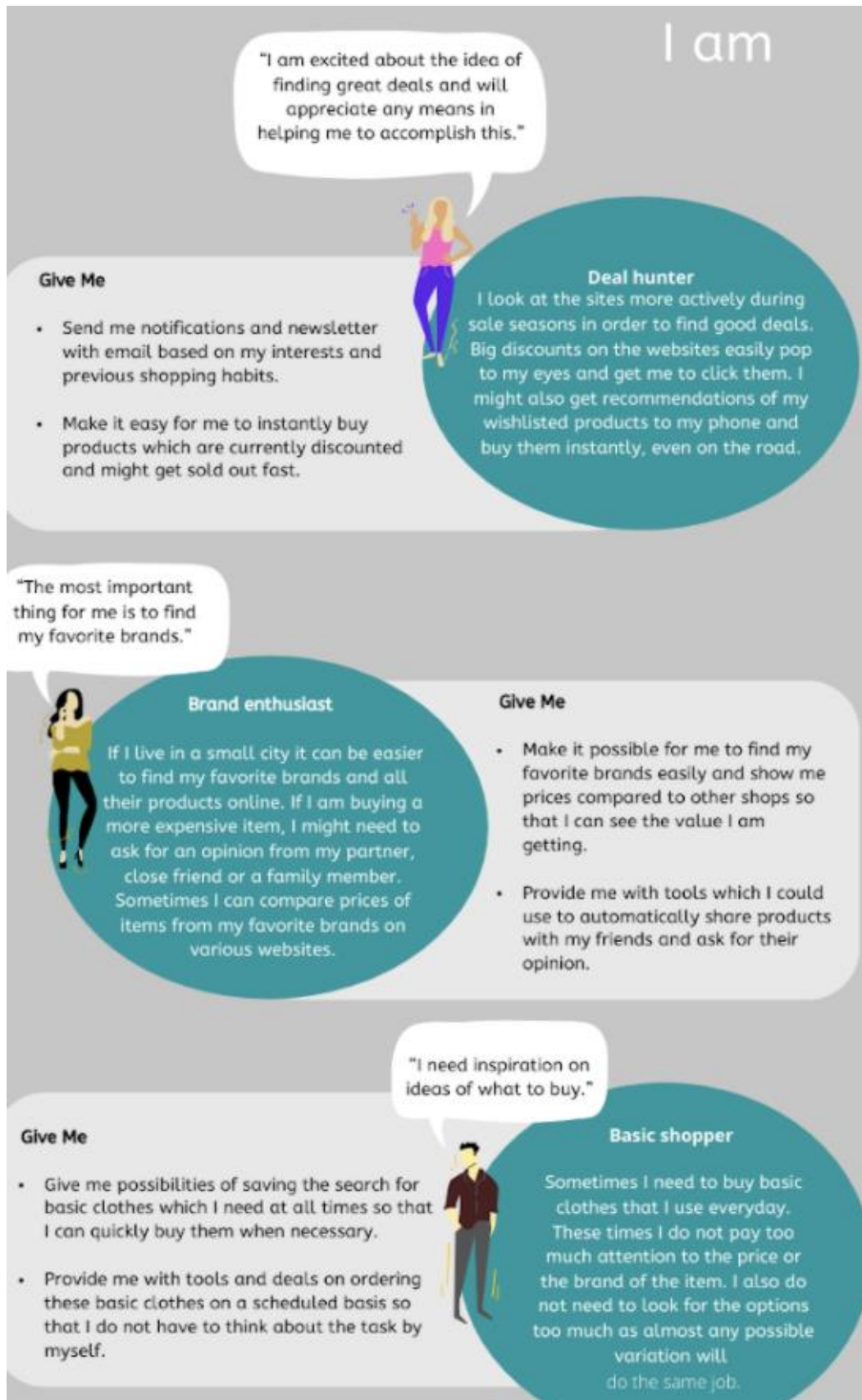


Figure 9 - The "I am"-part of the Identity Model

Source: The project (2020)

3. **I like** - The third group of identities specify what kind of things the customers appreciate on e-commerce websites. What are the functionalities and information available that speaks to their core motives?
- 3.1. **Private person** - People with these identities need space and want to avoid external disturbances, such as other people. In fact, they use this alone time to recharge from social activities and in order to do that they want to be able to disable pop ups and notifications. They also want to be able to find out information about anything necessary by themselves so that they can avoid contacting customer support, for example.
- 3.2. **Relaxer** - Relaxers come to the website in order to clear their minds from other things. For new functionalities, they want to have a low learning curve and, for navigational elements, they prefer having less pages to go through so that they can avoid wasting time and energy going through various sections.
- 3.3. **Convenience searcher** - This last group of people love convenience above all else. They like to use things which they are already familiar with and will take a lot of work to persuade otherwise. They also have their own specific tastes of products which they want to be able to easily find so they require effective customization of filters. Furthermore, depending on their mood, device and other related factors, they want to be able to change how many products can be viewed at any given time on the catalogue page.

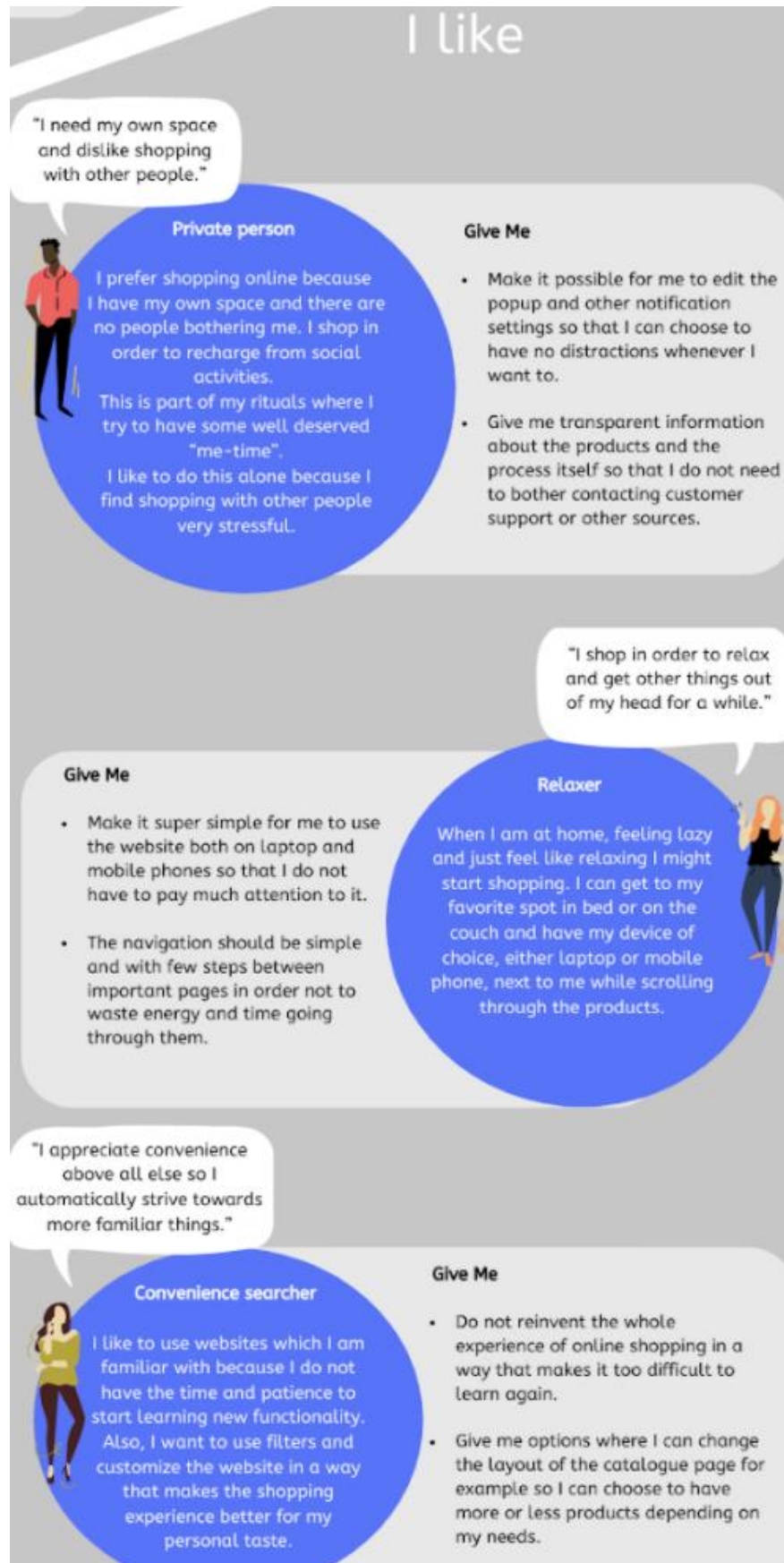


Figure 10 - The "I like"-part of the Identity Model

Source: The project (2020)

The Sequence Model

The last design model, which was chosen for this project, is the Sequence Model. Unlike the other two models, Sequence Model is a Traditional Contextual Design model meaning that it does not consider the later established idea of Cool Concepts. Instead, this model digs into the specific steps within the activity and points out the main steps of the activity, common sequences to get around as well as breaking points where the activity was not able to be successfully accomplished. With the help of this model then, the designers can enhance and fix areas where there are unnecessary steps or the flow of the activity is otherwise not smooth enough. (Holtzblatt, 2016). The elements of the Sequence Model are presented below:

- **Green elements** - These green bars are chunks of the activity provided by the product. These are the main things that users brought up during interviews which they do on the e-commerce platforms and which support the idea of the solution itself. They are the most important elements which build the activity of online shopping itself.
- **Blue elements** - The blue elements are individual actions or steps that the users take while navigating between the main steps, green elements. These routes of blue elements are divided into various paths which individual users might take to achieve the same results as, obviously, different people have different ways of getting around. On the other hand, the users might also go through multiple of these routes at a time before continuing to the next green green element.
- **Red elements** - Red elements function as description for the intention for which reason the preceding step was taken. For example, in Figure 6, the user would sign up or log in in order to get various customer benefits available. These elements help the reader of the Sequence Model understand deeper meanings of the specific actions which were taken by the users.
- **White elements** - White elements where the text starts with a red lighting symbol, as illustrated in Figure 6, indicate places where the designated action could not be finished because of various reasons. The reason for these breakpoints is indicated in the preceding blue elements though a further explanation is given in the white element itself. These elements should be used by the designers when thinking how to improve the functionality of the product.

The Sequence Model itself has been separated into various steps, each including a set of possible routes that the users can go through. These routes represent the actions which the users would go through when visiting an e-commerce website. These steps have been examined in the following sections:

1. **Get initiative for shopping** - In the first step of the Sequence Model the users are just getting the initiative for the shopping and are being led towards entering the website and starting to explore the items. In this step, the blue elements represent various possible triggers that could give the users the initial cue and raise an intent. The triggers can be brought up by notifications, advertisements or the user's need for new clothing, for example. The intents then include items such as buying discounted items or finding a specific item that the user is missing. Each variation of the triggers and intents in this step can be seen in Figure 11.

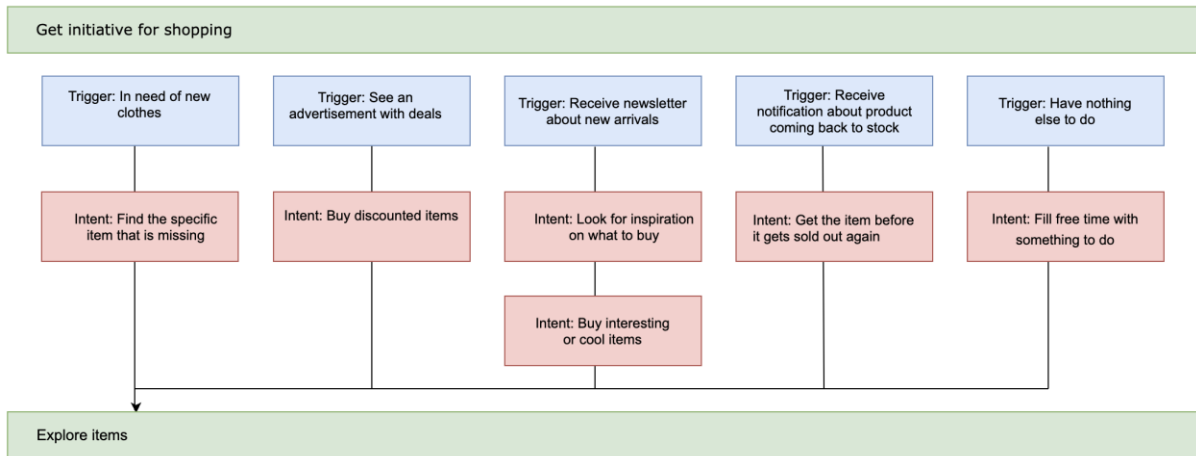


Figure 11 - First step of the Sequence Model

Source: The project (2020)

2. **Explore items** - In the second step, the users have come to explore items on the website. Here they usually perform one or more of the shown routes of action. These include actions such as customizing the website to their liking, scrolling through products and using filters to name a few. Their intents at this step could be, for example, to see more products to choose from, see more interesting products or to look for only specific types of items. All possible steps to take have been shown in Figure 12.

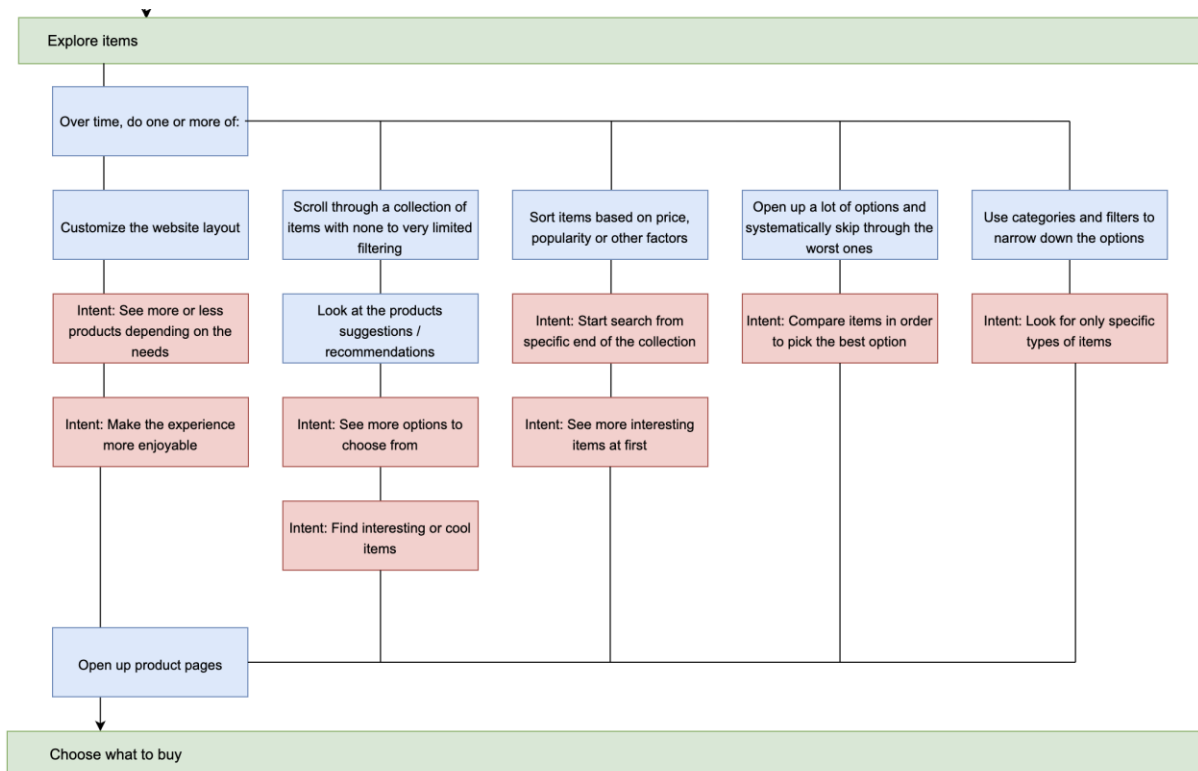


Figure 12 - Second step of the Sequence Model

Source: The project (2020)

3. **Choose what to buy** - After the users have performed actions within the exploring step they would, at some point, start to choose which items to buy. Again they have multiple routes to take which include going through the information shown on the product page, looking at the related items and asking an opinion from a friend. The main action, which all the others are leading towards, is to put specific items to cart. The intent for choosing a product could include finding the best available price for a product, getting free shipping or making sure that the product is a right fit. All the various routes, which can be taken in this step, have been shown in Figure 13.

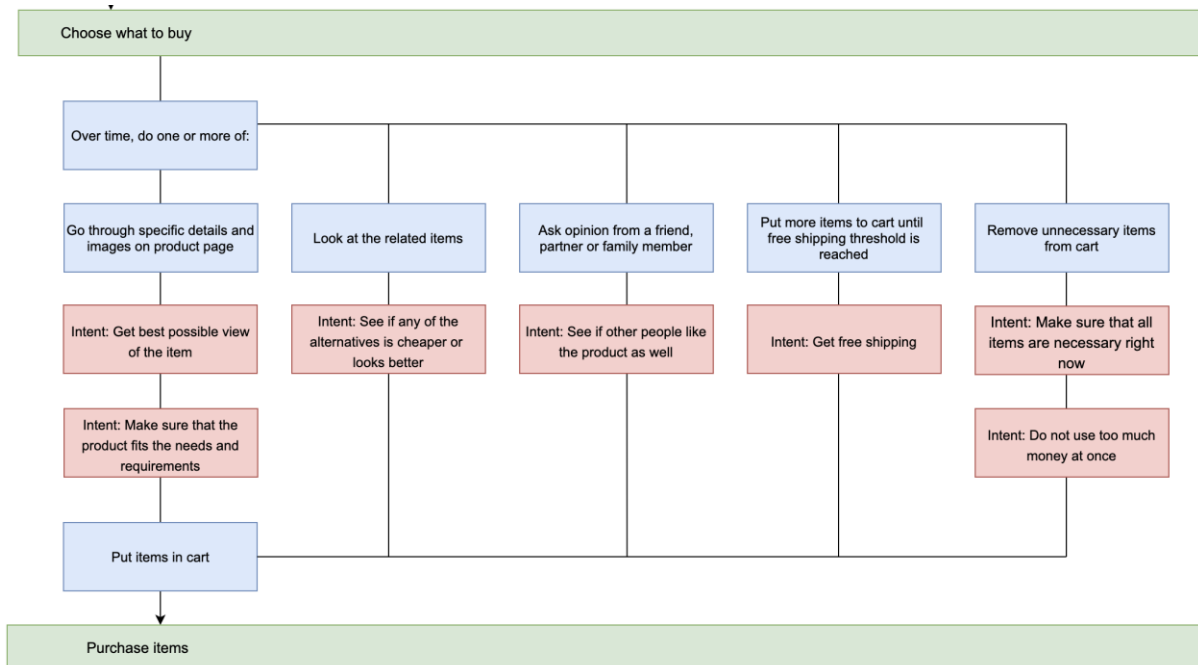


Figure 13 - Third step of the Sequence Model

Source: The project (2020)

4. **Purchase items** - After adding specific items to cart and being ready to purchase them the users could choose to sign up or log in in order to get customer benefits. In this step. A couple of breakpoints have been presented in which the activity breaks and users are turned away from purchasing their items. These include not being able to get free shipping and not seeing enough information to be able to make the final decision regarding the purchase. This step and the breakpoints can be seen in Figure 14.

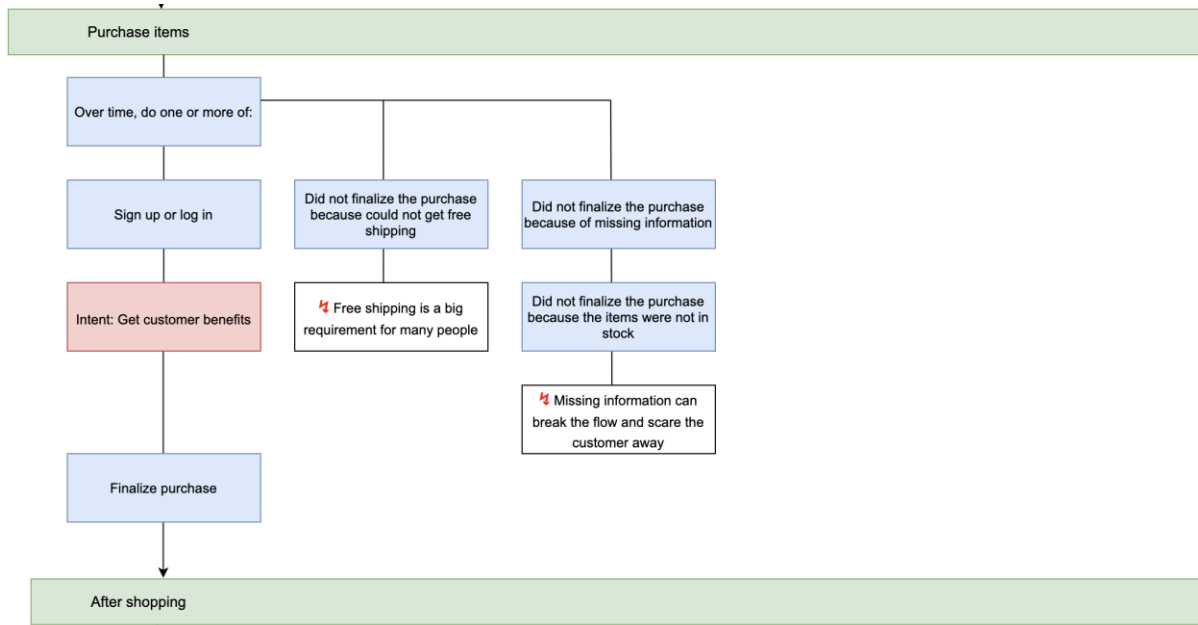


Figure 14 - Fourth step of the Sequence Model

Source: The project (2020)

5. **After shopping** - If the users were to successfully get through purchasing products they would have yet another set of actions to choose from. This step of The Sequence Model, as shown in Figure 15, includes routes for returning items, adding new items to wishlist or signing up for a newsletter. The intent for returning clothes could be that the fit was not right and for others simply to get good deals as an example.

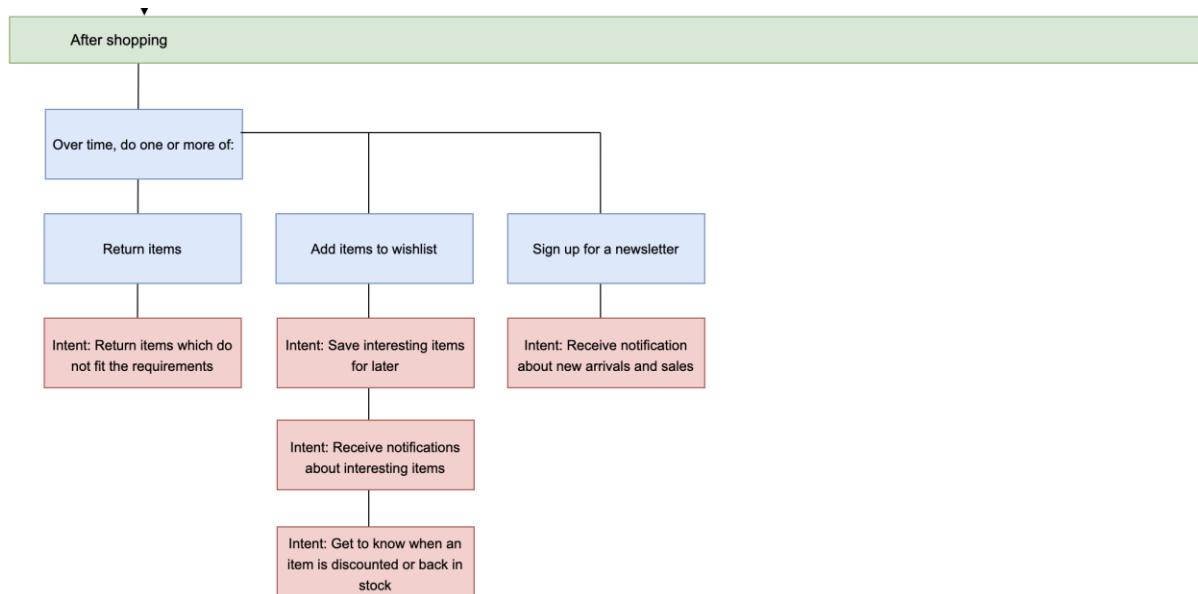


Figure 15 - Fifth step of the Sequence Model

Source: The project (2020)

Ideation

The second of the three phases within Contextual Design is ideation. In this phase the research team utilizes the design models which were created according to the data collected during the research phase. The main purpose of ideation is to innovate and come up with possible new solutions for the target activity, which would help the users accomplish their goals in a more efficient way, while also keeping in mind the Cool Concepts and transforming the way the users accomplish the activity in their everyday lives. Indeed, instead of coming up with singular functionality the design team aims to deliver life changing solutions for the product as a whole (Holtzblatt, 2016). Holtzblatt (2016, p. 307) writes the following about the users' requirements, the Cool Concepts and designing novel products in general: "But today the Cool Concepts tell us that people will no longer tolerate highly complex applications that expect a lot of up-front learning. They want products that require no learning at all — that can be used instantly and that keep life going anytime, anywhere, in any amount of time." Before moving on with ideation though, it is important to explain how exactly the creation of ideas happens, what is creativity and how does this project utilize it.

Creativity

“Design relies upon the generation of alternative ideas and their effective evaluation in order to ensure that attention is directed in a worthwhile manner” (Childs, 2014, p. 51). Design is the outcome of coming up with a bunch of ideas, putting them to the test by evaluating them with the users and improving them based on the received feedback. Ideas themselves are usually born from various sources of creativity, which according to Goldenberg and Mazursky (2002) can be explained with the help of three different main categories. These categories are the following:

1. **The Creative Person** - Creative person is someone who has the ability to generate ideas and choose the best suited ones for the given problems. Though, to achieve this, they might use some previously defined set of creative tools and methods.
2. **The Creative Process** - Creativity can be achieved through a creative process which would include getting to know the issue at hand, using creative methods to come up with solutions, getting deeper insight into the possibility of implementing these solutions and finally evaluating the solutions with users.
3. **The Creative Idea** - Innovating through already existing creative ideas can be achieved by looking at how other solutions have tackled previous issues and replicating them in various new ways.

In this project, both the creative processes and the already existing creative ideas have been used in order to come up with the design solutions. On one hand, Contextual Design has its own set of tools which guide the team through creating ideas and narrowing them down to a final design. On the other hand, this project utilizes ideas and designs from existing resources to achieve a more recognizable and appealing solution by following recommended common web usability - and persuasive technology practices.

The Wall Walk

The ideation phase in Contextual Design is started with a quick creative process called the Wall Walk. During this process the team comes up with product ideas based on the various labels created for the Affinity Diagram. The aim is to target the green labels of the Affinity Diagram as much as possible as these are the main design thinking themes and concern a wider array of interests and issues. Though, for the purposes of innovation, the other level of labels could be used as well if necessary. This way, the team makes sure to target a wide range of issues and other areas of interest documented from the interviews (Holtzblatt, 2016). Five product ideas were created as part of this creative process which, with their associated affinity labels, are shown below:

1. **Highly customizable shopping experience** - A website with a lot of tools to edit what the user is seeing. It could be, for example, built block by block from separate modules of functionality or pages that the user can place wherever they wish to on the page itself.

▶ Having control of what I am doing is important in order to have a good experience.

2. **An infinitely continuous flow with all the products** - All the products would be shown on a single page but the user would be given dozens of filters for every possible option and detail so that they could choose exactly what to see. They could also save the different setups and name them to be used at a later time.

▶ I want to have less pages to go through.

▶ I want to effectively control which items I am seeing.

3. **Virtual reality shopping experience** - A virtual lounge where the user can walk around with other characters which would be models wearing the available clothing. The user could then switch the clothes on the models as they wish or see more information about any specific item.

▶ Being fully aware of what I am looking at makes me more confident in making the right choice.

4. **Club or membership based website** - A website with personalized shopping experience in a way that the user would be given an initial questionnaire which would then provide them with content and offers tailored to their personal needs and requirements.

▶ I need to be directed towards the right direction.

5. **Product collector hub** - A website which would collect products from various websites and show them to the user. The user could then see multiple various prices as well as mix and match items from separate shops in order to get free shipping, for example.

▶ I have difficulties deciding what to buy.

▶ I can be persuaded to buy more items.

Visioning

At the visioning stage, the design team takes the ideas they previously came up with, evaluates them, takes the best parts of each idea, applies design elements from the design models and builds one coherent solution which they decide to continue working on. Furthermore, they go through the various Cool Concepts one by one and apply them to the final idea as well as draw initial sketches of the product concept (Holtzblatt, 2016).

Evaluation of initial ideas

According to Hao et al. (2016), both idea generation and idea evaluation are essential parts of the creative process. By alternating between these two phases the team is more likely to

end up with higher quality ideas and build solutions which are both original as well as effective. The evaluation of initial ideas in this project is based on a simple process of listing the positives and negatives of each idea and writing them down, which is the preferred method suggested by Holtzblatt (2016). While doing so, the team should also ask themselves the following three questions for the sake of being able to successfully build the solutions in the first place:

1. *Does it fit the users' practice?*
2. *Is it doable technically?*
3. *Does it fit with the business mission and organizational skills?*

Because of the limitations set for this project in the beginning, where anything business related was decided to leave outside of the project scope, the third point is not being considered at all during this phase. Instead, the focus is solely on the two first points and the evaluation will be done on the basis of the skills of the one man team available. The following points of pros and cons were listed during the evaluation phase:

1. **Highly customizable shopping experience**

Pros <ul style="list-style-type: none"> + Having a lot of customization gives the users more choices to edit the experience to their personal liking. + Building the website from components would allow the owners to easily add new pieces of functionality to satisfy a wide array of needs. + Technically, it would be simple to add new components.
Cons <ul style="list-style-type: none"> - Having the whole site based on customization could turn away users who prefer a simpler experience. - Having to build the website from components would also force the users to first create accounts in order to be able to use the site in the first place. - Technically, it could consume too many resources to create the base for the website as well as support it in the future.

2. **An infinitely continuous flow with all the products**

Pros <ul style="list-style-type: none"> + Having all products on a single page would greatly reduce the effort of navigating between various sections. + Highly detailed filtering system would allow the customers to find exactly the kind of product they are interested in. + Technically, it is a very simple and quick solution to implement.
Cons <ul style="list-style-type: none"> - A single page e-commerce website could feel "small" and give out the expression that it does not have a lot of variation in products. - Again, too much customization in the form of filters can frustrate the customers who are looking for a more relaxed shopping experience. - Technically, if not implemented right, it can be a very slow process to load all the products and filter them on a single page.

3. Virtual reality shopping experience

Pros <ul style="list-style-type: none">+ Seeing the clothes in virtual reality would allow the users to have a very good view of what they are actually considering to buy.+ Many of the interviewees were saying they use functionalities which enable them to see the product on a model or ask a friend's opinion.+ Virtual reality is becoming more popular so it could help make the product more interesting and boost it out to the markets.
Cons <ul style="list-style-type: none">- Many people who just want to buy clothes might not be interested in entering a virtual reality and getting the equipment for it in the first place.- Putting the clothes into virtual reality might lose a lot of their "life like" qualities and make them look pixelated.- Technically very difficult to implement and out of the scope of the available skills.

4. Club or membership based website

Pros <ul style="list-style-type: none">+ The questionnaire would help with providing interesting products for the users.+ Subscription based models could work with people who are interested in getting the same basic clothes on a regular timespan.+ Technically, quite simple to implement.
Cons <ul style="list-style-type: none">- Some people might not be interested in answering a questionnaire in which case the website would not offer them anything special.- The idea as a whole is not very original and might not stand out of the masses.- People might not want to pay a monthly subscription fee for a clothes based e-commerce.

5. Product collector hub

Pros <ul style="list-style-type: none">+ This idea would provide the users with unlimited amounts of products and stocks as anything available on the internet could be used.+ It would also enable the website to provide the cheapest possible prices which can be found online.+ Once operational, it would require almost no further effort in the sense of development.
Cons <ul style="list-style-type: none">- "Pricerunner"-type of websites already exist so the idea would not be very original.- Technically, it would be very difficult and time consuming to implement as it would require figuring out how to get products and how to use them from other sites.- It would also be quite difficult to create a system where the users would buy from different websites at the same time plus the orders would be almost

impossible to group into one delivery.
--

Combined product concept

Once the initial ideas have been evaluated it is possible to mix and match their best functionalities in order to build a one coherent product concept and support a wider spectrum of needs. The idea is to find those elements of the ideas which provide most value to the users, as represented in the design models, and which the team would have actual capabilities implementing. Then, by combining these elements into one common product idea, many of the weak points can be addressed while enhancing the strong ones. Afterwards, it is important to look at the Cool Concepts once more in a process called the Cool Drilldown. By doing this, the team can maximize the effect of which their product would provide joy for the users in the context of their whole lives (Holtzblatt, 2016). Following Krug's (2014) web usability principle of convenience, the initial ideas were combined into a form of a traditional e-commerce website and a set of hot ideas for the most important pages, representing the activity sections from the Sequence Model. Furthermore, wireframes were created from each of these pages in order to provide a direction for the designers to continue in the following phases. The created wireframes are shown in the following section presented with a page title, the related hot ideas and a short explanation. After the wireframes, it has also been explained how the Cool Concepts were applied as part of the Cool Drilldown.

Home page

- *Provide the user with personalized content by having them fill in an initial questionnaire on sign up.*
- *There should be a way for the users to get product recommendations based on their preferences.*
- *The user should be able to get tailored notifications about products of their interest.*

The home page represents the entry point for the "Get initiative for shopping"-section from the Sequence Model and is the starting point for the users when they first enter the website. The presented hot ideas have been derived from the "Inspiration finder" - and the "Mood shopper" identities as well as each of the identities from the "I am"-section looking for specific types of products. On the home page, the users have a possibility to sign up and answer a questionnaire regarding their demographics as well as personal preferences of the products. This information would then help by building a personalized profile specific for that customer and enabling the site to provide them with customized content. This content is, for example, shown in the form of recommended products - and favorite brands sections. Before signing up these sections would be filled with the most popular items instead. Furthermore, the users would also be able to see here their recently viewed products as well as news articles and blog posts regarding latest fashion trends. Optionally, they could choose to turn the latter feature off from the settings on their account page. The wireframe for this page can be seen in Figure 16.

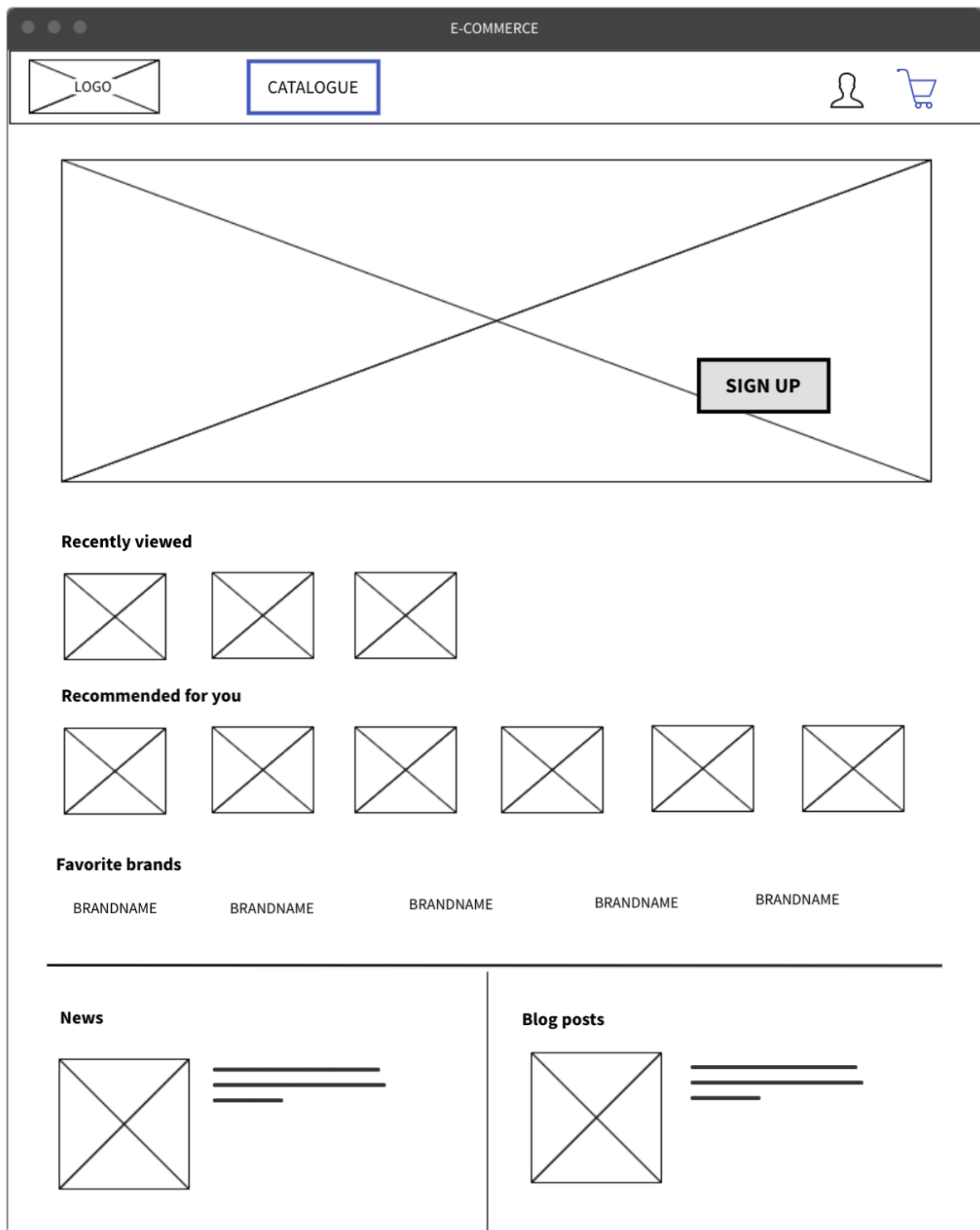


Figure 16 - Wireframe of the home page

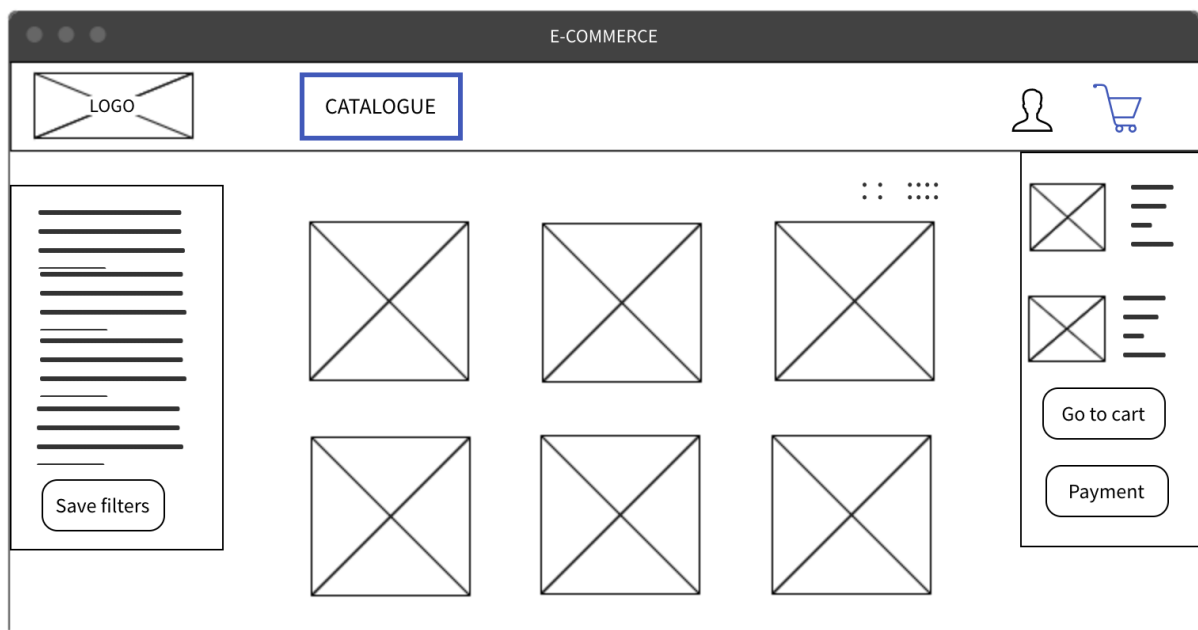
Source: The project (2020)

Catalogue page

- *The website should be like a single page so that you never spend too much time navigating between different sections.*
- *Build your own page with saved filter settings, layout and other possible preferences.*

- *Customize your own shopping experience by changing the layout, how many products are shown and more.*
- *The user should be able to continue their progress on the website or app at any given time and location without having to start over by saving the filters and seen products.*
- *Make it possible to hide previously viewed products or show them in a different place.*
- *Save filters settings on profile.*
- *Make it possible to see all variations of the product on the catalogue page without having to go to the product page.*

The catalogue page represents the “Explore items”-section from the Sequence Model and functions as the place where the users would primarily come to find products. Most of the hot ideas are directly related to the steps in the Sequence Model itself while also addressing the “Exploring”-section of the Day-in-the-Life Model as well as the “Convenience searcher” - and the “Time killer” identities. The catalogue page works as a singular page in a way that there is no need for jumping, for example, between different sections for genders and categories. Instead, a wide variety of filters would help the users in searching for the products they are interested to find. If logged in, they would also be able to save and name the specific selection of filters for their account in order to use it again at a later time. To support multiple devices and screen sizes, the users can also change the layout, meaning the amount of products shown for each row. Furthermore, one of the filter options would help these users continue their progress on a different device or time by enabling them to hide already viewed products on demand. By hovering their mouse or, on mobiles, pressing their finger on top of a specific product the users could also see color variations and other information of the same product in a quick view without the need of switching to the product page itself. The wireframe for the catalogue page can be seen in Figure 17.



Product page

- *Help the user save money in every possible situation by showing them deals and prices for similar products.*
- *Show all the important information to the users, in the right places and without cluttering the interface such as shipping fees and products in stock.*
- *Suggest size based on prefilled personal model information, show your own model with the clothes.*
- *Share products with friends and get feedback.*
- *Let the users reserve items instantly from the product page without going to cart first.*
- *If there is a model on the product page, always link and show also the other products she is wearing so that the users can complete the outfit.*

The product page represents the “Choose what to buy”-section of the Sequence Model and is the place where the user would come to see further information about the item they are interested in and to possibly add it to their shopping cart. Again, many of the hot ideas were created directly from the section within the Sequence Model itself. Additionally, the hot ideas are related to the “Making a purchase”-section of the Day-in-the-Life Model as well as the “Private person”-identity. On the product page, the users would be able to see normal information such as a short description, available colors, price and a possible discount, to name a few. Furthermore, additional information would be available regarding the fit, delivery and reviews. In order not to clutter the page with information, these sections have been separated to tabs where the user could change the currently shown section at their own will. The size of the product would be suggested based on the user’s previous shopping habits and the demographics filled during sign up, though, they would also be able to “try on” the product on a model to see how different sizes would fit different body types. The chosen body type can also be saved to have it quickly available in future. Moreover, the users can quickly share the product with their friends in order to ask for feedback regarding it. The outfit shown in the product pictures can also be easily completed, or similar items can be checked out, from the product links shown on the page. Lastly, the users are able to either wishlist or reserve the product for a limited amount of time if it happens to be in sale, for example. This could prove useful if they wanted to make sure to purchase the product but did not have enough time to look at other products at the time in order to qualify for free shipping or other benefits. Wireframe for the product page can be seen in Figure 18.

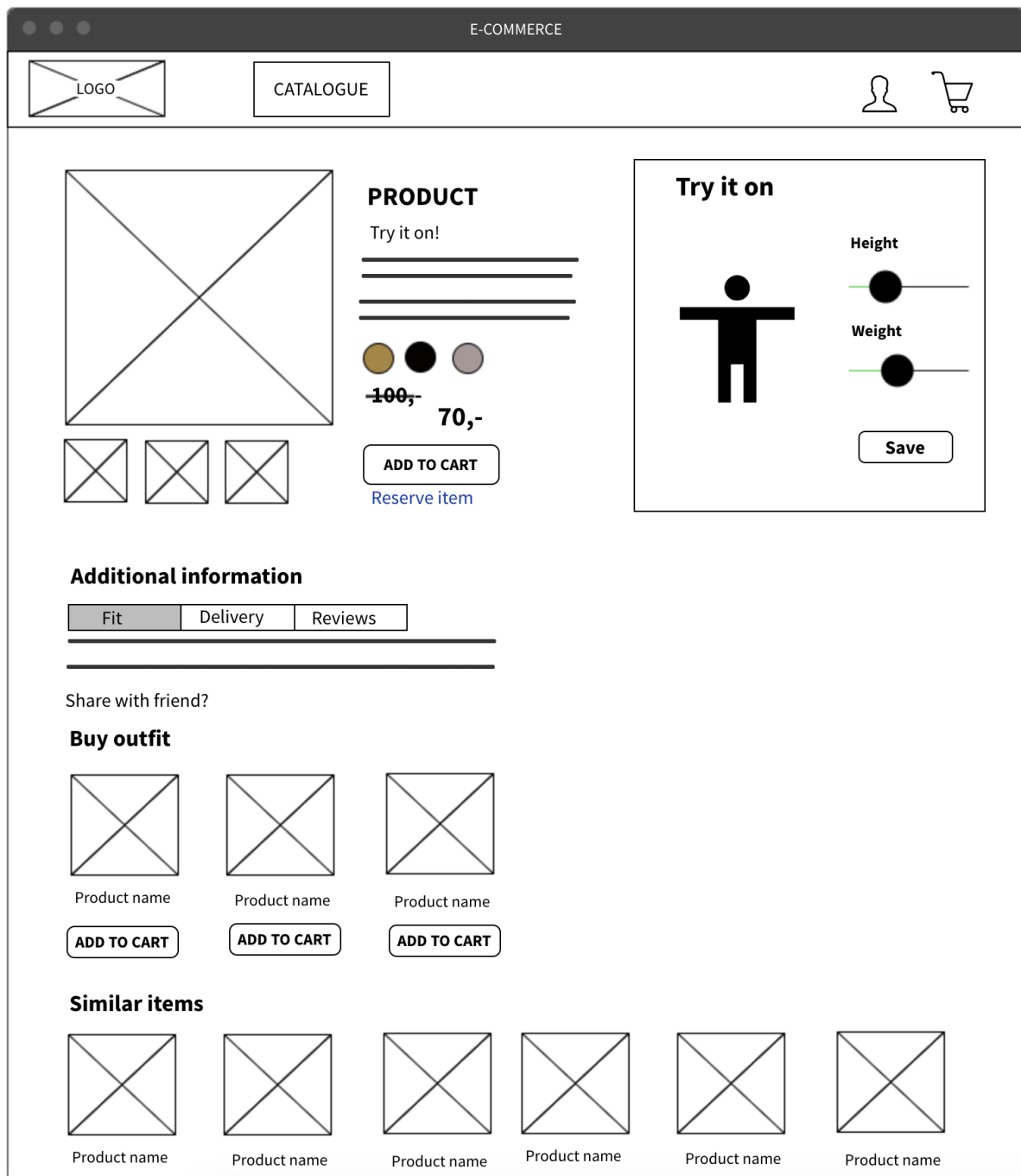


Figure 18 - Wireframe of the product page

Source: The project (2020)

Shopping cart page

- *Let the users purchase products without filling in too much information or signing up.*
- *Add from reserved products for a single delivery in order to get free shipping. Show cues when free shipping would be available.*
- *Get delivery together with another person for free shipping.*

The shopping cart page represents the “Purchase items”-section of the Sequence Model and as was the case with the product page, also inspired hot ideas from the “Making a purchase”-section of the Day-in-the-Life Model. No specific identity was used as a primary

inspiration for this page though, for example, concerns regarding the “Relaxed”-identity were touched. The shopping cart page is usually the place where the users would make their final decision regarding the purchase. Here, the idea was to make a very simple layout showing only the most important information as not to confuse the users with unnecessary details. Depending on their status of being signed up or not they could be able to skip filling out address information altogether. Information that is shown, includes the current products in cart, price distribution as well as how much is missing for free shipping, if available. The users would also be able to add their previously reserved products here in a simple press of a button. Furthermore, a link to share their shopping cart information with a friend has been added in case the users have not yet completely made up their mind at this point. Wireframe for the shopping cart page can be seen in Figure 19.

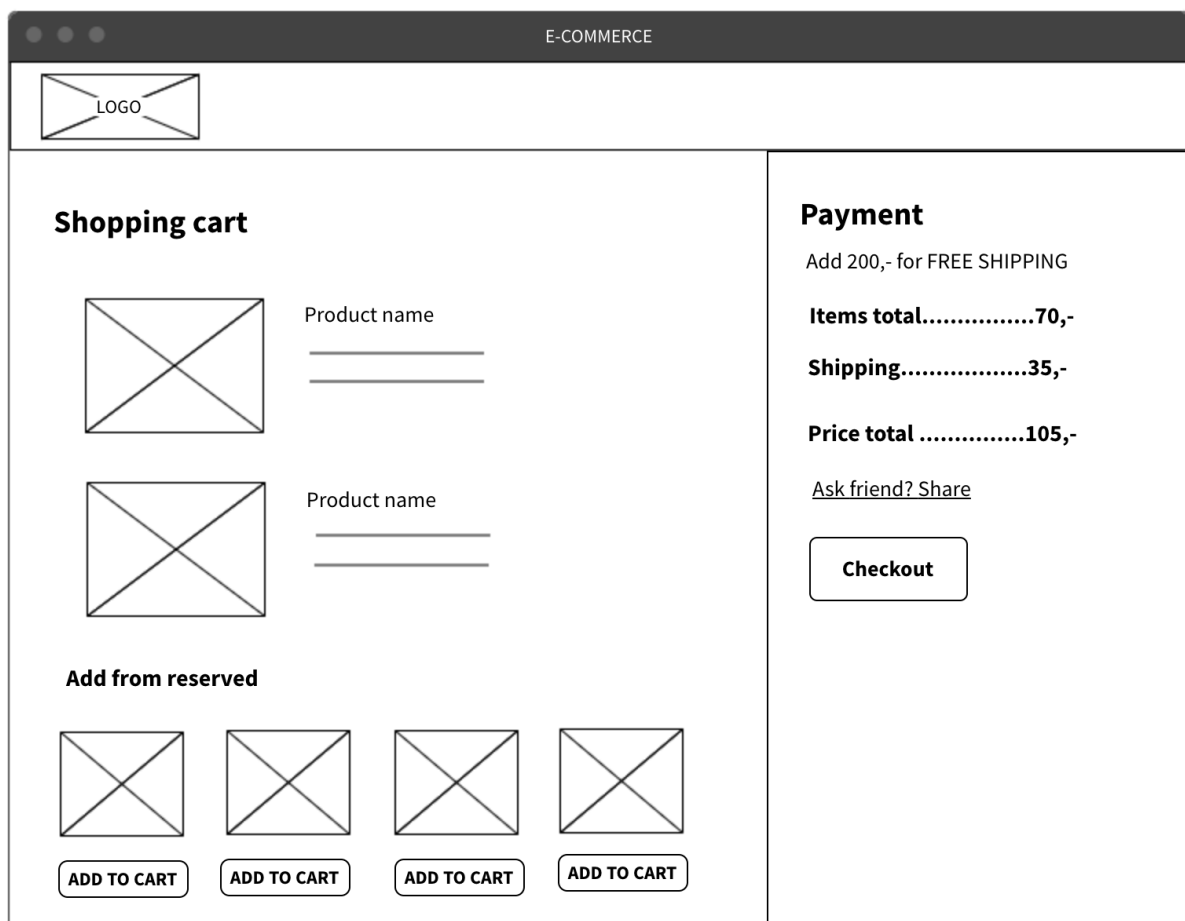


Figure 19 - Wireframe of the shopping cart page

Source: The project (2020)

Account page

- *Personalized newsletters based on user preferences and previous shopping habits.*
- *Show news or blog articles about fashion to those who might be interested.*

Account page functions as the “After shopping”-section from both the Sequence - and the Day-in-the-Life Model. Also, the “Brand enthusiast”-identity was used to generate hot ideas. The account page is the place where the users would come to see and change various things regarding their personal information, preferences and history. For example, the users could change preferences regarding their personalized content which would have been

initially set by the sign up questionnaire and, after that, updated continuously by their shopping habits. Many things would be based on these preferences, such as the recommended products and monthly email newsletters. Some elements on the website could also be enabled or disabled on the account page, such as the fashion blog and news articles on the home page. All the content on the page itself has been divided to different sections which are: account, wardrobe, orders and setting. The wardrobe, as an innovative idea, has been further examined in the following chapter. The wireframe for the main layout of the account page can be seen in Figure 20.

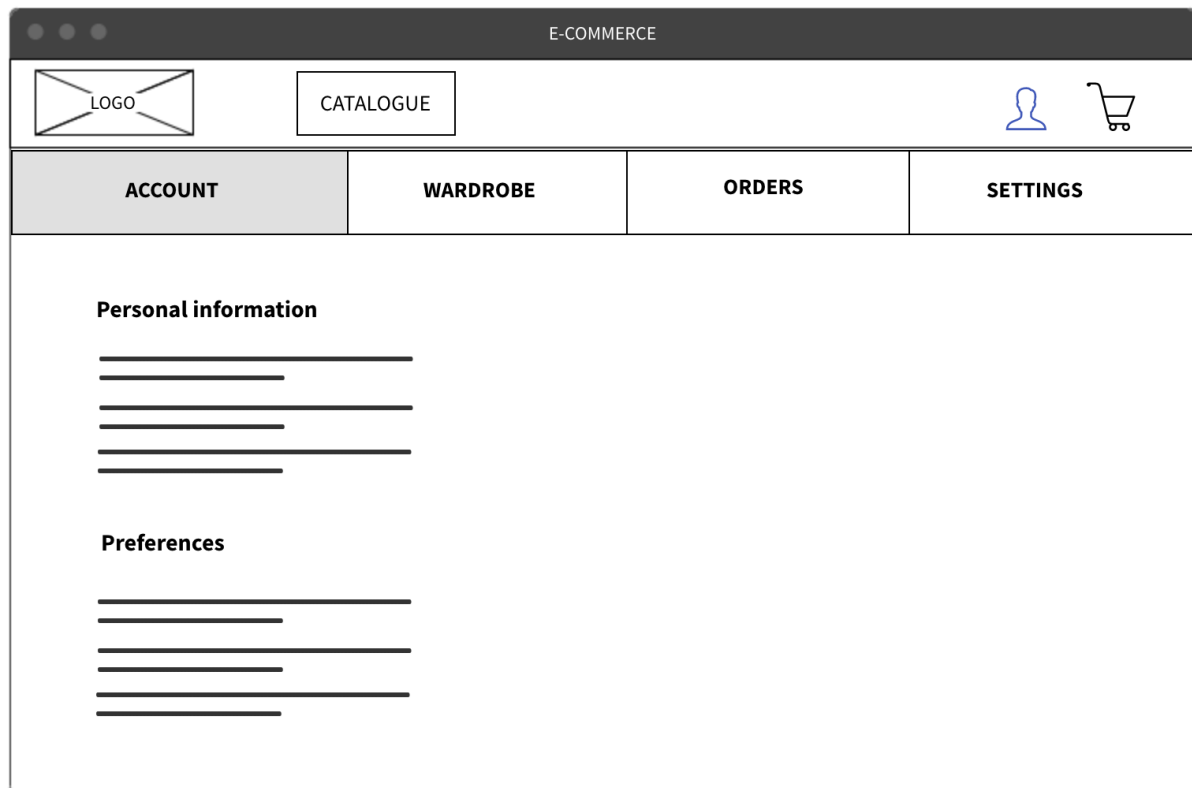


Figure 20 - Wireframe of the account page

Source: The project (2020)

In the end, wireframes were created with associations to each of the sections within the Sequence and the Day-in-the-Life Models. Additionally, most of the Identity Models were tried to be used as inspiration when creating the hot ideas. In the next chapter, it is explained how the Cool Concepts were considered while creating these wireframes and the concept itself.

The Cool Drilldown

As mentioned before, it was necessary to consider the Cool Concepts once more and apply them to the newly created product concept. In this chapter each Cool Concept is explained in a sense of how they affected the creation of the new product idea, though, in reality they were already considered before drawing up the wireframes. Cool Concepts used from both the Wheel of Joy in Life as well as the Triangle of Joy are described in the following:

- **Accomplishment** - Accomplishment was included by adding functionality such as the product reservation that enables the users to spend more time in looking for the products and not having to make a purchase decision instantly when a product would

get discounted. Additionally, being able to hide the previously shown products helps the users in filling their dead time by quickly continuing where they have previously left off.

- **Connection** - Connection can be seen on the product and shopping cart pages where the users are able to share their products with friends and quickly ask for help with just a press of a button.
- **Identity** - Various identity elements were applied according to the Identity Model. Some of them also mix with the other Cool Concepts but small additions can be seen all around the website, such as the fashion news and blog posts, catalogue page customization and filter saving as well as the “Try it on”-functionality on the product page to name a few.
- **Sensation** - The Cool Concept of sensation was not included into the product concept and wireframes at this point. Instead, it was decided to leave this until the design phase where it could be more effectively utilized.
- **Direct into Action** - This Cool Concept can be seen in, for example, the sign up questionnaire which, after being filled, helps the users at finding interesting products. Furthermore, small queues, like how much is missing from free shipping on the shopping cart page, have been added all around to show important information so that the users do not have to waste time looking for them.
- **The Hassle Factor** - Firstly, the hassle factor has been reduced by not requiring sign up. Though, the sign up process has been made more lucrative by providing useful functionalities, like saving the filters and getting recommended products, which would reduce the necessary hassle in even a greater factor.
- **The Learning Delta** - Main idea during combining the initial ideas, which was based on the interview data as well as both the web usability - and persuasive technology principles, was to not create a product that would transform the whole shopping experience as the users know it. Instead, it was important to have a traditional e-commerce feeling for the website while adding innovative functionalities to create a more effective and joyful experience.

Design

The final part of the project includes the design phase. During this phase, gained knowledge from both the web usability and behaviour change theories have helped in transforming the previously created wireframes into product design mock-ups. These steps have been separated in a way that first the web usability has been used while creating the initial high level designs and afterwards various additions regarding the persuasive technology principles have been implemented in order to encourage the users into action. In the end,

the designs have been validated with the same interviewees who participated in the Contextual Inquiry process at the beginning of the project.

Mock-ups

While creating the mock-ups, the general structure and layout of the designs was kept from the wireframes but a more graphical presentation was created by adding pictures, colors, and other utilities. The web usability theory from Krug (2014) was applied in order to have an easily recognizable and understandable product. The main idea was to keep the website simple so that it was both easy to learn but also quick to scan through. For example, when adding buttons, it was important to not only color them in indicative manners but also to write their messages in as few as possible words with definitive meanings. This way it would also be much more effective for the users to quickly choose the most satisfying options while scanning through the pages. Furthermore, all the functionality was kept as simple as possible building on the idea from Krug (2014) that the users do not have either time nor patience to start learning completely new and complicated tools. Various other ways of implementing the web usability techniques, as suggested by Krug (2014), have been further demonstrated in the following sections:

- **Persistent navigation** - Persistent navigational elements were added in the form of header and, at this point, an empty footer which would appear on almost every page. Such conventions can be used to show the users that they are staying on the same website while navigating through different pages. The footer was left empty as it would be mostly customized based on the specific company information and, for example, social media links. Some pages, such as the checkout - and payment pages, are usually left without header and footer in order to help the users focus on the specific task on hand. According to Krug (2014), four elements are recommended for persistent navigation: a logo, sections, utilities and a search bar. In the mock-ups, as the company is an abstract entity, a placeholder has been used to represent the logo. The logo is the main thing about the whole idea of persistent navigation showing users that they are staying on the same page. Furthermore, it provides safety as it can be used to return to the home page whenever the users would get lost. The other three main elements of persistent navigation, with the alteration of including search bar as part of utilities, are further examined in the next two points. The persistent navigation element in full can be seen in Figure 21.



Figure 21 - Screenshot of the persistent navigation

Source: The project (2020)

- **Sections** - Sections, or the primary navigation, are the second element included in the persistent navigation. These links include, quite literally, the main sections of the website for quick navigational access. In the designs only a few links were added but, naturally, these could be expanded on a company basis. As mentioned before, the texts included in these links needed to be self explanatory so that the users would

quickly understand where they might possibly be directed towards. In this project and in the product designs, there was no need for a subset of sections because the navigation was specifically meant to be simplistic and with as few pages as possible. Normally such subsets could be shown as dropdowns, for example, when the users would hover over a specific parent link. This part of persistent navigation is especially important for the type of users who Krug (2014) calls the “link-dominant” users. Such users would typically browse around the website preferring links as the main method of navigation. The other group of users are the “search-dominant” users which will be further explored in the next point.

- **Utilities** - Utilities, including the search bar, are persistent navigational elements like the logo and the sections but instead of navigating around the main pages on the website these tools help the users get to other important pages such as the account - and the shopping cart pages on the project’s e-commerce website. These pages are considered as supportive content to the main pages as they help the users in achieving their goals. As mentioned before, the search bar is mainly utilized by the type of users who Krug (2014) calls the “search-dominant” users. Unlike the “link-dominant” users, this group prefers navigating around by quickly typing in what they are searching for. Though, in case of e-commerce websites, this group of users is not always completely supported as the search bar is many times limited to product searches exclusively. For this reason, in this project, the search bar has been counted as part of the utilities instead of a separate navigational element. The other utilities included for the persistent navigation in this project are icons for the account - and shopping cart pages. Furthermore, the account icon would usually include a dropdown submenu with additional links for pages like sign up or login depending if the user is currently logged in or not.
- **Breadcrumbs** - Breadcrumbs were added on most of the pages to show the users exactly where they are on the website at all times. Breadcrumbs are chains of links separated by “>”-sign expressing the hierarchy and location of the currently navigated page. Each of these breadcrumbs has been made to initiate from the home page. Just as was the case with the logo, this is done because the home page is considered being the safe page where the users can always return and try over if they ever happen to get lost. As suggested by Krug (2014), the last item on the list has been bold faced to further indicate the status of the currently active page. An example of the breadcrumbs can be seen in Figure 22.

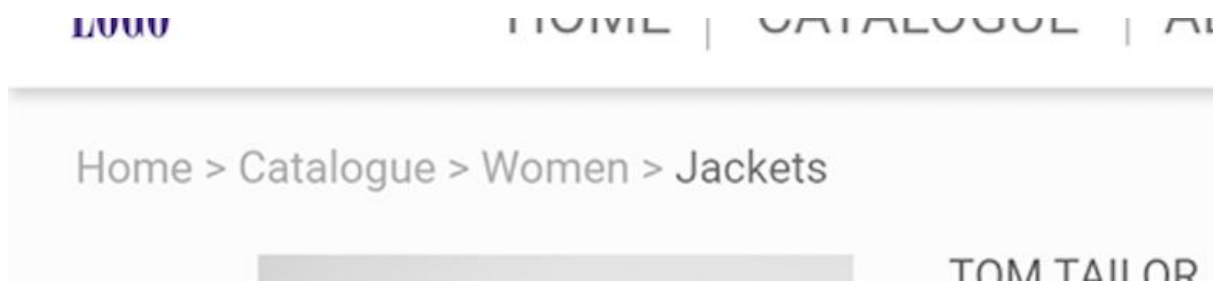


Figure 22 - Screenshot of breadcrumbs on a product page

TOM TAILOR
Source: The project (2020)

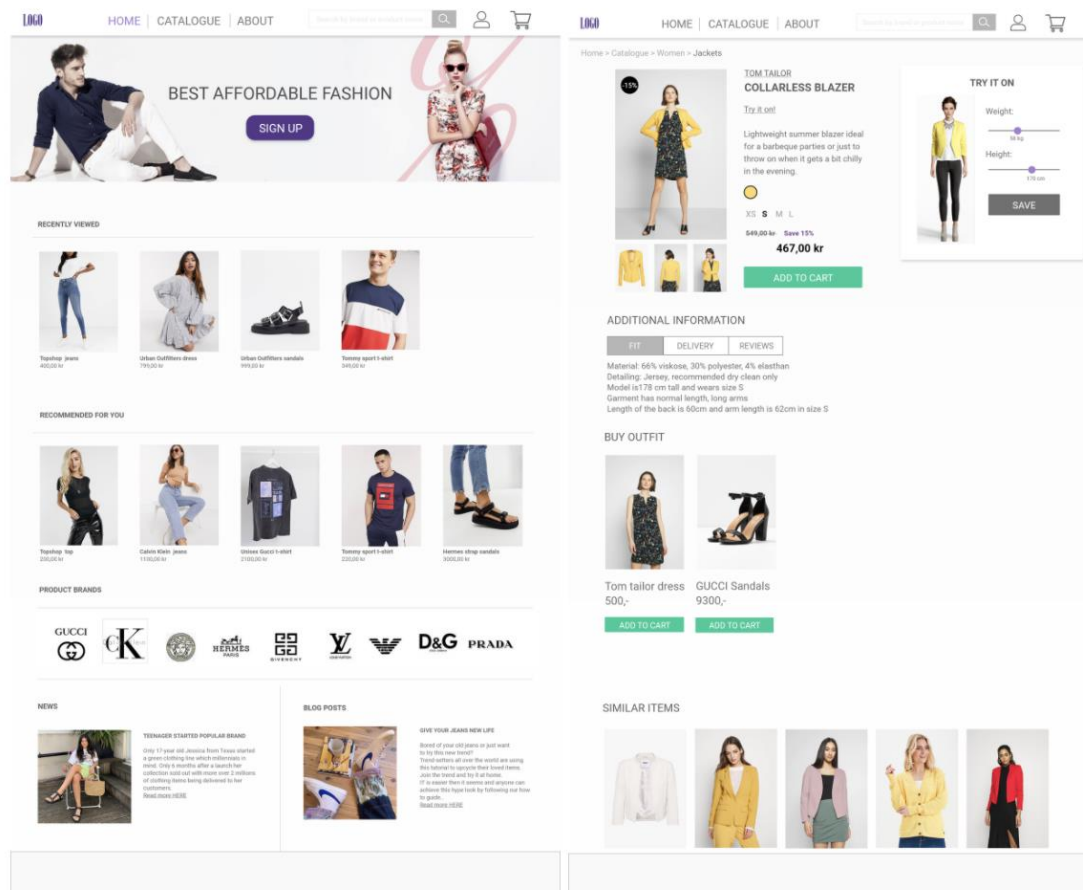
- Tabs** - On the account pages, tabs were kept as the preferred method of navigation. They are used in order to separate the subsections within the main account page from each other. Krug (2014) suggests using tabs for three reasons. First, they are self-evident as they have been used countless times before. Second, because of their simplicity, they are hard to miss or be mistaken for anything else. Lastly, as long as the active tab is always clearly indicated, the tabs as a navigational tool are easy to make look good with almost any kind of design. In the mock-ups created for this project, the active tabs are shown with a grey background whereas the others are shown plain white. A tabs section has been presented in Figure 23.



Figure 23 - Screenshot of the tab section on account page

Source: The project (2020)

Web usability was additionally used to add life into the mock-ups by making decisions, for example, on how the visual hierarchies were presented as well the clickable elements and text-formatting. In general, as preferred by many of the interviewees as well as the presented theories the designs were kept simplistic and clean. The main goal was to keep the visual noise to the minimum while adding the most important conventions presented on various other e-commerce websites. Without going too much into such conventional details, the home - and product pages, next to each other, have been presented in Figure 24.



Applying the Persuasive Technology

After creating the mock-ups and using web usability as a general guideline on making an easily usable website, the persuasive technology principles were applied on top of them in order to bring in more innovative ideas and make the product as a whole more appealing. While many good ideas were created during the visioning phase and the users' needs and requirements were tried to be answered to fullest, it was still important to include an element to the product that would further help motivate the users who come to the website to actually buy products and decide to use it as their default shopping platform.

As explained in the theory section, the main drive for persuasion within this project was set to be the Behaviour Change aiming to motivate the users into, not only buying more products, but also using the website as their default e-commerce platform for buying clothes. The two first phases of Behaviour Change, understanding and discovering, were already finished as part of the theory and research phases of the project itself. The third part, designing, was also already initiated by preparing the Day-in-the-Life - and the Sequence Models which could be represented as the behavioural plan of the users. Therefore, all that was left to do was to apply this behavioural plan to the designs by creating behaviour changing functionalities or other possible changes which would help further motivate the users.

When applying persuasion within the scope of this project, the ethics have been made an important factor. It was important that, by using the website, the users would not get deceived into making regrettable purchase decisions. Instead, the purpose of the project would be to visibly motivate the users and help them make better decisions. For this reason, the main persuasion strategy for the project was chosen to be the supporting of conscious actions. By deciding on this strategy, it also meant that each of the five preconditions for taking an action in the Create Action Funnel, as presented by Wendel (2014), needed to be fulfilled for a successful behaviour change. This process has been supported in the following ways:

1. **Cue** - The users can be given the initial cue for action, for example, by sending them product deals within newsletters or recommending the products on the home page itself as was visioned in the ideation phase of the project. Furthermore, big sale indicators were added to inform the users about great deals as is shown in Figure 25.

RECOMMENDED FOR YOU

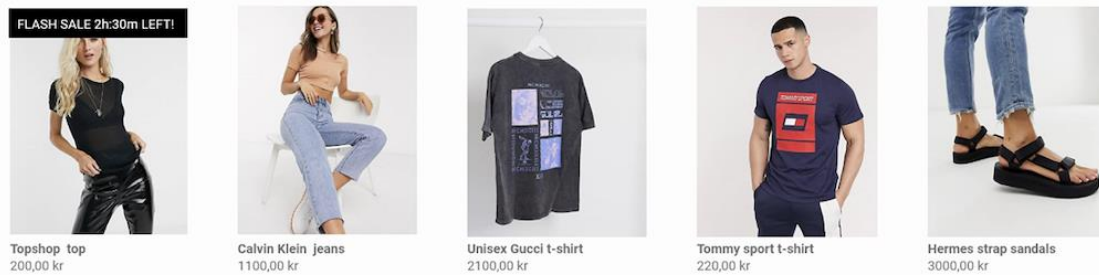


Figure 25 - Screenshot of a product with an ongoing flash sale

Source: The project (2020)

Additionally, a popup was added on the home page which would ask visitors to create an account and start earning benefits. It was thought that by adding this cue the users might get intrigued about the possible benefits and try to find more information about them. This popup has been shown in Figure 26.

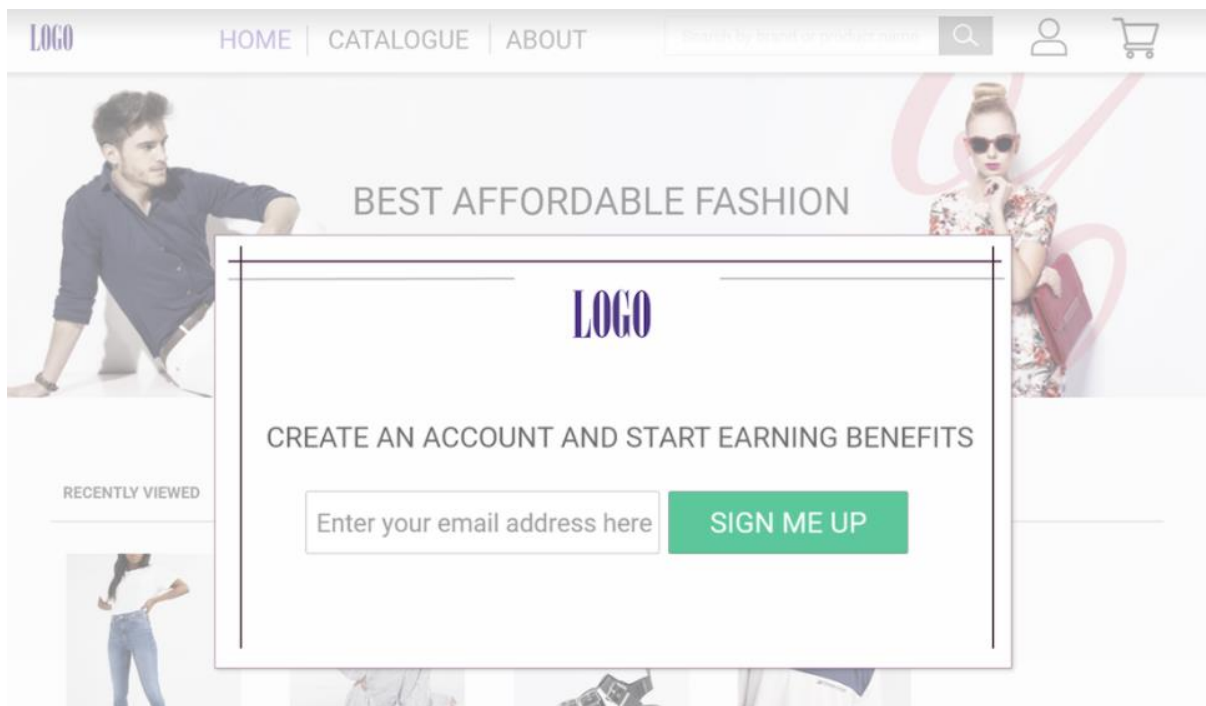


Figure 26 - Screenshot of a sign up popup

Source: The project (2020)

2. **Reaction** - As explained before, in the reaction step the mind should evaluate the cue for its relevance for the user. By returning a positive emotion towards the cue the user could decide to continue to the next step. This process was already encouraged through the personalized content functionality visioned during the ideation phase of the project. There are not many better ways of showing the users relevant content than by basing the shown products on their preferences and previous shopping habits. Furthermore, a small functionality to hover over a product on a catalogue page for additional information about color - and size options as well as a button to

add the product instantly to cart was added in order to help the user with this step as shown in Figure 27.

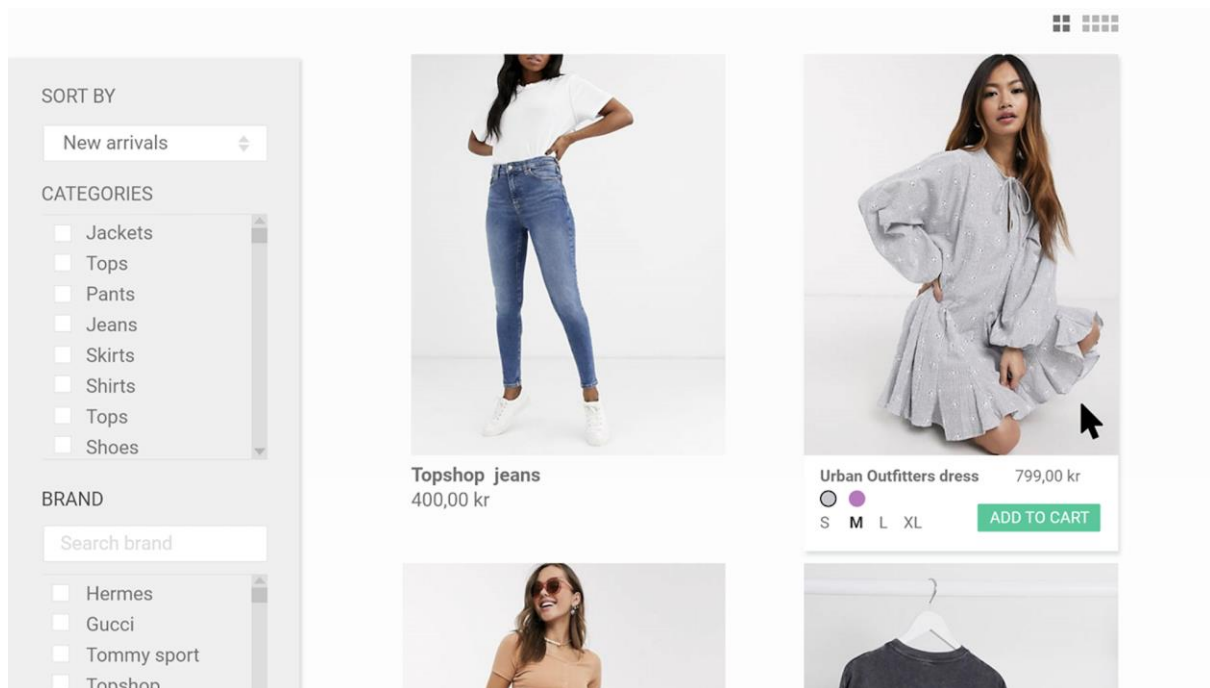


Figure 27 - Screenshot of hovering over a product on catalogue page Source: The project (2020)

3. **Evaluation** - During the evaluation step the users would have to make a conscious decision about the profitability of the product as well as they could compare it to other products, if given the option. Evaluation here was supported with the option to share product or shopping cart with a friend as well as with the “Try it on”-functionality on the product page where the users could test different sizes of the product on a model whose size they were also able to modify as shown in Figure 28.

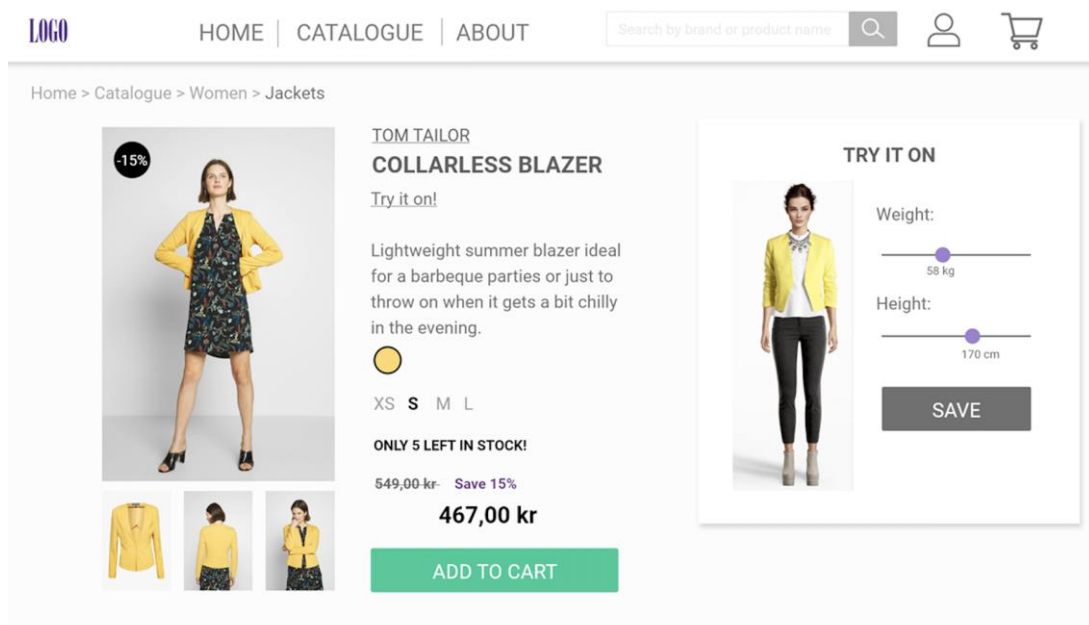


Figure 28 - Screenshot of the “Try it on”-functionality

Source: The project (2020)

The comparison of products was supported by showing similar product suggestions on the product page. Additionally, a wardrobe section was added on the account page where the users could test matching various clothes together as an outfit. On this page, they would be able to pick clothes from the ones they would have reserved or wishlisted as well as from their previously purchased products and group them together. If a good match was found, they would be able to add the non-purchased clothes directly to the shopping cart with a press of a button. The wardrobe section from the account page has been shown in Figure 29.

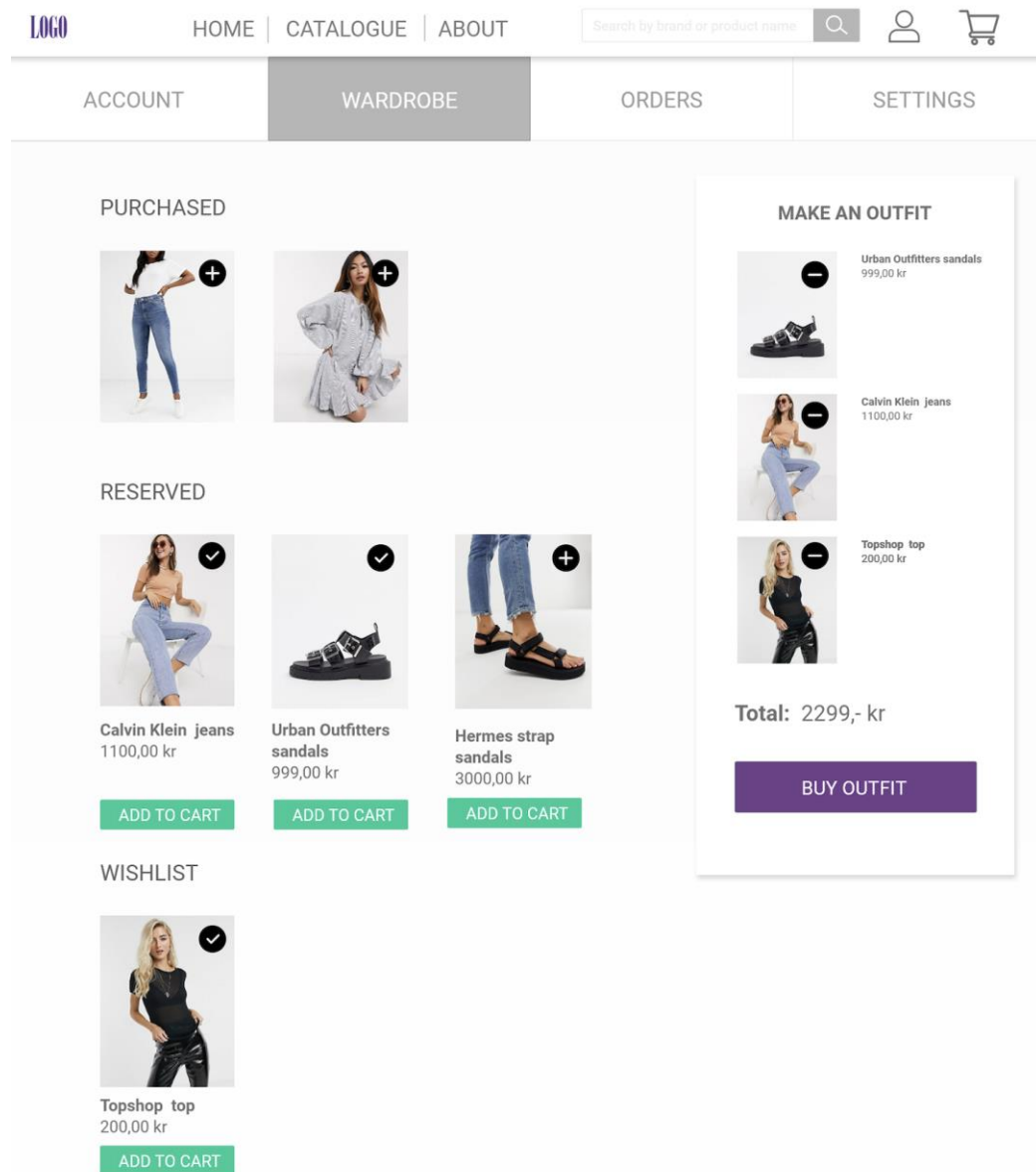


Figure 29 - Screenshot of the wardrobe section

Source: The project (2020)

4. **Ability** - Once successfully evaluated, the user should be convinced that they are able to take the considered action in the given circumstances. In case of this project,

the users are shown various cues about, for example, how much they are missing for free shipping which, as it was found out to be quite important for the interviewees, should help convince them in finishing the purchase. It is also possible for the users to purchase products without signing up which could further reduce any existing objections. Furthermore, a popup was added, which would be shown when a product is added to the shopping cart. In this popup, as shown in Figure 30, the users can see the current status of their cart as well as quick options to go to cart or even straight to the payment page if they would be logged in.

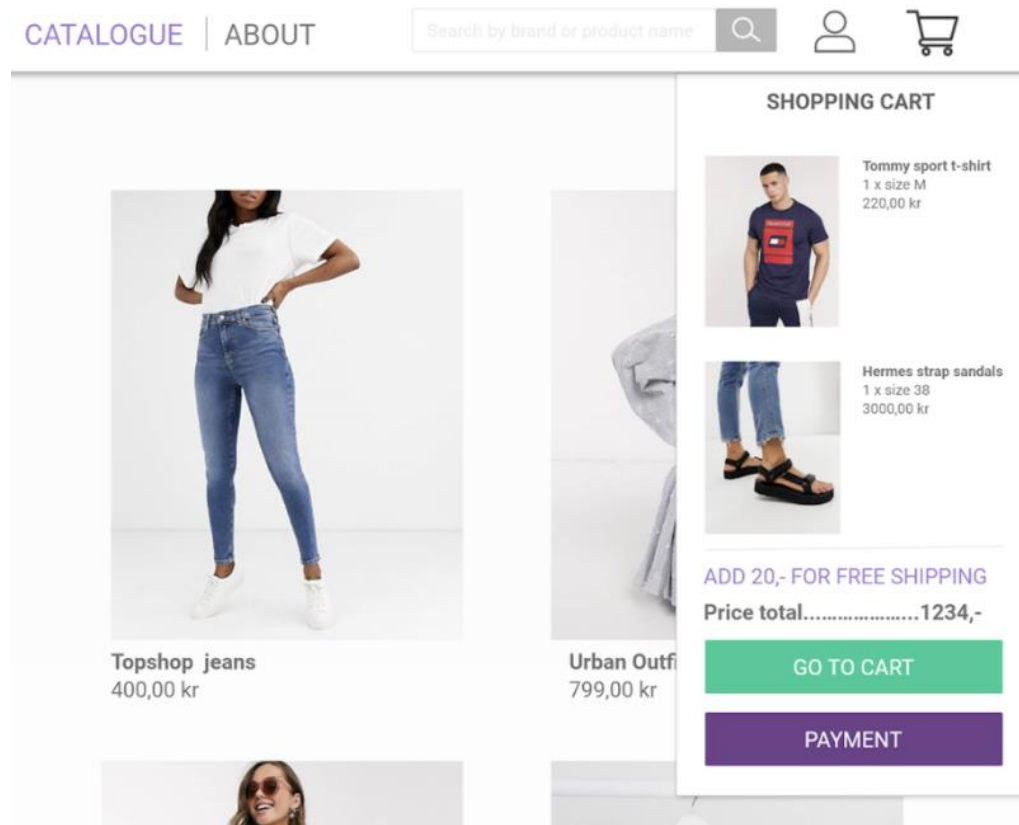


Figure 30 - Screenshot of a shopping cart popup

Source: The project (2020)

Also, a section was added to the shopping cart where the users could see exactly how many, and which, steps they have left until reaching the end of the purchase process. This can be seen in Figure 31. It is also good to point out that the persistent navigation element in the shopping cart does not have other links than the logo as the only purpose here is to get the users forward with purchasing.

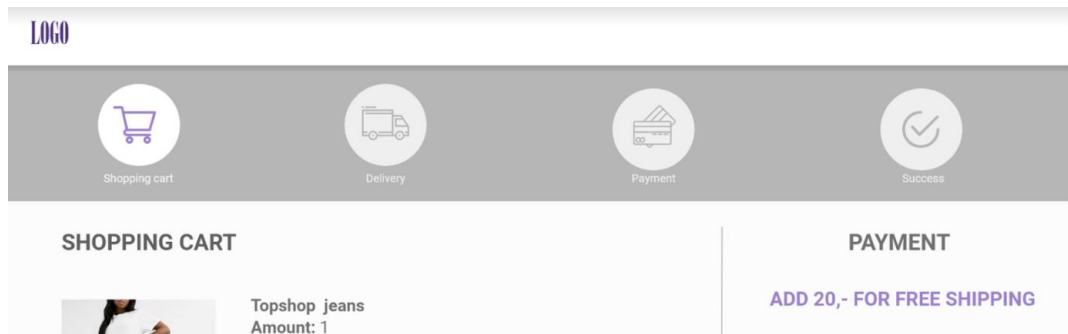


Figure 31 - Partial screenshot of the shopping cart page

Source: The project (2020)

5. **Timing** - The final push is to make the users either feel like it is urgent or otherwise relevant for them to buy the products right away. It can often be seen on e-commerce websites that the urgency has been shown with a timer running out which was also done here as already shown in Figure 25. Furthermore, once the users are in the shopping cart they are shown a section where they can add products from their reserved list. This has been visioned to function as a reminder that the users wanted to buy these items and they can only be reserved for a limited amount of time. Therefore, now might be as good a time as any to purchase the products. This section has been shown in Figure 32.

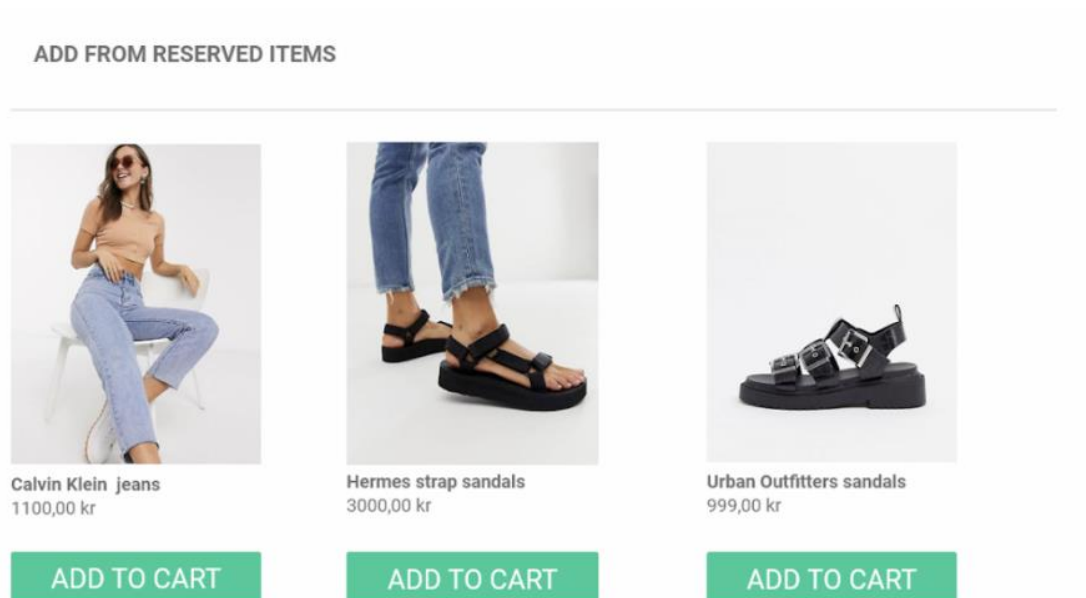


Figure 32 - Reserved products section on the shopping cart page

Source: The project (2020)

As shown in the previous sections, a lot of new elements and functionality was added in order to apply Behaviour Change to the designs and motivate the users to purchase products. As a bonus, an additional section for the account page was created of which purpose was to encourage existing users to keep returning to the website and possibly make it their default e-commerce platform. Firstly, the users would be able to earn points as was previously explained. Then, they would have a separate section on the account page for these points and other benefits. There they would be able to, for example, return their old clothes for additional points or become a monthly paying member and gain points even

faster. As mentioned, the idea was that these functionalities could give additional cues and motivation to keep already existing members coming back to the website over and over again. The benefits section has been shown in Figure 33.

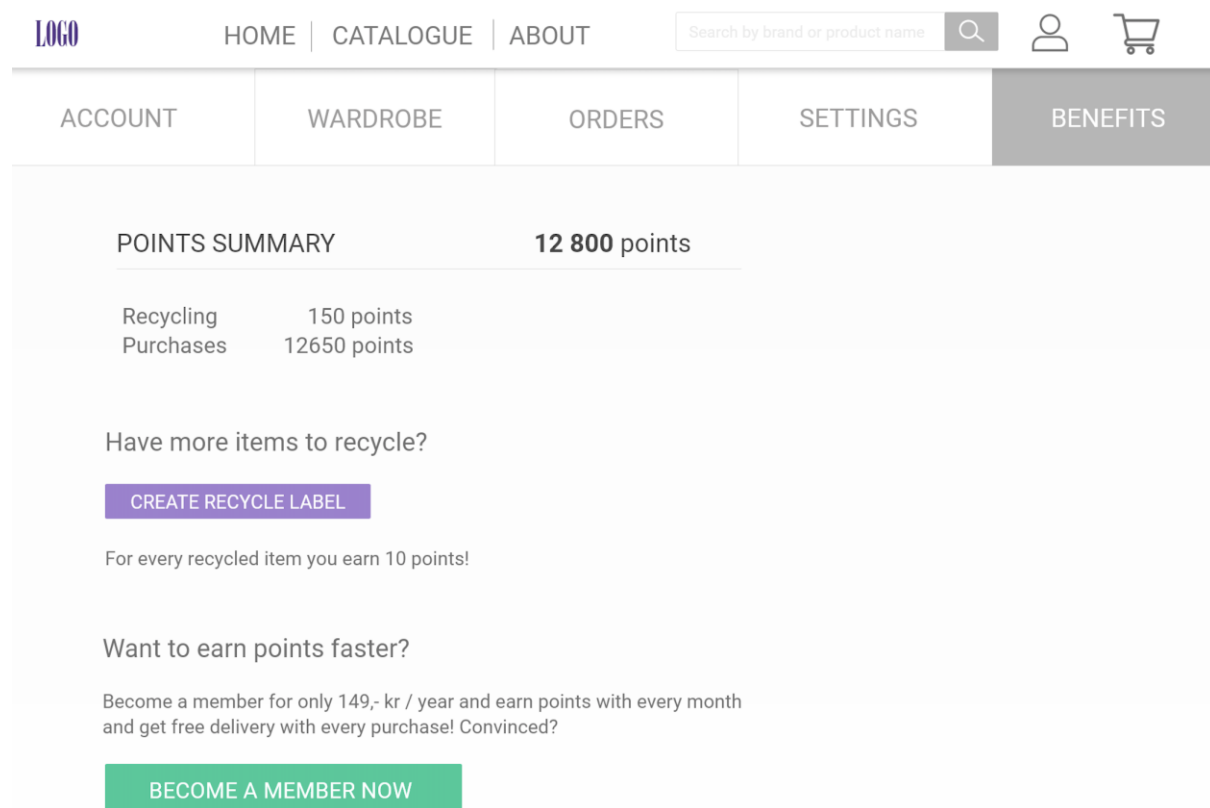


Figure 33 - Benefits section on the account page

Source: The project (2020)

All of the final designs as ended up within the design phase can be seen in Appendix 3. After finishing the designs a quick ethical analysis was gone through before continuing to the user validations. The ethical analysis was conducted in order to make sure that a minimal, or preferably none, unethical choices were implemented in the process of adding persuasive elements.

Ethical analysis

The persuasion strategy of supporting conscious action chosen for this project has been presented by Wendel (2014) as the least bad of the given strategies as, unlike the other strategies, it is not based on skipping any of the preconditions within the Create Action Funnel. Furthermore, none of the persuasion choices used in the designs are based on either deceiving or straight out cheating the users. Instead, the aim has been in supporting the user in making a calculated decision and supporting them in the use of the website. When it comes to the stakeholders within the project scope, there are the research team, the users and the possible company owning the website. As the research team is separated from the other stakeholders, it has also been possible to implement more ethical elements and functionalities for the website as the main concerns have not been about making money but instead a great product. The six areas of persuasive technology that Fogg (2003) has suggested to consider from their ethical standpoints were, as previously presented, novel

technologies, positive reputation, persistence, interactivity, emotional cues and responsibility. None of these areas were really exposed in the scope of the created website other than the interactivity, which could be considered problematic on the shopping cart page as the various links to navigate elsewhere have been removed in favor of persuading the user to go through with the purchase. On the other hand this was also a suggested technique within the web usability principles as presented by Krug (2014) as it helps the users concentrate on the task at hand instead of distracting them away from it. In that sense, the ethical concerns related to even this technique can be considered being minimal.

Validation

After applying the persuasive technology principles on the product designs, it was time to go validate them with the same four previously viewed interviewees. At this phase, the interviewees were shown the designs one by one as each of the elements and functionalities were explained. From each page, feedback was given. Furthermore, the interviewees were asked about their thoughts on a few other topics relevant for the project. The questions included in this interview session were the following:

1. Is it okay if I record this conversation?
2. What do you think of the _____ page?
3. Do you find the website easy to use?
4. Does it answer some of the concerns you might have expressed during the first interview?
5. Would you consider shopping on this website if they had products you find interesting?
6. Do you have any additional comments?

When asked about the home page, results were a bit mixed. For example, two interviewees liked the idea of having fashion news and blog posts and the other two said it was not important for them. Though, it was pointed out that at least it was good that they were on the bottom of the page so they would not be taking attention from the other things. Two of the participants also did not care for the brand logos on the home page. Otherwise the page was well received and the participants seemed to like the designs, excluding one who thought it seemed a bit too empty. The signup popup was thought to be acceptable as long as it would not be mandatory to actually sign up before browsing products. Suggestions were given to write more information about the possible benefits and to include an “Ask me later”-button.

On the catalogue page, the decision of having all products within a single place on the website got appraisal, though some concerns were raised about the complexity of having too many filtering options. It was suggested that some of the filters such as the gender could have default values in order to speed up using them and that the longer filter sections could function as dropdowns so that the lists would not take so much space at all times. Both being able to save the filters as well as the filter for hiding already viewed products were thought as good things to have. In fact, three of the interviewees mentioned that they really prefer not to see the same products over and over again. Also, the option to change how

many products were shown on a row was thought as useful functionality, though one interviewee also asked for the possibility of having an option to paginate the products and choosing how many products in total are shown on a page. They thought that it might be exhausting to have all the products on a single page. Showing additional information about the product when being hovered on was liked by all of the participants, though suggestions were given to have the product pictures scroll through automatically and to add a button to open a quick view popup of the product with even more information while still staying on the same page. Also, one of the participants wanted to see the color options even when not being hovered on. Furthermore, the shopping cart popup when adding an item to cart was well received with a comment that the number of items in cart should be always visible by the shopping cart icon in the persistent navigation section.

On the product page, the “Try it on”-feature was very well received, though there were concerns about how it would work with different kinds of clothes. It was suggested that instead of choosing the weight and height for the model, a size could be chosen just as with the clothing and different models would be shown wearing the clothing. The exact size dimension of the selected model could then be shown for comparison as well. It would also be important to show some sizing charts about the products. In general, there were some misinterpretations about this feature, though it was accepted that if it would work well, it could be very useful. Also, the buy outfit section received some appraisal.

On the shopping cart page, all of the interviewees found the idea of reserving items useful as it would give them more time to think about what to buy. Two of the participants said that they would probably not use the functionality to ask for a friend’s opinion, though it did not receive any negative feedback. It was thought to be very useful that the amount missing for free shipping was clearly indicated.

The default account page did not receive any meaningful feedback as it did not really include any special content. The wardrobe section on the account page was really well received and would be used by three of the participants. A possibility to add products manually was requested so that the users would be able to see all of their clothes on the page. It was thought that the wardrobe section could reduce the number of returns as the users would be able to get a better overview of the products before ordering them. The benefits section on the account page was also well received. The participants like getting points and benefits and all of them thought that the recycling was a nice option. Though, it was requested to be able to see more information about how exactly the company handles the recycled clothes. Some of the participants could consider paying for getting more points as long as the benefits would be useful and well explained.

In general, all of the interviewees found the website easy to use and agreed that it successfully addressed some of the issues they had previously pointed out in other e-commerce platforms. Especially showing the free shipping information clearly at all times, the “Try it on”-feature, “Buy outfit”-section, the reduced need of navigating through multiple pages and the decision to not show color variations separately on the catalogue page were mentioned. Furthermore, the recycling feature, wardrobe and point system were given pointed out as positive things to have. All of the participants said they would be interested in shopping on the presented e-commerce platform if it had products they find interesting. The full transcriptions on these interviews can be seen in Appendix 4.

Discussion

This chapter aims to build some additional discussion about important topics within the project which were for one reason or another left out or not able to fit within any of the other chapters. It includes discussion about the customized Contextual Design process created for the project, the next steps regarding the project and some additional reflections regarding the ethics.

The customized Contextual Design process

Contextual Design was decided to be the main method for this project. This process though, has been through and through described by Holtzblatt (2016) which makes it quite difficult to customize when necessary. In order to build the project around a more varying literature base, it was decided that some of the steps would be replaced by other methodologies. Indeed, the design phase has been heavily modified to adopt the principles of web usability and persuasive technologies and, for example, the step of building storyboards has been completely left out. On the other hand, the research and ideation phases take a lot of elements and models from Contextual Design while going through a very strict step-by-step walkthrough described by Holtzblatt (2016). Because of this, as most of the models are built by using the notes from the Interpretation Session, the usage of raw interview data is quite minimal. To better utilize this raw data, NVivo was included thanks to which some additional insights to the data were able to be created. Additionally, transcriptions from the interviews were created and the interpretation notes were based on these, not only to make it possible to do this session without a team, but also in order to preserve as much of the original interview data as possible. All in all though, the project was formed around a quite personalized process and a lot of different aspects were able to be covered which gave a sense of success and satisfaction.

The next steps

The next steps for the project would include going back to the drawing board and making changes on the designs based on the received feedback. It would also become necessary to design the rest of pages and start building the website itself. With the help of an interactive mock-up it would become easier to perform more interviews and receive data, not only based on the looks of the website, but also on the patterns of behaviour and any possible navigational issues, to name a few areas. If the work on the platform would be continued, it would be less likely to follow Contextual Design methodology anymore and rather focus on, for example, finding information on specific studies related to e-commerce and web usability. Also, more time and work should be spent on just focusing on improving the general looks of the designs as currently, as mentioned in the interviews, they can seem a bit empty. The positive thing is that the interviewees seemed to approve with the suggested content and features which would mean that, excluding some tweaks based on the received feedback, the basic structure and functionality would be more or less finished.

Reflections on ethics

Ethics are an important topic within persuasive technologies and the users are nowadays even considering them when choosing which technologies to use. The justifying for this can be traced back to the recent data breaches regarding the popular social media platforms (Kight & Gram-Hansen, 2019). But there can be cases such as this project where the effects of using persuasive techniques are concentrated on improving the user experience and motivating them by giving them better tools to make calculated decisions. In these cases, it can be a bit bothersome having to do an ethical analysis, even just to show that these aspects were considered. And, even though an ethical analysis was conducted for this project, the process felt a bit unnecessary in the scope of deciding to use the strategy of supporting the user's conscious action as presented by Wendel (2014). What was not considered within this project as part of the persuasion are the different types of people who could possibly shop on the website. According to Adaji et al. (2019) different types of e-shoppers could be persuaded with different types of persuasion techniques. This has been left out because the Behaviour Change, as presented by Wendel (2014), and its underlying research on psychology function as general guidelines unrelated to different people types. In a way, it could be even considered being an ethical choice not to target specific types of people and their "weaknesses". Indeed, it could be comparable to the obvious unethical decision of targeting specific vulnerable groups of people such as old people or children as explained by Fogg (2003).

Conclusion

The purpose of this project was to create an attractive e-commerce platform by using the Contextual Design process while assisting it with the use of web usability - and persuasive technology principles. The idea of this e-commerce solution was to function as a general multi-brand platform for selling clothes. It was important that the created solution would be focused on creating an enjoyable user experience while borrowing concepts from common web usability principles in making the interface easy to use. Though, differentiation was to be made from other similar platforms by providing valuable new functionalities. These functionalities could be enhanced with the use of persuasive technology principles in making, for example, the activity of shopping easier to accomplish for the users of the platform.

Contextual Design, as used in this project, has a list of pros and cons when used without additional team members. The cons are rather obvious as many of the activities within Contextual Design are meant to be performed as a team. For this reason, many times it was necessary to come up with alternative ways of doing those specific activities. These changes have been explained in the project. For example, it was especially difficult to perform the Interpretation Session in order to create the interpretation notes and then generate the Affinity Diagram and the design models based on those notes. Indeed, it would be suggestable not to approach Contextual Design, at least not without heavy modifications on the process itself, without at least one or two other team members. The pros of doing everything alone are not many but could include, for example, being able to gain a deeper understanding in all of the available data as there was no need to pass it on to other team members who might not have been present during certain interviews.

As expressed in the discussions, by customizing the Contextual Design process it was possible to cover more areas of interest. Especially when it came to using the web usability - and persuasive technology principles, it was necessary to rebuild the whole design phase. Instead of creating storyboards, user environment design and interaction patterns, the focus was put purely on focusing, firstly, to make the website more usable and, secondly, to make it more attractive and enjoyable to use. The rebuilt design phase then only included creating mock-ups based on the web usability principles and then applying persuasive technology principles on the designs to bring in innovative new ideas.

What kind of common practices and innovative ideas were exactly implemented then? The web usability helped primarily on creating basic structure for the website and, for example, on applying general guidelines for text-formatting and clickable elements. Furthermore, the whole main interface section, persistent navigation, was purely based on the web usability principles laid out by Krug (2014). On the other hand, the persuasive technology principles and especially the Behaviour Change helped in creating various new elements and functionalities such as the wardrobe and benefits pages which both received appraisals in the validation interviews. It is expected that, by having these new elements and features, the created e-commerce platform can provide better quality content and make it easier for the users to perform and accomplish their activity that is shopping.

References

- Adaji, I., Oyibo, K., & Vassileva, J. (2019). Effect of shopping value on the susceptibility of e-commerce shoppers to persuasive strategies and the role of gender. In H. Oinas-Kukkonen, K. T. Win, E. Karapanos, P. Karppinen, & E. Kyza (Eds.), *Persuasive Technology: Development of Persuasive and Behavior Change Support Systems* (Vol. 11433, pp. 270–282). Springer International Publishing. https://doi.org/10.1007/978-3-030-17287-9_22
- Bryman, A. (2016). *Social research methods* (Fifth Edition). Oxford University Press. (1-146, 373-618)
- Childs, P. R. N. (2014). *Mechanical design engineering handbook*. Butterworth-Heinemann. (51-119)
- Davis, J. (2009). Design methods for ethical persuasive computing. *Proceedings of the 4th International Conference on Persuasive Technology*. Claremont, California, ACM.
- Deng, L., & Poole, M. S. (2012). Aesthetic design of e-commerce web pages – Webpage Complexity, Order and preference. *Electronic Commerce Research and Applications*, 11(4), 420–440. <https://doi.org/10.1016/j.elerap.2012.06.004>
- Fogg, B. J. (2003). *Persuasive technology: Using computers to change what we think and do*. Morgan Kaufmann Publishers.
- Goldenberg, J., & Mazursky, D. (2002). *Creativity in product innovation*. Cambridge University Press. (1-43)
- Gould, J. D., & Lewis, C. (1985). Designing for usability: Key principles and what designers think. *Association for Computing Machinery*. <https://doi.org/10.1145/3166.3170>
- Hao, N., Ku, Y., Liu, M., Hu, Y., Bodner, M., Grabner, R. H., & Fink, A. (2016). Reflection enhances creativity: Beneficial effects of idea evaluation on idea generation. *Brain and Cognition*, 103, 30–37. <https://doi.org/10.1016/j.bandc.2016.01.005>
- Holtzblatt, K. & Beyer, H. (2017) *Contextual Design*, second edition. Morgan Kaufmann, Elsevier.
- Kight, R., & Gram-Hansen, S. B. (2019). Do ethics matter in persuasive technology? In H. Oinas-Kukkonen, K. T. Win, E. Karapanos, P. Karppinen, & E. Kyza (Eds.), *Persuasive Technology: Development of Persuasive and Behavior Change Support Systems* (Vol. 11433, pp. 143–155). Springer International Publishing. https://doi.org/10.1007/978-3-030-17287-9_12
- Krug, S. (2014). *Don't make me think, revisited: A common sense approach to Web usability* (Third edition). New Riders.
- Lavie, T., & Tractinsky, N. (2004). Assessing dimensions of perceived visual aesthetics of web sites. *International Journal of Human-Computer Studies*, 60(3), 269–298. <https://doi.org/10.1016/j.ijhcs.2003.09.002>
- Mao, J.-Y., Vredenburg, K., Smith, P. W., & Carey, T. (2005). The state of user-centered design practice. *Association for Computing Machinery*. <https://doi.org/10.1145/1047671.1047677>

Menon, S., & Kahn, B. (2002). Cross-category effects of induced arousal and pleasure on the internet shopping experience. *Journal of Retailing*, 78(1), 31–40.
[https://doi.org/10.1016/S0022-4359\(01\)00064-1](https://doi.org/10.1016/S0022-4359(01)00064-1)

Most popular online goods by gender Great Britain 2019. (n.d.). Statista. Retrieved March 7, 2020, from <https://www.statista.com/statistics/275976/types-of-goods-purchased-online-in-great-britain-by-gender/>

Preece, J., Rogers, Y., & Sharp, H. (2015). *Interaction design: Beyond human-computer interaction* (Fourth edition). Wiley. (17-43, 262-282)

Top fashion e-commerce companies by market cap 2019. (n.d.). Statista. Retrieved March 7, 2020, from <https://www.statista.com/statistics/245648/leading-fashion-e-commerce-companies-by-market-cap/>

Wendel, S. (2013). *Designing for behavior change: Applying psychology and behavioral economics* (First edition). O'Reilly. (1-296)

Wilson, C. (Ed.). (2010). *User experience re-mastered: Your guide to getting the right design*. Morgan Kaufmann Publishers. *Defining Usability*, 22(1) (1-22)

Appendices

Appendix 1. Initial interviews

Participant 1

I: Interviewer

P: Participant

I: What are your gender, age and occupation?

P: I am female. I am 25 years old and I am currently unemployed.

I: We are going to be talking about shopping and online shopping in general, what is your general opinion regarding this subject?

P: I like shopping and I use online shopping platforms quite often. I can find more items online since I live in quite a small city. I enjoy looking for new trends or finding inspiration online.

I: Everyone is a different kind of shopper with their own personality traits.. How would you identify yourself as a shopper in general when buying new clothes? Deal hunter, casual shopper, brand enthusiast etc.

P: I usually search for items which are discounted, unless I am looking for something in particular or I need something. Then I don't care about the price so much. I Look for specific things when I need to buy something such as going to a party and I need to find a dress. Otherwise I look for deals or things I like.

I: Do you get enjoyment out of shopping. Which ways?

P: Yeah, I enjoy shopping. It is exciting to try and get new things.

I: Do you prefer to shop clothes online or in physical stores and why?

P: I prefer to shop in physical stores but I spent more time shopping online. This is mostly because the physical stores here don't have a lot of variety. Online shopping is good if there are free returns so you can try the clothes with your own items before deciding which is not really possible in physical stores. Then you can see if you like it and if it fits with your other clothes. In physical stores you can't try the item with your other clothes than what you are wearing.

I: Which online platforms or apps do you use the most when shopping for new clothes?

P: I usually use Zalando and Asos and sometimes some smaller platforms.

I: What do you like about these platforms?

P: I like that they offer different varieties of brands and they have good customer service. It is very good to have multiple brands to choose from. In general I prefer it because I can buy multiple brands in a single order and have the shipping for free. If I would buy one item from a brand website, it would have to cost me more to get free shipping. I would probably not buy clothes online without free shipping.

I: Do you use these platforms on your computer, mobile phone or other?

P: I use them on my laptop and phone.

I: What do you like about using these specific devices? Are there any unique or cool features when using specific devices?

P: I use my phone when I am travelling or sitting in some waiting room trying to kill time. I use my laptop when I am at home. I usually buy clothes when I am on my laptop. On my phone I look for deals or buy things that have gotten back to stock and need to be bought fast. I have a wishlist of products I am following and I will get an email notification if they are back in stock. I like when a website has the option to see an item from a 360 degree view or a video. It helps me to make a decision regarding the product and get items I am truly satisfied with and then give good feedback for the shop. I can see better how the item would look like in real life and how it behaves when being worn.

I: Is shopping clothes online something you plan for a specific time or do you prefer to do it during dead time when you have nothing else to do?

P: I usually don't plan it. I just do it when I feel like it or have nothing else to do. Only if it is necessary for me to buy a new item right away I could plan it.

I: Where are you likely to be, and how much time and attention do you use for shopping clothes online?

P: Usually I am at home or travelling. Sometimes I spend half an hour and sometimes two hours. Depends how fast I find the item I am looking for.

I: In which other environments you might do your shopping? Home, work, commute etc.

P: I do it when I have time and nothing better to do. So, usually in the environments I already mentioned.

I: What are you trying to accomplish when shopping for clothes online? Get inspiration, find specific clothes, compare prices etc.

P: I don't spend much time comparing prices, unless I find a specific product that I like. I try to get some inspiration for outfits because some shops have the option to buy the whole outfit. Then you can see all the items that they have put together on a model. It is a nice thing to have so you could for example see a black t-shirt you want with pair jeans you

already have. Maybe it can make you want to buy it more. In some pages I can even change these clothes on the model.

I: In your opinion, what kind of interface would give you the best possible shopping experience?

P: It is good when I can see multiple products at once. when I can choose the layout and pick if I want for example 6 or 3 products in a row. Then I can edit it depending if I want to see the products better or if I just want to scroll through them fast and see if something catches my eye. I also want to be able to filter the products.

I: Can you think of any issues within online shopping platforms?

P: Sometimes the information about if the product is in stock is inaccurate. Then you might buy the product when it's not actually in stock. It can cause complications. This product stock should always be correct so that such mistakes don't happen.

I: In your opinion, what kind of simple tweaks or additions could overcome the issues?

P: Usually the pages have an option to notify you when the item is back in stock. But the pages which don't are the problem. This is also why I use the wishlist so I will get notification once the product is back in stock.

I: What kind of new features would you want from the platforms you are using?

P: They could improve in their filtering options and search in general. For example, the filters usually work by choosing which materials you want the item to be but not which materials you don't want the item to be. So if you have a coat which is made of wool you can search for it by choosing that material.. But what if I don't want a wool coat? I would have to click all other materials and I might still get a coat which is partially made of wool. It would be nice if I could just click "exclude wool".

I: Do you have any other comments or ideas about the functionality of any online platforms which have caused you issues or which would make the experience better?

It would be nice if the website collaborated with some wardrobe app so I could test how the clothes look like with my own collection. In general it would be good to see the piece in an outfit rather than just by itself. It could also be cool if the website could share the outfit with your friend and have their opinion about it when I am not sure about it.

I: Think of the last time you bought clothes online. What did you set out to do and how did you accomplish it in the duration of the whole day?

P: Last time was a few days ago when I bought myself coat. So, when I have time I check the platforms that I usually use and go through the pages to see if there is anything I like. If I see something interesting I might add it to my wishlist so I get notified if the price goes down. Once they have only a few items in stock and I haven't found anything better I can buy the coat.

I: Was the activity divided into chunks of times and locations?

P: It was divided into chunks of times but they were all at home.

I: How long did the activity last in total? Moments, minutes, longer?

P: It took a few hours throughout the day.

I: Which times of the day was the activity performed?

P: In the afternoon I searched for the product when I had nothing else to do. In the evening I bought it when I hadn't found anything better.

I: Which devices and platforms did you use?

P: I used my laptop and I checked Asos and Zalando.

I: Did you do the activity with someone else? If so, why and how? Do you ever?

P: No, I only shop with my friends in real stores. Online it would take too long because we each search for items for ourselves and we wouldn't be able to do that at the same time.

I: Which items did you buy last time?

P: It was a coat and shoes.

I: And could you show me how you would run through this process from beginning to end, when you are looking for a coat and you buy it?

P: Yeah. So, right now I am on the Zalando page. I will go to the ladies section, then I will go to jackets and coats. Then I would choose coats category and then I would use some filters. Let's say I would filter it by my size and also by color if I had some specific color in mind. And probably I could also put some maximum price I would be willing to pay for it. Then I would just scroll through the results and see if I like anything.

I: And do you ever use other filters than the ones you just used right now: size, color and price?

P: Sometimes I would also filter by material or length if I am looking for some pants.

I: All right. We were talking before about the filter where you could exclude some material. Are there any other filters that you could exclude or would it work with them?

P: Not really. Except for the one I mentioned.

I: Which was?

P: Which was excluding materials instead of including them.

I: So which other filters you might use? There is sorting by...Do you use that?

P: Usually if I have too many items, I sort results by price lower to higher, or by popularity of the items.

I: And do you think this category navigation is easy? That you first choose gender, then you choose what type of items you are looking for and then you choose a specific category and then there are more sub-categories and so on... Do you think it is fine?

P: I am not the biggest fan of sub-categories. Let's say I click on jackets, that is fine, but then there are multiple types of jackets and then I think it can be misleading and otherwise I just get too many items. So I think the sorting could be made a bit better.

I: So do you think it would be better to have everything in one, under jackets, in total?

P: Yeah and then just use the category of jacket as a filter for example. Or, I mean if you pressed some filters you are gonna get results that are more similar to what you want instead of clicking through each category.

I: Okay. Let's continue with your jacket search.

P: So I have 219 results from my filters. So I would go through them and as soon as I find something I like then I click on the item, probably go through all the pictures so I can see the item from all the sides and from close by if I use the zoom function. Then the next thing I do is that I check how tall and how big is the model that I see on the pictures so I can compare it to myself and see which size would fit me.

I: And where do you see these information?

P: I can see it under "fit". Here I can see how tall is the model and which size is she wearing. So I can see that I probably need to size down.

I: All right. So that is some kind of extra information on the product page.

P: Yeah, I think that is very useful. Then also another thing I check is the material.

I: And then what?

P: And then if I am satisfied with everything I just put it in a basket and go to checkout. Unless I feel like searching for more and then I add it to wishlist and go check out other coats I got in my search results.

I: So usually you scroll through the page. Let's say you are looking for something specific and once you find that one item do you buy it right away or?

P: If I need it I buy it right away. But if I am not in a hurry and I have some time or if I am actually going shopping to some physical stores then I will just wait if I can find something better and if not then I buy it later.

I: Is it possible that you put multiple jackets in your basket or how do you compare them if you find multiple ones that you like?

P: Well if the shop has free delivery and returns then it is possible that I order multiple ones and just see how they fit.

I: Can you on Zalando do those nice features that you mentioned like see the model in 360 or change the layout of the items and so on?

P: No Zalando does not have those features.

I: Could you teach me how I would buy myself, for example, new jeans or shoes as a first time customer on that same platform? So, let's say I would have to create my account and so on, can you show me the whole process If I was visiting Zalando's page for the first time?

P: Well you don't have to start with creating your account. You can just go to mens.

I: Do you think that is a good thing that you don't have to create an account first when you want to buy something?

P: Yeah, I think it's something that can discourage customers. So let's say you wanna buy jeans as you said. You would go to the jeans category. So what is your size?

I: Let's say 32 or 31. Either one.

P: Well you can select multiple filters so I will just check them both. Do you have any specific brand that you would like?

I: Let's say I would want... what brands are there? You just choose one.

P: I can choose Calvin Klein

I: All right.

P: But if you choose one brand then you usually get less results since they don't have so many items probably in your size.

I: So you think it is better to look through all the brands?

P: I think it is better to either choose multiple brands or just go through them all. So now we got 53 items but some of them are shorts so here you can use the length filter. So I guess you want long pants.

I: Yeah.

P: So now we have only 31 results. Is there some price that you are not willing to pay more than or is there some specific material that you would want?

I: Let's say I can pay up to 700 kroner, for example.

P: Well, now you can see that the minimum price for this brand is 779 so then you wouldn't get any results. So probably it would be best for you to either not choose the brand if you have some maximum price you can pay or just go through all the items with specific brand since there are not so many.

I: And how did you see that price range that we have?

P: Well, if I click on the price I can see that minimum is 779 and I can not go any lower.

I: So there is some kind of price range that you choose and it shows you the minimum and maximum price of the current selection?

P: Yes.

I: Okay. Let's say I would pick the first pair. Then what would I do if I wanna buy them?

P: Well, then you would probably see if you actually wanna buy them so you would see all the pictures and material.

I: And what kind of options can I see there in extra information?

P: You can see material, extra features, if it has buttons or a zipper, how it fits, what size the model is wearing and how tall he is. Then you can also see some reviews about the jeans and what is the overall rating of the item.

I: Do you ever check the reviews, because you didn't mention it when you were going through products before?

P: Because not all the websites have reviews, but I usually check it. Though they can be also misleading because many times it happened to me that people had different fit of the item that I experienced. So I don't put that much importance on it, since I can try it out at home and then return it for free.

I: Do you ever leave your own reviews?

P: Not really.

I: All right. Let's say I would pick this pair of jeans, how would I buy them?

P: Well, let's say I am not logged in and it is just you buying the jeans. So you would choose your size and then you would add them to the basket. Then you would go to your basket and see that everything fits. Then you can go further and you have to register or log in.

I: So I can not actually buy without registering?

P: No. But I think that is due to free returns. So they can register what you did and such. I know that on some websites you can just buy without registering.

I: Do you think it would be useful to have both options? Like if you have logged in or registered that you can have free returns and if you have not then you have to pay for it.

P: I don't think it would be good to differentiate. But it would be good to have an option to just buy without registering, but not in the way that you would lose the benefits.

I: Do you imagine how that would be possible?

P: Well I am sure they have a database of users and you already put your address so they could create some kind of customer number in a way I guess. Not sure if that would work.

I: And of course it would have to be prepaid products, right?

P: Yeah, you would have to pay for it first.

I: Okay. Let's say I would create an account. Is it an easy process in Zalando?

P: It seems quite simple. They don't require lots of things. There is a name, surname, birthday, email and password.

I: And then if you are interested in women or men clothing. I guess that will automatically put you on a relevant page.

P: But I don't think it's necessary.

I: And I see there is an email subscription kind of a check box if you want to have a newsletter or so. Do you ever use this?

P: I only use it if I can get some discount if I sign up, otherwise I don't.

I: So it needs to give you more value than to show you deals and so on.

P: Yeah.

I: Okay. Let's say we skip this registering and we log in with your user so you can show me how we continue from there. So this is the step. We can see that there are five steps and this is the second step.

P: Yeah

I: And you choose the address.

P: Yeah I can choose if I want it delivered at pickup point or at my home address. So they already have my address. So let's say I choose that. Then I can go further and then I would choose a payment type, which is usually a credit card but if you are a new user you can also get an invoice and then pay it later.

I: And there seems to be just normal information. It shows you address and the price and so on and you can put the discount code.

P: Yeah and I can even delete some of the items in my basket if I had multiple.

I: All right. And can you go back to the main page? So is there any other functionality that you can show me? That, let's say, you use or you find useful or you don't like..

P: Well sometimes they recommend you some items on the front page based on what you searched for so that can be useful.

I: And how do you use that? So now we see that there are some things that are relevant to the jeans search.

P: Yeah, now we see many black jeans.

I: And do you ever use this to look for products?

P: Well let's say I was looking for that coat and then I put it on the wishlist. The next time I go to the page I can see multiple coats, so maybe some of them I like better than the one I found. So that could be useful, but otherwise if you are not really looking for anything, it can be just annoying, so it depends.

I: And when you are just scrolling looking for deals where do you go then? When you are not looking for something specific.

P: Well I either go to the newest items or I go to outlets based on what I feel like.

I: And what is on the outlet page?

P: Well there are all the discounted items

I: So it is the same, it just doesn't have the normal price or what?

P: Yeah it just has some kind of a discount.

I: All right, then I think that's enough

Participant 2

I: Interviewer

P: Participant

I: What are your gender, age and occupation?

P: I am female, my age is 27 and my occupation is student.

I: We are going to be talking about shopping and online shopping in general, what is your general opinion regarding this subject?

P: I like online shopping, I think it is a great thing. I think there are a lot of good things about it.

I: Everyone is a different kind of shopper with their own personality traits.. How would you identify yourself as a shopper in general when buying new clothes? Deal hunter, casual shopper, brand enthusiast etc.

P: It depends on what I am buying. I think I am 50% deal-hunter. If it is about clothes I always look at the sites more when it is sales season, because there are some crazy deals all the time. But it is not exclusively when I shop online. If for example I need some basic clothes, like simple items that you just use so much that they just get used and you need to have them all the time, those are the ones I don't think too much about, because if I need it then I need it, so then I just pick some. So that is what I never think about when it comes to price. It depends on what I need at that time. But I enjoy being a deal-hunter too.

I: Do you get enjoyment out of shopping. Which ways?

P: Yes, I do, In a way that If I am bored, I really like to do it, but I can get overwhelmed. It has happened many times that I collect stuff and then I just close the site and maybe I come back to it later when I am not that overwhelmed anymore. Because a website can contain a lot of stuff so you just get tired.

I: Do you prefer to shop clothes online or in physical stores and why?

P: 50/50. Of course in physical stores you can try them on, but it is also more difficult to find them because in online shops the model already tried it on for you, but otherwise it is just two completely different things. I think maybe online shopping is better because normal shops can get too crowded and you have to wait in a queue to try on the clothes or you don't find your size. That can be very annoying. So it depends on how I feel. I would say I buy as many items in a physical store as online.

I: Which online platforms or apps do you use the most when shopping for new clothes?

P: I have an H&M app, I use that all the time. It is very useful to have that because you have all these points and everything, though it can be scary because you always get as many points as the amount of money you spent while shopping so you can actually see how much money you spent there and the more points you have the more discount and benefits you can get. Otherwise I use NA-KD, Boohoo, nelly.com

I: What do you like about these platforms?

P: They have good prices, these are not very expensive websites, and they are very user friendly. You can really search for the exact thing you are looking for. So let's say you want to buy black top but you don't know more. So you can put filters as size, long sleeve, short sleeve and some of them even have what kind of material you want. So if you want something but don't know exactly what you can just choose what you would like and maybe they will show you something nice. And they usually do. I also never had problems with their shipping, it was never late, it is very easy to return stuff even though I don't usually do that. But they do send the return label in the pack so you don't have to think too much about that. I think H&M brands themselves with "buy it and try it at home" because you can return items so easily, so you don't have to be very committed.

I: Do you use these platforms on your computer, mobile phone or other?

P: I use the h&m app on my phone and the rest I use on the computer.

I: What do you like about using these specific devices? Are there any unique or cool features when using specific devices?

P: No. I actually don't really like the app. I think it is a bit too much, like crowded and a bit difficult to navigate. And it doesn't really show that many items at once because of the small screen. I prefer the websites. And I also do it when I am bored so I do not want to stare at my phone. I can just have my computer next to me. It is more comfortable.

I: Is shopping clothes online something you plan for a specific time or do you prefer to do it during dead time when you have nothing else to do?

P: I feel like even if I need something I just do it at random time, I need to be in the mood for it. I really hate specifically sitting down and searching for a dress when I have to go for an event. If it is for an event I don't even shop online because there is so much to choose from so it is just easier to go to shop and buy something. So either when I have nothing to do or when I know I have time to sit with it.

I: Where are you likely to be, and how much time and attention do you use for shopping clothes online?

P: It is probably at my home, in my bed. It is kinda like part of recharging from social activities, like part of ritual. It is very private. Also if I go out shopping I just shop alone. I don't shop with other people, that is stressful. I look at sites maybe every 3 weeks or something. Once a month at least I do a big online shopping, which is very annoying, I shouldn't do that. But somehow I always end up doing that at least once a month, maybe even twice a month. It can take hours, like 2 or 3.

I: In which other environments you might do your shopping? Home, work, commute etc.

P: Only at home. Once I bought a coat on a phone but it was only because I had to do it right away as it was on sale. Also H&M gave me a notification through their app about their sale today but I did not even open it. I have to be in the right environment.

I: What are you trying to accomplish when shopping for clothes online? Get inspiration, find specific clothes, compare prices etc.

P: Most times it is clothes shopping which is the aim for finding happiness. It makes me very happy to shop in general. I am not really looking for inspiration I just do it because it makes me feel good.

I: In your opinion, what kind of interface would give you the best possible shopping experience?

P: The more customization the better. The trait of clothing, like size and color and material, maybe even fit. Like for example what I said, this Boohoo website has options for like short girls or tall, like if you are buying bodystocking it matters how tall the person is because it has to fit. So that is very useful. And of course the price range option is very important of course. Also saving the favourites. NA-KD has this very good feature that shows you the list of the last clothes that you looked at, that is very good if you had something that was very good but you forgot to save it so then you don't have to go back later. But, for example, what NA-KD doesn't have is that there is a two-piece thing, it does show the top but it doesn't show where to find the trousers for it. That's super annoying. But I think they do it in H&M. And I think it is very important if you want to buy something together and they sell it in 2 different pieces. Also with bikini, if you can't find the bottom then it is super annoying. It would make sense that if you see the jacket you get related pants with that because it is how

you get the set. So it would be clever if they showed you because maybe you are not very original. I think it happened to me when I saw the jacket but I didn't see the skirt and I couldn't find the skirt.

I: Can you think of any issues within online shopping platforms?

P: They don't like to write a lot of information about shipping time and costs in advance. So it is very difficult to find these information on many websites. I think that is also the reason why I use only few websites because this information is very annoying to find out. But it happened to me before that I had to put something to the basket and wait until it would proceed to the payment to actually see how much shipping would cost and what time it would arrive. Sometimes I guess they don't think it is important. That's annoying.

I: In your opinion, what kind of simple tweaks or additions could overcome the issues?

P: I think it would show right when you go to your basket. Why would you save it for a surprise? It would be just a very simple and visible place to put this information.

I: What kind of new features would you want from the platforms you are using?

P: Not really.

I: Do you have any other comments or ideas about the functionality of any online platforms which have caused you issues or which would make the experience better?

P: No, sorry.

I: Think of the last time you bought clothes online. What did you set out to do and how did you accomplish it in the duration of the whole day?

P: I think it was one of the weekends. I think it was after a party or something and I was wearing my white shoes in the party and in the morning I looked at my shoes and thought they look disgusting because they were so dirty. And for some time already I was thinking I should get one pair of shoes that I can party in and another that I can wear on the street without throwing up on them. But I don't think I did anything about that. It was while I was working on my Master thesis and felt like I should reward myself with a break. So I sat down to shop. I was already shopping there before, it was on Boohoo, but I thought that I should buy more stuff at once because they have a shipping cost of like 40 DKK. So now I additionally looked for some stuff if I need to buy. I remember that I thought that I don't have a lot of long-sleeved items because I tend to buy pretty party clothes or short sleeved items. So I searched for that and also for the clothes I can wear to the streets in this Danish kind of weather so not like short clothes but more weather appropriate. Then I just paid for it and it came.

I: Was the activity divided into chunks of times and locations?

P: I did it in one sitting. But when I shop I also look at my favorites list. Those items I found long time ago, so I go through them if I need anything from there. So these items are from different time but they were included in this recent purchase. So I usually start with my favorites and scroll and look at them and then I start with new items and I add them to

favorites. I don't put them directly in the basket because you cannot buy everything you like. So before I check out I just look through my favorites what I would like to have.

I: How long did the activity last in total? Moments, minutes, longer?

P: Maybe 2 hours.

I: Which times of the day was the activity performed?

P: Around afternoon and evening, something like that.

I: Which devices and platforms did you use?

P: My laptop and website Boohoo. I didn't check out any other websites at that time actually.

I: In what physical locations did the activity take place?

P: At home.

I: Did you do the activity with someone else? If so, why and how? Do you ever?

P: No. Sometimes if I am shopping for something and I am not sure about it I will show it very rarely to my mom or to my girly girlfriends that I know could give me their opinion. But this is usually with more expensive items. If I use the app I just share the screenshot otherwise I send the link. With cheap items I just buy them.

I: Which items did you buy last time?

P: It was a coat which I actually returned. Because I thought I lost my coat and I really like it so I ordered it, but then I found my coat so I returned it.

I: Could you show me how you go through the process? How you look for an item and how you buy it.

P: Okay. I just logged in to the H&M website on my laptop. Should I look for something I would like to buy?

I: Yes.

P: Okay. So I choose the women category. Now I see that there is 60% sale so obviously I am going to search for this. And let's say that I would like some top. So now I see these tops and first of all I would search for my size because somehow small sizes are sold out very fast. Apparently Danish people are small.

I: Do you ever use the other filters?

P: It depends on the category. Not for these. Okay, I would like to look for beige and black. But what I normally do I would not put the filters on.

I: Because you wanna see everything possible

P: Yes. It is already discounted so it is not going to be a lot of things so why not just search.

I: If you see something interesting, what do you do then?

P: I click on it. Actually I saved this one on my app. I really like it and I think it has been on sale before. Probably if it will be on a sale for a longer time I will end up buying it. Sometimes I can think about a piece for a very long time, like even weeks or months. So it is good to have the favorites saved.

I: So you think it is good to have some notification when it is on discount you might end up buying it because of it?

P: Yes. Easily. I would do that

I: So when you come to this page because you like it, what do you do here?

P: I choose the size and put it in my favorites

I: So you don't look at any information about it or?

P: Not on this website because they don't have anything. Sometimes I look at what people responded if the fit is rather bigger or smaller because I know they have this feature. But for example on NA-KD website they say how tall is the model and what size she is wearing.

I: And then you can compare yourself to her?

P: Yes. That is why I like to go back to some websites because you know how they work. If it is a completely new website then it is not as much fun because you have to learn it. So here I know that there is not any interesting information other than that. I would say that sometimes I look at the related products if let's say I am looking at something long sleeved then I know they will suggest some other long sleeved items, which you see I already saved few of them. So let's say I see this and it is not exactly what I like but if I click on it and I scroll down I guess they have more related items so I guess I also tend to use this kind of function. But for example in the app I think it does not work, it does not show it, so on the website it is so much easier. I think most of the clothes websites have this kind of function.

I: But there you have to take an extra step because you have to go to another product to see more related stuff. Do you think it would be easier to reload somehow more here?

P: That would be very nice because it is like 2 pages only showing.

I: So now you have enough stuff that you liked. How would you buy them?

P: So I would go to my favorites. So now I just found out that the coat I bought is on sale. This is what I hate about H&M. Everytime you want something just wait a few months and they will put it on sale. There is no item they will not put on sale. But when I see that something is out of stock and I see that I don't like it anyway I usually remove it from my favorites list. But I just look at them. For example, more body fitting items like bikini tops I would just look at it again because I would hope there would be more pictures of it, because for some clothes you need more perspective than for others. Like for bikini tops I think it

would be very important that they show how it looks on the model, but for some reason they don't do it here.

I: Some other shops like ASOS show video of a product or in Zalando there is 360 view. Do you think that is good?

P: I guess both of them are great. Also on NA-KD there is catwalk video which is great because it prevented me from buying something. But most of the time pictures are enough. So it is not like I would buy more items on NA-KD just because they have video.

I: So sometimes you double check it even if it is on your favorites before you buy it?

P: Yeah, even triple.

I: Let's say you decide to buy it, what would you do then?

P: I can just put them in my shopping bag. Maybe for the last check I go through the page again if something catches my eye but that is a really short check on the website again. And then I revise my shopping bag, if I really need this and that. So if I am not happy with how much I should pay for items I just save some stuff for later. I would say that I frequently remove items from the shopping bag before paying to be more happy with the final price. And I think that is it.

I: Could you teach me how I would buy myself, for example, new jeans or shoes as a first time customer on that same platform?

P: So I am at Boohoo, and it is already customized for me so I want to log out.

I: How is it customized for you?

P: The language and the currency. This is very annoying actually that you need to be logged in otherwise it is a mystery. So for example if I land on the main page it is going to be UK and pounds so you would like to have a currency in DKK and the language is already English and then it will automatically go to Danish website. This is very important because they have different promotions for different countries. So you would like to go to shoes and I think I just click on this and all shoes, because there are more subcategories when you click on it. And here you can customize everything not just categories.

I: And this is what you like as you mentioned.

P: Yes. And also you would like to choose the size. Because they don't have the size from everything. And I would go for trainers and maybe white shoes. Then you would look at them and if you like something you would just double click on this so it opens in another window so you can still go back to the search. Then you look at it and you look at the pictures. And if you would like it you just put it to your favorites.

I: So the same process as before.

P: Yeah but if I click on the favorites on this website it navigates to my favorites which is super annoying, that is why I always open them in different tabs. And that is how I would look for shoes.

I: Is there anything different in the wishlist and how you shop here compared to the H&M app?

P: No. I just always put things in my favorites before I decide to buy it. Now I see that most of my favorites are out of stock. This is very annoying because if my favorite is sold out on HM it gets all grey but here it is just a small notification. If I am scrolling and I find something I like I get excited and then I notice that it is out of stock, so that is turn off.

I: So even if it is in stock it just says the same way that it is in the stock? So it looks exactly the same, it just says different things.

P: Yeah, one color difference. I mean it is almost even the same color. But yeah, that is how I use Boohoo.

Participant 3

I: Interviewer

P: Participant

I: What are your gender, age and occupation?

P: I am male. I am unemployed and 28 years old.

I: We are going to be talking about shopping and online shopping in general, what is your general opinion regarding this subject?

P: It (online shopping) is exciting. It's like shopping but gives you ideas, can find things at a cheaper price and is more relaxing.

I: Everyone is a different kind of shopper with their own personality traits.. How would you identify yourself as a shopper in general when buying new clothes? Deal hunter, casual shopper, brand enthusiast etc.

P: I am both a deal hunter and a brand enthusiast. I try to find my favorite brands on a cheaper price. I like to follow up on the deals they might have.

I: Do you get enjoyment out of shopping. Which ways?

P: Yeah, definitely. If I am shopping online, it's always fun to check out new clothes as well. For example, when I am buying a t-shirt I can also check out other things on sale or new arrivals. This way I might find inspiration for what to buy later and grow my clothes collection.

I: Do you prefer to shop clothes online or in physical stores and why?

P: I used to prefer the physical stores but nowadays I dislike it when the people push themselves on me with help. It's a good idea to recommend things but is annoying when they are trying to force me to buy things. That is why I have switched to online shopping, so I can take my time and consider the choices during the day. Also, I am quite tall so it is easier to find my size online.

I: How often do you shop for clothes both online and in physical stores?

P: I am not a frequent shopper. I shop during the sales a few times a year.

I: Which online platforms or apps do you use the most when shopping for new clothes?

P: Now, I am using almost exclusively Asos because of their tall size collection. Maybe I might also use Nike.com.

I: What do you like about these platforms?

P: Honestly, I would say the quality of the clothes in Asos is not very good. If I would go for the quality, I would never buy from Asos. Also the prices are not the best. But their fitting is very good, everything is long enough for my size, which is difficult to find otherwise.

I: Do you use these platforms on your computer, mobile phone or other?

P: I shop mainly on my phone, I have the Asos app, because it's more convenient than shopping on my computer.

I: What do you like about using these specific devices? Are there any unique or cool features when using specific devices?

P: It's about when I'm using the app. I might be sitting on a couch or lying on the bed so it's much easier to use my phone than a computer. I also don't feel like spending time on the computer so much. On a computer it could be better though, when I want to see the product and the images better. Then again, the layouts on computer screens are usually very cluttered with information and there are too many steps between different pages, which can be a bit overwhelming. On the app the layout is much more lightweight and has only the necessary information which is easier for my eyes. Furthermore, I can use just one finger to swipe between pages which makes the navigation much faster. It's just a very easy and nice feature.

I: Is shopping clothes online something you plan for a specific time or do you prefer to do it during dead time when you have nothing else to do?

P: Both, I might shop online whenever I need something specific or whenever I just feel like it. Sometimes I might get ads or emails that something is on sale, so I can go and check if there is something of interest for me. I plan the time if I need something specific and other times just shop during the dead time.

I: Where are you likely to be, and how much time and attention do you use for shopping clothes online?

P: Normally I shop at home. I don't know the exact time but sometimes it can be an hour or so while going around checking different clothes pieces and reading about them. Never more than an hour, though.

I: In which other environments you might do your shopping? Home, work, commute etc.

P: I might also shop when I am commuting or sitting in a classroom. I have seen the other students also doing that. But it's not really shopping, it's checking the things out and putting them on your wishlist and so on.

I: What are you trying to accomplish when shopping for clothes online? Get inspiration, find specific clothes, compare prices etc.

P: I compare prices and get inspiration for the coming season or for replacing my old clothes.

I: In your opinion, what kind of interface would give you the best possible shopping experience?

P: As of today, the best interface for me is the kind on the mobile app. For example, if I get facebook or instagram advertisements it's easier to navigate to them on my phone. All I have to do, if I am interested, is to click on the link and it will take me to the seller's app. The same might be possible on the computer but overall it's easier on phone. Also, the navigation especially is easier on the app. I think all the websites are more or less the same with too much information. On the other hand, it also depends on what you are buying. If you are shopping for electronics and need more information it's better to do it on a computer. Also, some apps like the Ikea one has a scanner that you can use in the physical store in order to get more information about the items.

I: Can you think of any issues within online shopping platforms?

P: The search algorithms are sometimes annoying because they show you the same default things like most popular or most purchased items. That is the first thing that appears on the page which you can then sort later by price and other factors. But it feels like they are trying to promote certain things more which I would like to try to avoid. I prefer to have less predefined content so I can see new things as well. I think, people don't usually go further than a few pages so everyone might end up buying the same things. I believe that people don't have the time and patience to use all the possible filters in order to search specific things. The app could also be better if I could see more things without navigating through multiple pages or scrolling all the way to the bottom. Maybe I could click on one item and it could show me multiple product variations at the same time.

I: What kind of new features would you want from the platforms you are using?

P: The same thing. I want to view more things without navigating too much. Also on the computer would be nice if I hover on a product it could show me more variations of it. Otherwise I am always seeing the same things which I don't have the patience for.

I: Do you have any other comments or ideas about the functionality of any online platforms which have caused you issues or which would make the experience better?

P: Well the apps freeze sometime, but I guess that is normal.

I: Think of the last time you bought clothes online. What did you set out to do and how did you accomplish it in the duration of the whole day?

P: Last time I bought a hoodie, I searched for it online but ended up buying it in a physical store instead because of the shipping fees. I don't like it when I have to buy for a certain amount in order to get a free delivery. Last time I bought online was because I needed something specific. The same thing happened that I needed to buy more in order to get a free delivery so I asked my friend if he needed anything. Then we ended up ordering together. I think it could be useful if you could, on the app, merge your orders with a friend in order to get benefits like free delivery.

I: Was the activity divided into chunks of times and locations?

P: Yeah, I searched a bit during the day and asked my friend. Then we made the order in the evening.

I: How long did the activity last in total? Moments, minutes, longer?

P: Less than thirty minutes.

I: Which devices and platforms did you use?

P: It was the Asos app.

I: In what physical locations did the activity take place?

P: At home.

I: Which items did you buy last time?

P: Last shopping I made with my friend's profile in the app. But I can show you the last time I bought something with mine. I bought some t-shirts and jeans.

I: Can you show me how you would run through this process from beginning to end?

P: Usually I go to the search. I choose clothing. In the range, I choose a tall range. That is kind of like a category specifically for tall people. Next in the filters I choose the product type. So if I wanted a shirt, I would choose a shirt. Then I look all of them one by one.

I: How would you continue once you find something interesting?

P: Let's say I like this green shirt. I open it and check the pictures. Good thing about ASOS is that they also have a video of someone wearing it so you can see how it looks when worn. Also, they mention the models height and size so it is easier to choose your size. ASOS also has an AI that can automatically recommend me certain sizes based on my height, weight and previous purchases. It would have asked for my information earlier. I think that is quite cool. Anyway, then I would add the product to my bag.

I: Could you teach me how I would buy myself, for example, new jeans or shoes as a first time customer on that same platform?

P: First you go to the search and find footwear. You can view all shoes or use filters like sneakers or trainers as well as your size. You can select brand, color, material price and so on. Then you can also sort by prices or recent additions, for example.

I: Let's say I put the item on my basket. How would I then buy it?

P: You press checkout and then choose your address. You can put here a code. ASOS gives 10% off for students. Then you can choose the delivery method. All of this is automatically selected for me because of my previous purchases. Then you move on and pay. You can choose the payment method and place the order.

I: How would I then return something?

P: You go to your profile, your orders. Then there is a button for return information. I will open that. If the order was recent it would show here right away, otherwise I need to create a new return. I can choose then order and they will automatically create me the return label to put on the box. Then I will take it to the post office.

Participant 4

I: Interviewer

P: Participant

I: What are your gender, age and occupation?

P: I am male, 28 years old and I am a software engineer.

I: We are going to be talking about shopping and online shopping in general, what is your general opinion regarding this subject?

P: I like shopping. I think shopping online is easier than going to the physical store because you have more space to think about what you want and there are no people bothering you. I like that in some places you can order and return clothes for free so you can try whatever items you want. I order things sometimes even though I think I might not end up keeping them.

I: Everyone is a different kind of shopper with their own personality traits.. How would you identify yourself as a shopper in general when buying new clothes? Deal hunter, casual shopper, brand enthusiast etc.

P: I think I am a casual shopper. When I am buying something I don't really care much about the price and often also not about the brand. I buy things whenever I need to buy something or feel like it.

I: Do you get enjoyment out of shopping. Which ways?

P: I like it when I find something that I think looks cool and I get to have it for myself. When I am shopping because I need to buy something I don't really enjoy it.

I: Do you prefer to shop clothes online or in physical stores and why?

P: Mainly I prefer online shopping because there are no people bothering you so it's more relaxed. But I think sometimes it's better to go to the physical stores because you get to try and have the items faster than if you would have to order them and wait for them to be delivered. On the other hand, it takes more time to buy something in physical stores because you need to go through all the shops and find the clothes in them.

I: How often do you shop for clothes both online and in physical stores?

P: I can visit physical stores quite often whenever I pass through them. So, I might just look at things or also buy them. Online, I shop 3 or 4 times a year whenever I need something and then I also look for other items. Recently, I have shopped more in physical stores because I have been finding some really cool clothes but mostly I buy things from online.

I: Which online platforms or apps do you use the most when shopping for new clothes?

P: I use only Zalando online and not any apps.

I: What do you like about these platforms?

P: Free deliveries, free returns without hassle. Very big collection of brands. They used to have free deliveries without even paying for the order before deciding if you keep the items or not. I think I don't have this anymore, though, because I returned too many things. Most of the online shops are otherwise similar I think. It is important to have a lot of pictures and information, like what is the size of the model and the item he is wearing, then you have less guessing to do.

I: Do you use these platforms on your computer, mobile phone or other?

P: I don't shop on my phone so I use it only on my computer. I don't use the phone because I want to see more products and information at once. It's already slow enough to go through multiple pages of products. I imagine it would take a long time on phone.

I: What do you like about using these specific devices? Are there any unique or cool features when using specific devices?

P: I don't really have a comparison since I never used a phone. But like I said it mainly about how many items you can see at once and how much information you can see.

I: Is shopping clothes online something you plan for a specific time or do you prefer to do it during dead time when you have nothing else to do?

P: I don't really plan my shopping. I do it whenever I feel like it but sometimes I don't have that much time so I might need to reserve some time for it.

I: Where are you likely to be, and how much time and attention do you use for shopping clothes online?

P: I only shop clothes online at home. I need to concentrate on it because I might be looking for something special or cool so I need to focus on the options. I spend some time, for example, to find all the options of jeans that I like and then in eliminating the worst of those ones before adding the rest to my cart. I think I use between 30 minutes to an hour at once.

I: In which other environments you might do your shopping? Home, work, commute etc.

P: I only shop at home and rarely somewhere else if I have my laptop with me and I feel like it.

I: What are you trying to accomplish when shopping for clothes online? Get inspiration, find specific clothes, compare prices etc.

P: I don't really care about the price so I am mainly looking for those items that I need at the time and then at the same time something cool or interesting. I don't really look for inspiration because I know more or less what I am looking for.

I: In your opinion, what kind of interface would give you the best possible shopping experience?

P: I don't like it in Zalando when you are looking for a sweater, for example, and then you see the same item multiple times on the page but in different colors. It would be better if you just see the color options when you hover on top of the product, for example. Also, I would like to see more options and products without having to go through too many pages. So it would be nice to have more things on less pages. They could also show similar items on the product page and a video or something about the model wearing the item and so on. I think it could be really nice if when you scroll through items you would somehow check them out and instead see other items next time when you are scrolling through the same pages. Also, the interface should show you right away if you have previously bought the item and if you have returned it and so on. Also, I hate it in Zalando nowadays when they have paid advertisements as products so they are trying to push you specific paid things. They should rather be in a separate page or something in case I am interested to see them.

I: Can you think of any issues within online shopping platforms?

P: Well I already mentioned quite a few. I haven't had many problems with customer service, for example, because everything is very straightforward in Zalando. What I don't like is that

they have separate pages for outlet items and premium items so I don't know if I am also seeing those items on the normal pages or if I need to go through all these pages separately. I would prefer to have it all in one place and then choose if I want to see outlets or premium items.

I: In your opinion, what kind of simple tweaks or additions could overcome the issues?

P: Like I mentioned. More things in less pages.

I: What kind of new features would you want from the platforms you are using?

P: Zalando should have videos of the models wearing the products or something similar. The better view you can get of the product the better experience it gives.

I: Do you have any other comments or ideas about the functionality of any online platforms which have caused you issues or which would make the experience better?

P: Not really, no.

I: Think of the last time you bought clothes online. What did you set out to do and how did you accomplish it in the duration of the whole day?

P: Last time was today, I bought jeans because I broke my old jeans. I bought the same jeans by going to my order page and finding the pair I ordered previously. That's also when I realized that when I am going through products on the category page it doesn't show if I have bought the jeans previously, which is quite annoying. Because I was going through more jeans and I realized one of those that I chose I had already ordered before and one also returned. It would be nice if this was shown on the product page as well as which size you ordered and maybe something more. The jeans I found very fast because I knew I wanted the same pair.

I: Was the activity divided into chunks of times and locations?

P: I did it in one chunk of time and I also searched for other clothes like t-shirts, sweaters and a jacket.

I: How long did the activity last in total? Moments, minutes, longer?

P: I spent like an hour shopping today.

I: Which times of the day was the activity performed?

P: I did it in the morning.

I: Which devices and platforms did you use?

P: Zalando on my computer.

I: In what physical locations did the activity take place?

P: At home.

I: Did you do the activity with someone else? If so, why and how? Do you ever?

P: I shop mostly alone, but I often ask my girlfriend's opinion about the items that I am about to order. Otherwise I never ask anyone else.

I: Which items did you buy last time?

P: I can show you here in Zalando. Last time I bought jeans, t-shirts, sweaters and a jacket.

I: Can you show me how you would run through this process from beginning to end?

P: I click "men" in the main navigation and then choose jeans in the categories. I already chose the jeans from previous orders on my account page but then I was looking for other options as well. In the filters I chose black color because the jeans I broke were black. Normally I wouldn't sort by color though, because if I was looking for jeans I would just go through all the options and see if I would find something cool. I don't usually change anything because it's already sorting by the popularity. I think it's fine to see what others have liked as well. Otherwise, I could also sort by price or by newest first. But as I don't really care about the price or shop often enough to care about the newest I don't use them. Then I picked the most interesting jeans and opened them in separate tabs. I go through them and check their pictures. They don't have 360 view but they have pictures from all angles. I also check the height of the model and the size he is wearing to compare which size I need. Then I also check the reviews and usually don't take it if it's like under 4 out of 5. I don't usually check the materials or such and instead just see if it looks good on the pictures.

I: So you don't ever use other filters like size or anything?

P: No. Because like with jeans I don't always have the same size so I just go through all of them and then I check if they possibly have my size options on the one I like.

I: Okay so now that you chose the jeans that you bought could you show me how you bought those other items you purchased?

P: Well, then I looked through T-shirts. Actually I saw the T-shirts somewhere. Maybe I was like scrolling down on the product page, there were some suggestions and then I clicked on a T-shirt that I liked and thought maybe I should check T-shirts. So then I kinda continued I went back on navigation to clothes. Or maybe I just saw the T-shirts on the suggestions and then I put them in the basket.

I: So do you think those suggestions actually encouraged you to buy more items?

P: Yeah I think so. If you see something cool on those suggestions that might make you give it another look that you would otherwise never find it by yourself. But it depends, like there are a lot of things. I guess they have some kind of algorithm or AI that actually suggests things that I might like which is fine for me. And then I also had a jacket because I needed a new jacket. I have recently gone to Zalando a few times to check out jackets because it is very difficult for me to find a nice one. So again I went to jackets page and then I filtered by light jackets and I went through a few pages and then I found a nice one and then I put it in my bag. There are like 31 pages of jackets so that is where I like that it is sorted by most

popular ones, because I think it is more likely that I like those most popular items rather than the ones that have never been bought, I guess. And then I needed a sweater as well or I wanted to find a nice sweater, so I went to sweaters and sweatshirts and then I filtered it by color because I knew I wanted a new grey sweater. I didn't know exactly what I was looking for, I knew that I wanted a sweater without a hood, which I can not filter here for some reason. Maybe it is in some other category but I am quite simple so I just like to go through them quickly. And then there were 10 pages and actually for the first time ever I went through all of the pages because I wanted to see all the options and choose the most interesting one.

I: So you like that there is an option that filters item by popularity so you can actually know what is trendy or?

P: I don't really care if it is trendy or not. It is because I don't really care about going through 31 pages and I don't know specifically enough what I am looking for so I can't filter it too much if I am just looking for something interesting. So then I think it is better to sort it by popularity which is automatically done because I feel like those items that are popular should be the better ones and more interesting than the ones that have never been bought. I guess it is just my own preference.

I: Ok, so now you chose a sweater and jeans and t-shirts. Do you put them directly in the basket or do you first add them to the wishlist? You already said that you open them all on a new page.

P: Yes and then I compare them and I eliminate the ones that are worst of those and the rest I put in my basket and then I don't really have to think about the total price because I have free delivery and free returns, so then I might just order them all and that's it.

I: And when you open them all do you go by category, like when you have all the jeans opened do you first choose the jeans before you move on to the next category like looking for a sweater or do you have everything opened?

P: No. I first go through the jeans.

I: So what do you do after when they are all in the basket?

P: Then I might google if there is some discount code and then I continue and buy it and that is it.

I: Could you teach me how I would buy myself, for example, new jeans or shoes as a first time customer on that same platform?

P: So you would go to the mens section and there are these categories, I don't know why they have this outlet separately or brands, I guess it depends what you are looking for. For me, when I am looking at it now, the more you have categories and filters the less I like it, because there are specific things I want. But on the other hand I understand that people might like different things so it is good to have a lot of options. But you would go to the shoes and then..

I: Let's say I want sneakers.

P: So then we go to sneakers. Then you can choose if you want low sneakers or high sneakers or skating shoes. This is also quite annoying because skate shoes can actually include both of the other categories, which I think is not necessary to have so then just choose sneakers low and then there should be another filter that says I want only skate shoes. I think that would make more sense. But let's say we want high sneakers. Usually when I am buying shoes I might already know the brand because I prefer Vans, so in this case I might filter by the brand. Otherwise if I know that I want high sneakers and if I want to see what kind of options they have to find something interesting then I just scroll through all the pages. I could open them in new tabs again and so on. I guess in Zalando you can see if there are different colors.

I: I guess it is because there are different prices on different colors so they show them as a separate product.

P: Yes but they should clearly show what options you have. I don't know, just more information in general so you can see the options. So then let's say you like these shoes. So of course you have others open but you eliminated them and you come to this one. You would check the picture, so it looks great. You check if there is a model which in this case there is not. Then you would choose the size, with shoes it is easy because you always have the same size.

I: So is there ever any model with the description when it comes to shoes?

P: No. It is not really required I guess. So I would choose 42 for my feet, could be different for yours. Then I would put it in the shopping bag and I get this nice view for all the products that are in my shopping bag and then you might just continue to buy it.

I: So which information can you see on the last page before you actually go and purchase the item? Now that we are in the shopping bag, what do you see here, could you describe it?

P: You have all the products, you have color, you have brand, so some little information about the product. You can change the amount of items you have in cart. You can delete it or instead add it to your wishlist. And there is some information about it, that is not reserved for you before you buy it. Then there is some price and this is really nice that it shows when it is expected to be delivered so you can see when you get it or if it is out of stock when you get it. It shows what payment options there are and of course discount code and payment.

I: So if you go further it would just be payment?

P: Yeah and then you put your information there and so on.

I: So it is pretty simple, just few clicks to buy it?

P: Yes.

Appendix 2. Interviewee profiles

Participant 1

S01, graduate from University College of Northern Denmark's Web Development top-up programme: 25, female. Currently unemployed, looking for a job and master level studies. Shops often in both online and physical stores. Uses both smartphone and laptop while shopping mainly on Zalando and ASOS websites.

S01-1 She lives in a small city, so she thinks that she can find more items online than in the physical stores.

S01-2 She enjoys looking for new trends online.

S01-3 She usually searches for discounted items and deals unless she needs to find something specific, in which case the price is not as important a factor.

S01-4 She thinks it is exciting to try and get new things.

S01-5 She prefers to shop in physical stores but spends more time online because it is easier to find a variation in the items.

S01-6 She likes to have free returns on the websites where she shops because then she can order more things and see if they will fit with all of her clothes before deciding if she wants to keep them or not.

S01-7 She thinks it is better to order and try items at home because then she can try them with more pieces of clothing than only what she is currently wearing, as would be in physical stores.

S01-8 She uses platforms like Zalando and ASOS because they offer varieties of brands. In her opinion it is better to buy all the brands from one website and get them in one order, with possibly free delivery, rather than buy from separate websites and have to pay delivery fees if the shopping amount would not go over some specific limit.

S01-9 She would probably not buy clothes online without free shipping.

S01-10 She uses her phone for online shopping when she is travelling or sitting somewhere trying to kill time.

S01-11 When shopping on the phone, she usually looks for deals or buys items which have just come back to stock and might need to be purchased as soon as possible.

S01-12 She usually uses her laptop for shopping online.

S01-13 She has a wishlist of products which she is following and will get an email alert once they get back in stock.

S01-14 She likes to have a 360 degree view or a video of the product so that she can see how it looks and behaves when being worn. It will help her find items which she will be more satisfied with.

S01-15 She only plans her shopping online if it is necessary to get some item as soon as possible. Otherwise she shops when she feels like it or when she has nothing else to do.

S01-16 She spends from half an hour two hours for online shopping at a time depending how fast she will find what she is looking for.

S01-17 She does not spend much time comparing prices of the items unless she finds a specific product that she likes.

S01-18 She looks for inspiration for new outfits by looking at what items the shops have put together for the model. Then she could see for example an item she owns with other fitting pieces. On some pages, she can even change the items on the model by herself.

S01-19 She thinks it is good when she has the possibility to customize how many products she can view on a page. Then she can choose to see less or more depending on if she wants to have a better look at the items or if she just wants to scroll through them fast.

S01-20 She wants to be able to filter the products.

S01-21 On some sites, it is inaccurately shown that the product is in stock. She has sometimes bought such items which has caused her complications. In her opinion, the shown product stock should always be correct in order to avoid such mistakes.

S01-22 She finds it helpful when the pages have an option which will notify her when the product is back in stock.

S01-23 In many shops you can filter, for example, which materials you want but not which materials you do not want to have in the product. Even if you would choose all other materials you might get a product partially made from the avoided material. She thinks it would be good to have an option to exclude such things for more effective filtering.

S01-24 She thinks it would be “cool” to be able to have some kind of a wardrobe app which would let her see how the sold items look like with her own clothes.

S01-25 She likes it when the items are shown in whole outfits rather than only by themselves.

S01-26 She thinks it would be “cool” to be able to share the sold items with her friends in order to have their opinions about those items.

S01-27 If she likes an item, she might put it to her wishlist and wait until she will get a notification that the price has gone down.

S01-28 She might wait with buying a product on her wishlist until there are only a few in the stock. By then she could choose to buy the item if she has not found anything better.

S01-29 She might divide her shopping in chunks by, for example, looking for items in the morning and making the purchase in the evening.

S01-30 She thinks shopping with friends online would not be a good idea because it would take too long time for everyone to search for their items one person at a time.

S01-31 She usually sorts items by price or popularity if there are too many to go through.

S01-32 She thinks subcategories can be misleading and does not enjoy going through them one by one. She would rather have the option to use subcategories as filters under the main category.

S01-33 She usually checks through all images and uses a zoom function to get the best possible view of the product.

S01-34 Whenever possible, she compares herself on the height and size of the model as well as the size of the clothing being shown. This will give her better picture which size would fit her.

S01-35 If she finds something interesting but is not ready to buy it yet, she will put the item on her wishlist. Then she can look through more things, either online or in physical stores, and later compare everything together.

S01-36 If the shop has free delivery and returns, she might order all interesting products home to compare them and to see how they fit.

S01-37 She thinks it can be discouraging having to create an account in order to be able to purchase things on the sites.

S01-38 She thinks it is not worth it to choose a single brand, but rather many at the same time or none, so that there are more options to choose from.

S01-39 She usually checks reviews if available, though she does not put a big importance on them because sometimes people have experienced different fit than her.

S01-40 She does not usually leave reviews about the items.

S01-41 She assumes that websites like Zalando enforce people to create an account in order to provide benefits such as free returns.

S01-42 She thinks it would not be a good idea to differentiate register and non-registered users, and instead suggests it would be nice to be able to have benefits such as free returns without having to create an account on the websites.

S01-43 In her opinion, the websites she uses have an easy signup process and do not require too many things to input.

S01-44 She does not think it is important to have an option to fill in if you are a male or female which would automatically put you to a relevant section of the website.

S01-45 She only signs up to newsletter mails if she can get some discounts or other value from it.

S01-46 She finds it useful to have recommendations of products related to her recent searches available on the front page, for example.

S01-47 When she is only scrolling and searching for good deals, she either checks the newest arrivals or the outlet section with all the deals on the website.

Participant 2

S02, studying in Aalborg University's Tourism programme: 28, female. Currently working in Customer Support as a student job. Shops often in both online and physical stores. Uses both smartphone and laptop, while shopping on websites such as NA-KD, Boohoo and Nelly. On her phone she uses the H&M app very often.

S02-1 She likes online shopping and thinks there are a lot of good things about it.

S02-2 In her opinion, she is a bit of a deal hunter as she looks at the shopping sites more often during sale seasons.

S02-3 She does not check the price too much when buying basic items which she needs all the time.

S02-4 She shops online when she is bored.

S02-5 When shopping online, she can get overwhelmed by the amount of items and might choose to leave and come back to it later.

S02-6 She prefers online shopping because physical stores can get too crowded and she might have to wait in queues to try on clothes or might not be able to find her size, which can be very annoying for her.

S02-7 She buys as many items online as from the physical stores.

S02-8 She likes to see a model wearing the clothes online in order to see how they fit.

S02-9 She finds the H&M app very useful and uses it all the time.

S02-10 She likes that in the H&M app she gets points for buying things which give her benefits and discounts.

S02-11 She shops on websites such as NA-KD, Boohoo and Nelly because they are user friendly and not too expensive.

S02-12 She likes to have a lot of filters which help her search for specific things she might be looking for.

S02-13 She does not return a lot of items but likes it when there is a return label in the parcel with the rest of the order.

S02-14 She is not a big fan of the H&M app because it is too crowded, the navigation is difficult and not many products are shown at the same time.

S02-15 She prefers to shop on her laptop over a phone because it is more comfortable than staring on a phone.

S02-16 She shops at random times whenever she has the mood for it because she hates to specifically sit down for the shopping itself.

S02-17 If she needs clothes for events, she does not shop online because there would be too many options to choose from.

S02-18 She has to be in the right environment to shop and usually does it at home on her bed.

S02-19 Shopping online is part of a ritual for her which helps her recharge from social activities.

S02-20 Shopping for her is very private and she always does it alone both online and in physical stores because she finds it stressful to shop with other people.

S02-21 Once or twice a month, she does a big shopping online which takes her around 2-3 hours.

S02-22 She once bought a coat on her phone because she got a notification about it and had to buy it right away.

S02-23 She shops because it makes her feel good and very happy.

S02-24 She thinks that the websites should have a lot of customization filters such as size, color, material and fit as well as the price range for the search.

S02-25 She thinks a filter about the size of the person is important because some of the clothes are better regarding if you are a short or tall person.

S02-26 She likes to have a wishlist as well as a place where she can see the last items she has looked at in order to save them if she forgot to do it earlier.

S02-27 She dislikes it when the website does not show her related items of a set and then she might not be able to find it anywhere on the whole site.

S02-28 She has had issues finding information about shipping times and costs which is sometimes shown only on the payment page. This information in her opinion should be shown already on the shopping cart page instead.

S02-29 She might look for more items to buy than she initially planned in order to get free shipping.

S02-30 When she shops, she always puts the interesting items to her wishlist and chooses the items to buy at the time from there.

S02-31 If she is buying more expensive items, she might ask an opinion from someone by sending them a link or taking a screenshot of the item.

S02-32 She can sometimes think about buying a specific item on her wishlist for weeks or months before actually doing so.

S02-33 She thinks getting notifications about things on her wishlist pushes her more towards buying those items.

S02-34 She does not like to use websites with completely new functionality where she would have to spend time learning her way around.

S02-35 She sometimes looks at similar item suggestions and can click through multiple products in order to get more suggestions and to see more alternatives for the products she is looking for. Though, she would prefer to have this functionality without having to go through multiple pages.

S02-36 She usually expects every item to get on sale within a few months.

S02-37 She usually deletes products from her wishlist when they get out of stock.

S02-38 She believes it is important to have a lot of pictures from various angles and with a model wearing the item in order to get a better perspective of the item.

S02-39 She thinks having a video or a 360 view of the item could be nice but not necessary as most of the time having enough pictures is enough.

S02-40 She can double or triple check the items before buying them to make sure they are good for her.

S02-41 She can still revise and remove items from her shopping cart before moving on in order to not pay too much for a single order.

S02-42 She finds it annoying that on some multi-language and -currency websites she needs to be logged in to get to the right country section.

S02-43 She has a trick to open the products on new tabs on her browser so that she can continue scrolling through the catalogue page.

S02-44 She finds it annoying when she adds a product on her wishlist and the site would redirect her to that page.

S02-45 She dislikes it when items on her wishlist which are out of stock are shown in an almost identical way to those on stock. She would rather like to have them clearly separated.

Participant 3

S03, graduate from Aalborg University's Master of Nanobiotechnology programme: 27, male. Currently working as a chef. Mainly does his shopping in online stores. Uses mainly his smartphone, while shopping almost exclusively on ASOS through their mobile application. Might occasionally also use websites such as Nike's online shop.

S03-1 He thinks online shopping is exciting and relaxing.

S03-2 He thinks online shopping can help get new ideas about what to buy.

S03-3 He thinks that it is possible to find items cheaper online than in the physical stores.

S03-4 Sees himself as a mix of deal hunter and a brand enthusiast in a way that he tries to find his favorite brands at a cheaper price. He likes to follow any possible deals regarding them.

S03-5 He enjoys shopping online and thinks it is fun to check out new clothes. While shopping for clothes he needs, he may look for new arrivals and sales in order to get inspiration on what to buy later on.

S03-6 He dislikes it when people push themselves to offer help at the physical stores. He feels like instead of really trying to help, they are just trying to push him into buying the product.

S03-7 He likes online shopping because he has enough time to go through the products at his own pace without anyone bothering him.

S03-8 He is quite tall, so it is easier for him to find the right size of clothes online.

S03-9 He is not a frequent shopper and only shops online a few times in a year.

S03-10 He shops at sites such as ASOS and Nike because they offer tall size collections which can be difficult to find.

S03-11 He does not like the quality of the items nor the pricing at ASOS, but buys the products from there anyway because of their good fitting for tall people.

S03-12 He prefers using an app on his phone over a website on a laptop because it is more comfortable. He can be on his phone anywhere such as on the couch or in a toilet.

S03-13 He thinks shopping on a laptop could be better than on the phone when you need to see more information about the products or just to see the images better.

S03-14 He thinks that layouts of the websites on computer screens are usually too cluttered with information and that there are too many steps between different pages which can become overwhelming. On the mobile apps, there is only the necessary information which is easier for his eyes.

S03-15 He thinks that it is a very nice and easy feature to be able to swipe pages on the mobile app because it makes the navigation much faster.

S03-16 Sometimes he gets ads or email notifications which will take him to the shop and he might end up checking the pages for anything interesting.

S03-17 He might plan his shopping if he needs to find something specific.

S03-18 If he is not looking for anything specific, he can end up shopping whenever he has any dead time.

S03-19 He normally shops from home.

S03-20 If he shops elsewhere than home, he does not usually buy anything but rather just scrolls through items and puts them on his wishlist.

S03-21 He normally spends around an hour shopping.

S03-22 He thinks that, though it might be similar, it is easier to follow and navigate through advertisements to the shops on his phone rather than on a laptop. Normally he only needs to click a link and he is already on the right page.

S03-23 He says that some apps, like the Ikea one, have product scanners which can help the customers get more information in the physical stores.

S03-24 Sometimes he finds the search algorithms annoying because he always sees the same products such as the most popular or the most purchased ones. It feels to him that the shops are trying to promote certain items over others which he would like to avoid.

S03-25 He prefers to see less predefined content in order to see more new items. With the usual filters, he assumes people do not go through many pages and everyone will end up seeing and buying the same products.

S03-26 He does not have it, and he assumes that other people also do not have the patience to use too many filters in order to search for specific things.

S03-27 He would like the mobile app better if he was able to see more products on less pages so that there is less navigation through pages. He suggests being able to click a product or hover over it in order to see multiple variations of it, for example.

S03-28 He found a hoodie online but ended up buying one from the physical stores instead because of the shipping fees that would have come from ordering online.

S03-29 He dislikes having to buy products for a certain amount in order to be able to get free shipping.

S03-30 He has bought products online together with his friend in order to have a high enough amount and get free shipping.

S03-31 He thinks it could be useful to be able to merge your orders with a friend in order to get free shipping together.

S03-32 He usually filters clothes by their size in order to find only tall size collections.

S03-33 He likes to see the images and, if possible, a video of the product being worn to get a better view of it.

S03-34 He mentions it is easier to find the right size of clothing when the size and height of the model and his worn item are mentioned in the information.

S03-35 He thinks it is cool that ASOS has an AI which can recommend him size based on his previous shopping behaviour.

S03-36 He mentions that in ASOS with a specific code students can get off 10% of all their purchases.

Participant 4

S04, graduate from University College of Northern Denmark's Computer Science programme: 30, male. Currently working as a Software Engineer. Shops occasionally in both online and physical stores. Uses only a laptop, while shopping exclusively on Zalando website.

S04-1 He likes online shopping and thinks it is easier than going to a physical store because there is more space to think about what to buy and no people bothering him.

S04-2 He likes when online shops have free delivery and returns. In these cases he might end up ordering things just to try them while having no intentions of buying them beforehand.

S04-3 In his opinion, he is a casual shopper because usually he does not care about the brand or the price but rather buys things when he needs them or finds them interesting.

S04-4 He enjoys finding and getting to keep items which he finds "cool".

S04-5 He does not enjoy shopping when he needs to find something specific.

S04-6 He thinks sometimes it is better to go to physical stores because he can try the items right away and buy them without having to wait for delivery.

S04-7 He thinks shopping in physical stores can take longer than online because it can be time consuming to go through all stores and their offerings.

S04-8 He often passes through physical stores when going somewhere else. He might end up looking at some items and buying something.

S04-9 He shops online approximately 3 or 4 times a year.

S04-10 He shops online whenever he needs something and looks for other interesting things simultaneously.

S04-10 Recently he has bought more clothes in physical stores because he has been finding some “really cool” items.

S04-11 He does not use any apps for shopping clothes.

S04-12 He shops exclusively on Zalando because of their easy and free deliveries and returns as well as a big collection of brands.

S04-13 He used to be able to buy things from Zalando while paying for the items only when choosing to keep them or not. Though, he is not able to do this anymore and he assumes it is because he ordered and returned too many items.

S04-14 He thinks it is important for an online shop to have a lot of pictures of the products as well as information such as what size is the model and the clothes he is wearing so that there would be less guessing to do regarding the items.

S04-15 He does not shop on his mobile phone because he wants to see more products and information at once. He thinks it is already slow enough to go through products on a laptop and that on a phone it would be even more so.

S04-16 Most of the time, he does not plan his shopping and rather does it whenever he feels like it.

S04-17 Sometimes he might need to plan his shopping when he needs something specific and does not have a lot of free time for it otherwise.

S04-18 He only shops online from home because he might need to focus on it if he is looking for something special or “cool”.

S04-19 When he is looking for something specific he finds a lot of options and then systematically skips the worst ones while adding the rest to his cart.

S04-20 He uses between 30 minutes and one hour for shopping online at once.

S04-21 When he shops for clothes, he does not really look for inspiration because he knows more or less what he is looking for.

S04-22 He does not like it when online shops show the same item multiple times on a collection page, just in different colors.

S04-23 He would like to be able to hover over a product on the collection page in order to see more variations of it, such as the different colors.

S04-24 He would prefer to see more products and their variations while going through less pages.

S04-25 He thinks it would be nice to see similar items on a product page as well as, for example, a video of the model wearing the item.

S04-26 He thinks it would be nice to somehow “check” the items as seen, while scrolling through them so that next time he would see different options.

S04-27 In his opinion the interface should show clear information about recent activity from the user regarding the product, such as if it has been bought, returned and so on.

S04-28 He dislikes when in Zalando there are sponsored advertisements shown as normal products as they are trying people to buy specific things. In his opinion, such things should rather be on their own separate pages.

S04-29 He feels confused and does not like that on Zalando there are separate pages for premium and outlet products because he does not know if these items are also shown on the other pages or not. He would rather have these items on the normal pages and then be able to filter them as necessary.

S04-30 He often asks his girlfriend's opinion about the products he is about to buy.

S04-31 Unless he is looking for something specific, he does not normally use filters other than to sorting as he wants to see more options in order to find interesting and “cool” items.

S04-32 He usually checks the video or pictures to see the item from multiple angles and get a better view of it.

S04-33 He usually checks the reviews and does not order the item if it has less than 4 out of 5 stars, for example.

S04-34 He does not usually check the material of the item other than how it looks like on the pictures.

S04-35 He does not usually filter by size because his size on the items might differ. Then, it is better for him to go through all the items and see if they possibly have his sizes on the items he finds interesting.

S04-36 He might be encouraged to buy things based on suggestions shown on the websites, even if he did not originally plan to buy such items.

S04-37 He thinks it is fine to have an AI suggesting him products he might like based on some predetermined algorithms.

S04-38 It can be difficult for him to find nice items, so he might end up checking the sites multiple times in order to look for the same items he needs.

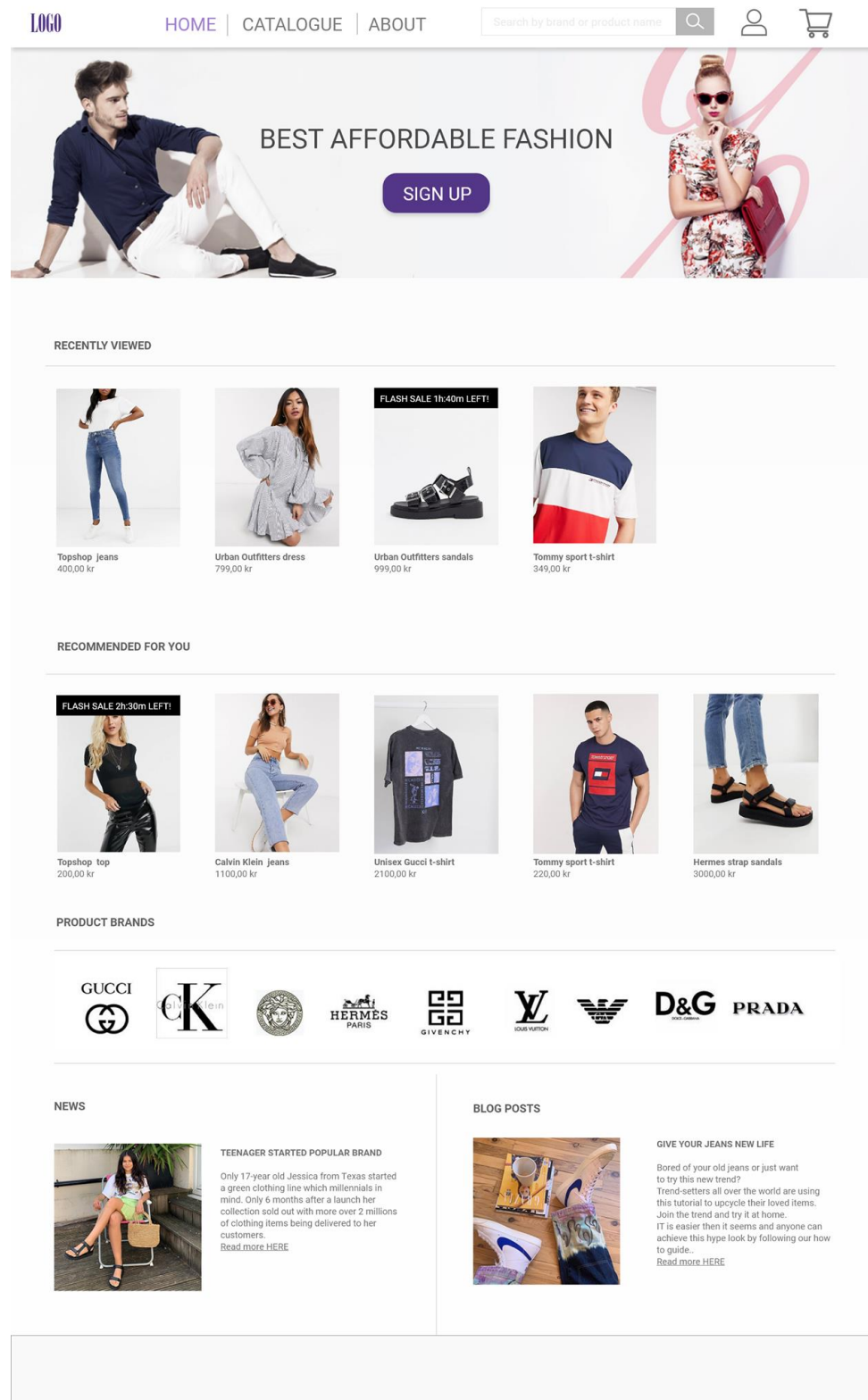
S04-39 He sorts by the most popular items so that he can see which items other people have bought as he believes them to be the most likely items he would purchase as well.

S04-40 He might google for any existing discount codes to apply.

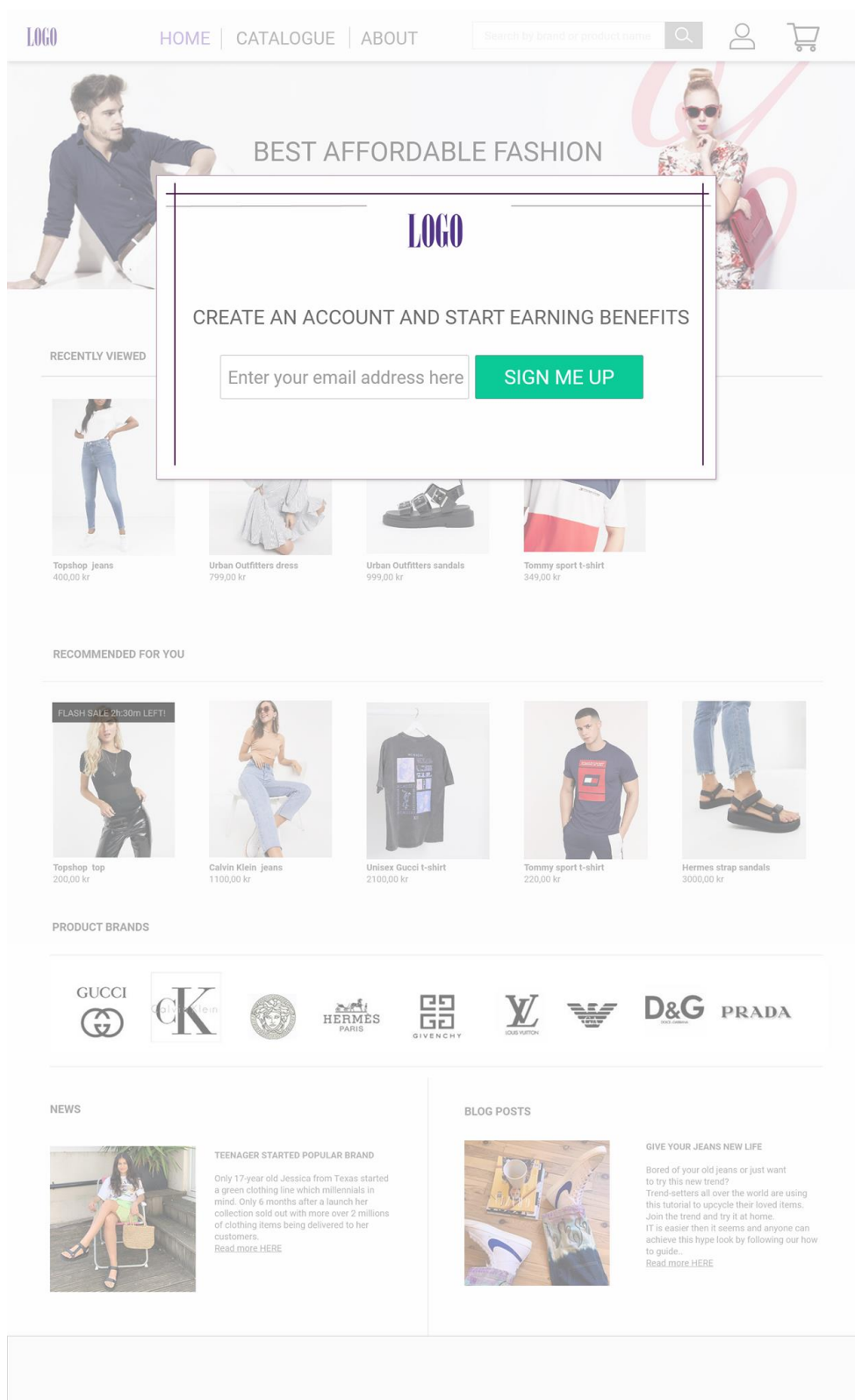
S04-41 He finds it annoying that the different subcategories might include the same items.

Appendix 3. Final designs

Home page



Home page with signup popup



Catalogue page

LOGO

HOME | CATALOGUE | ABOUT

Search by brand or product name

Home > Catalogue

SORT BY

New arrivals

CATEGORIES

☐ Jackets

☐ Tops

☐ Pants

☐ Jeans

☐ Skirts

☐ Shirts

☐ Tops

☐ Shoes

BRAND

Search brand

☐ Hermes

☐ Gucci

☐ Tommy sport

☐ Topshop

☐ Calvin Klein

☐ Urban outfitters

SIZE

☐ XS

☐ S

☐ M

☐ L

☐ XL

☐ 37

GENDER

☐ Male

☐ Female


☐ Unisex

☐ Hide viewed products


FILTER

SAVE FILTER


Choose saved filter




Topshop jeans
400,00 kr




Urban Outfitters dress
799,00 kr




Calvin Klein jeans
1100,00 kr



Unisex Gucci t-shirt
2100,00 kr



Urban Outfitters sandals
999,00 kr



Tommy sport t-shirt
349,00 kr

Catalogue page with hover

LOGO

HOME | CATALOGUE | ABOUT

Search by brand or product name

Home > Catalogue

SORT BY

New arrivals

CATEGORIES

☐ Jackets

☐ Tops

☐ Pants

☐ Jeans

☐ Skirts

☐ Shirts

☐ Tops

☐ Shoes

BRAND

Search brand

☐ Hermes

☐ Gucci

☐ Tommy sport

☐ Topshop

☐ Calvin Klein

☐ Urban outfitters

SIZE

☐ XS

☐ S

☐ M

☐ L

☐ XL

☐ 37

GENDER

☐ Male

☐ Female


☐ Unisex

☐ Hide viewed products


FILTER

SAVE FILTER

Choose saved filter




Topshop jeans
400,00 kr




Urban Outfitters dress 799,00 kr
S M L XL


ADD TO CART




Calvin Klein jeans
1100,00 kr



Unisex Gucci t-shirt
2100,00 kr



Urban Outfitters sandals
999,00 kr



Tommy sport t-shirt
349,00 kr

Catalogue page with shopping cart popup

LOGO

HOME | CATALOGUE | ABOUT

Search by brand or product name

Home > Catalogue

SORT BY

New arrivals

CATEGORIES

☐ Jackets

☐ Tops

☐ Pants

☐ Jeans

☐ Skirts

☐ Shirts

☐ Tops

☐ Shoes

BRAND

Search brand

☐ Hermes

☐ Gucci

☐ Tommy sport

☐ Topshop

☐ Calvin Klein

☐ Urban outfitters

SIZE

☐ XS

☐ S

☐ M

☐ L

☐ XL

☐ 37

GENDER

☐ Male

☐ Female


☐ Unisex

☐ Hide viewed products


FILTER

SAVE FILTER


Choose saved filter




Topshop jeans
400,00 kr




Calvin Klein jeans
1100,00 kr




Urban Outfitters sandals
999,00 kr



Urban Outfitters t-shirt
799,00 kr




Unisex Gucci t-shirt
2100,00 kr




Tommy sport t-shirt
349,00 kr

SHOPPING CART



Tommy sport t-shirt
1 x size M
220,00 kr



Hermes strap sandals
1 x size 38
3000,00 kr

ADD 20,- FOR FREE SHIPPING

Price total.....1234,-

GO TO CART

PAYMENT

Product page

Logo

HOME | CATALOGUE | ABOUT

Search by brand or product name

Home > Catalogue > Women > Jackets

-15%

TOM TAILOR

COLLARLESS BLAZER

Try it on!

Lightweight summer blazer ideal for a barbeque parties or just to throw on when it gets a bit chilly in the evening.

XS **S** M L

ONLY 5 LEFT IN STOCK!

549,00 kr- Save 15%

467,00 kr

ADD TO CART

TRY IT ON

Weight:

58 kg

Height:

170 cm

SAVE

ADDITIONAL INFORMATION

FIT

DELIVERY

REVIEWS

Material: 66% viskose, 30% polyester, 4% elasthan
Detailing: Jersey, recommended dry clean only
Model is 178 cm tall and wears size S
Garment has normal length, long arms
Length of the back is 60cm and arm length is 62cm in size S

BUY OUTFIT


Tom tailor dress
500,-
ADD TO CART


GUCCI Sandals
9300,-
ADD TO CART


SIMILAR ITEMS


Shopping cart page

LOGO



Shopping cart


Delivery



Payment


Success

SHOPPING CART




Topshop jeans
Amount: 1
Size: 27/32
Price : 400,00 kr




Urban Outfitters dress
Amount: 1
Size: 36
Price : 799,00 kr

ADD FROM RESERVED ITEMS




Calvin Klein jeans
1100,00 kr

ADD TO CART



Hermes strap sandals
3000,00 kr

ADD TO CART



Urban Outfitters sandals
999,00 kr

ADD TO CART

PAYMENT

ADD 20,- FOR FREE SHIPPING


Items total.....1199,-
Shipping.....35,-


Price total.....1234,-



[Ask friend? Share](#)

CHECKOUT

Account page

 [HOME](#) | [CATALOGUE](#) | [ABOUT](#)



ACCOUNT	WARDROBE	ORDERS	SETTINGS	BENEFITS
---------	----------	--------	----------	----------

PERSONAL INFORMATION

EDIT

Address

Jessica Doe
Godsbanen 3,6
9000 Aalborg
Denmark

Phone number

+4581710504

Email address

jess.doe@gmail.com

PREFERENCES

EDIT

☐ See news on homepage

☐ See blog posts on homepage


SAVED FILTERS


EDIT


Wedding outfit

Holidays dress

The wardrobe section

 [HOME](#) | [CATALOGUE](#) | [ABOUT](#)







[ACCOUNT](#)


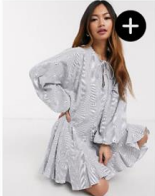
[WARDROBE](#)

[ORDERS](#)



[SETTINGS](#)

PURCHASED







RESERVED





Calvin Klein jeans
1100,00 kr

[ADD TO CART](#)



Urban Outfitters sandals
999,00 kr


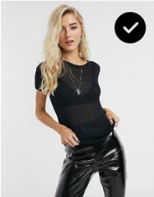
[ADD TO CART](#)



Hermes strap sandals
3000,00 kr

[ADD TO CART](#)

WISHLIST



Topshop top
200,00 kr

[ADD TO CART](#)

MAKE AN OUTFIT



Urban Outfitters sandals
999,00 kr



Calvin Klein jeans
1100,00 kr

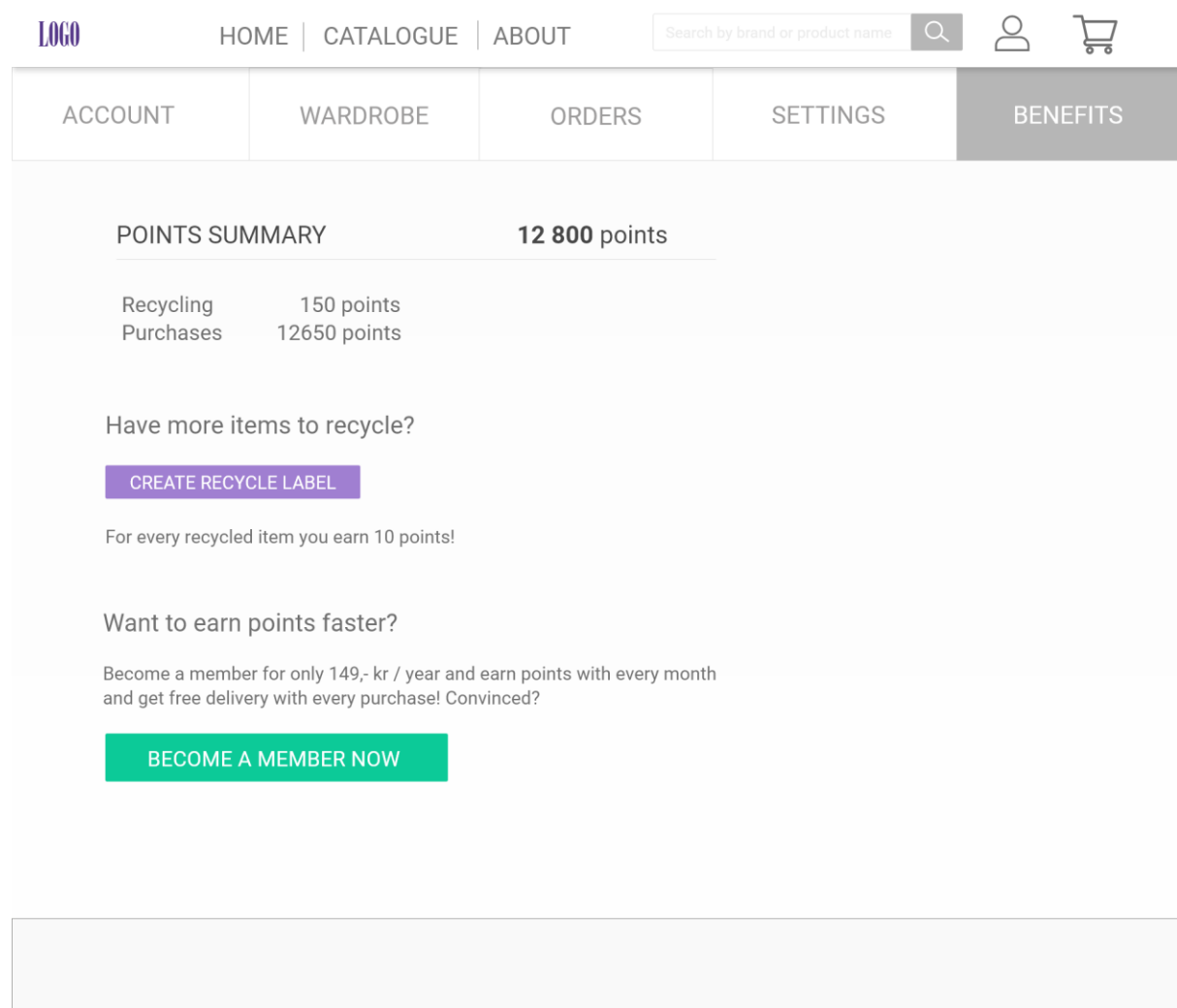


Topshop top
200,00 kr

Total: 2299,- kr

[BUY OUTFIT](#)

The benefits section



Appendix 4. Final interviews

Participant 1

I: Is it okay if I record this conversation?

P: Yes

I: So first I am going to show you some of the designs that I have done. I will go through them one by one and then I will ask you your opinions about them.

Interviewer explains the homepage and asks for participant's opinion.

P: Well, I like that it is not too clustered and I like that I can see some sales on the products, some flash sales. But I think it would be nice to see that I am actually logged in so it would be nice to have some kind of username under the user icon. I like that there are some brands that I can see so I know what the website can offer and I can see that there are some news and blog posts probably for some people who are interested in fashion.

I: You think that is a nice thing to have?

P: Yeah and I think it is nice that it is at the bottom of the page so it is not taking attention away for the people who just came to the website to shop.

I: Interviewer explains the catalogue page and asks for participant's opinion.

P: Well I like that the layout can change because I usually don't like to have too little products, I like to see more at once. But I think the whole filtering way could be a bit confusing at a time.

I: How do you mean confusing? Do you think it is too much?

P: I think it could be too much especially when you have multiple categories of products. So maybe it could be divided into bigger subcategories which you can check and open and choose smaller categories instead of having everything in one chunk.

I: Okay. Do you have any other comments about this page?

P: No. I think everything else looks good.

I: Interviewer explains the catalogue page with hovering effect and asks for participant's opinion.

P: I think that is good. Maybe it would be also good to see somehow this kind of information, like just some writing at the bottom of the picture like 2 more colors just so I know.

I: So some kind of indicator that you don't have to hover on top of it to see.

P: Cause lets say I would not be hovering over every product so I think it would be good if there was writing like more colors or so, because I can already see the price and size does not bother me cause I can filter it.

I: Interviewer explains the product page and asks for participant's opinion.

P: I think it is nice that there is a feature where you can try it on at least with the height, maybe it would be better if instead of weight there would be size since the weight does not always significate what size if the person wearing, so maybe it would be better if it was height and size like S M etc. I think it is better than to put there weight, maybe that could be a bit offensive to the people but otherwise I think the product page looks really good.

I: Do you think this new try it on feature is useful? Would you find it useful?

P: Yes. I would find it useful.

I: Interviewer explains catalogue page with drop-down and asks for participant's opinion.

P: It would be nice if there was like a number that pops up on the cart icon so I can see how many items I have in the cart.

I: So you would want to have a number as well as this thing?

P: Yeah usually on other websites there would be a small number in the right corner of the shopping cart icon so you know how many items you have in your shopping cart and you know that the session did not expire or you logged out or something.

I: Interviewer explains shopping cart page and asks for participant's opinion.

P: I think it looks good and I like the feature that it tells me how much am I missing for free shipping and that it actually shows me the shipping cost because many websites don't show the price for shipping until you get to the very end when you are paying.

I: And how do you like this idea of reserved items?

P: I think it could work especially if you are just busy then you can reserve the item on the run for later and if it is just a day or two it doesn't really matter to the company, doesn't make a big loss.

I: And the idea is that it helps you make sure that you can buy the product when you have time for it and you can add more products to your shopping to reach the free shipping.

I: Interviewer explains the homepage popup page and asks for participant's opinion.

P: Maybe it could write a bit more about the benefits. Like if I see just create an account and start earning benefits I would probably not sign up. But if I would see for example like many websites have sign up and get 15% off your 1st order or something so. Maybe if it was shown what kind of benefits in some small way it would be good, because otherwise I would just close it.

I: So you would want some kind of persuasion like what you will be getting or so.

P: Yeah, like why should I sign up if it just says benefits? Like, I don't know what those benefits are.

I: Interviewer explains account page and asks for participant's opinion.

P: I think it looks just fine, just like any other website.

I: So no special comments about this one?

P: No.

I: Interviewer explains account page - wardrobe and asks for participant's opinion.

P: I think it is a good feature to have because I can see if my old clothes fit with my new clothes and I am not just going to purchase something that once I receive at home I will find out that okay this doesn't fit with anything I own. So I think it is good to put it all together and see, okay this is the right choice and this isn't. Cause otherwise the company will just lose money on shipping since I will return it.

I: So you think this will make it more clear that you are actually buying a product that you will use and not return?

P: Yeah

I: Interviewer explains benefits page and asks for participant's opinion.

P: I think it is nice that the company is trying to recycle the materials. Would be nice to have some information like what we do with recycled items like some link to an article where they write more about it.

I: So you would see that sending them your clothes would have more purpose than just getting you some small discount.

P: Yeah I would want to see if it is really worth returning clothes to them or if I should just give it to charity.

I: All right. Do you think the points system would persuade you to become a paying member?

P: I think it should be also explained okay, for 2K points you get that much discount or so. Like there is actually not written anywhere what are those points doing for me or how much discount is this many points or if I reach this level, you know.

I: Yeah, so maybe show if you have this many points it equals this much.

P: Yeah like next level point check is 15K points and once you reach it you get 50% off your order or something

I: Would you rather use the points as a currency itself or would you rather use it as a system as you said reach a certain amount of points and get more and more benefits.

P: Well I think it would be the best if you could use them right away, but I am not sure if it is worth it for the company itself. So maybe if they could make it work then sure. Maybe it could be made that if you have some small amount of points you can still use them but you get a very small discount like 5kr but if you reach 15K points you can get like 30% discount of your order so you can just like keep on buying there. Like spend them right away option or save for later.

I: Yeah it could be that the more points you have without using them the more benefits you get but if you just decide to use them right away then you also lose those benefits.

P: Yeah and it would be also good that when you are shopping it would show on the basket page like you have 12.500 points, do you want to use it for x amount of money discount?

I: Yeah all right. Do you find the website easy to use?

P: I think it looked quite simple, maybe except for the catalogue page in the sense of filtering. Maybe the filters could be a dropdown itself so they open when you click on them cause otherwise they take up too much space.

I: Anything else?

P: I think otherwise it was pretty good

I: Does it answer some of the concerns you might have expressed during the first interview?

P: Yeah. I think I especially talked about the free shipping and free returns so it persuades me more so it is nice to see how much am I missing for free shipping.

I: Would you consider shopping on this website if they had products you find interesting?

P: Yeah why not.

I: Anything special about this website:

P: I think if they had a good recycling program I would use it. That is a plus for me.

I: Do you have any additional comments?

P: No.

Participant 2

I: Is it okay if I record this conversation?

P: Yes.

I: So first I am going to show you some of the designs that I have done. I will go through them one by one and then I will ask you your opinions about them.

Interviewer explains the homepage and asks for participant's opinion.

P: Well for me this thing with the brands like putting so much emphasis on them I never really understood. It was never interesting to me, but I guess for some people it is. But otherwise it looks good, I like the recently viewed things. I also like recommended for you, if it is real, if it is not bullshit, then I guess it is interesting. Also news and blog posts are not very interesting for me.

I: So you wouldn't find this section useful at all?

P: No. I don't look at stuff like that. But I guess some people do, I don't know. But it doesn't matter. So on the top is home catalogue about etc. So Catalogue is like searching or what is that?

I: Yeah, I will show that page to you soon. But catalogue is basically the page with all the products.

P: Okay and then the magnifier on the right side that is also for search isn't it?

I: Yeah. There is a search bar and account icon and shopping cart icon and so on.

P: Yeah. I think it is fine.

I: Interviewer explains the catalogue page and asks for participants' opinion.

P: Maybe you also want to add how many it shows on the page

I: Yeah I was thinking if there would be different pages or there is just one infinite scroll.

P: Yeah, maybe but then if they lose it then it is not good.

I: So you would prefer to have pages?

P: Yeah I would but with option how many I want to see in a page. I think that is very usual to be honest.

I: What about otherwise what do you think about filters and hiding the viewed products and so on?

P: Yeah hiding products is good because if you liked it you already saved it and if you didn't you don't want to see it again. But I don't know because sometimes you like something maybe from a different color so I dunno, but that is just my thoughts. But it also depends on the website, maybe if it is website where there is a lot of items then it is good.

I: What about the idea of saving filters settings, do you think it is useful?

P: Yeah. Actually I know one secondhand app called trendsales and they have the same thing. That is very useful because there are just so many items and sometimes you just wanna search for the same thing. But I think it is a good idea.

I: Interviewer explains the catalogue page + hover

P: So if I click on the purple one that it shows the purple product without opening it right?

I: Yeah

P: Okay, then I have 2 comments. One of them is that I don't know which website it is but I really like that when you put a cursor on the picture, not click it, it starts to show you different

pictures so not just one displayed but all the different ones. So it is like if this picture is item without model and then you would open it and see it on model and everything then it is fine. But if it is the tshirt and you have picture like this you cannot recognize the cut and the fit of it just by having it hanging so it is good to see it on the model. I think it is really good if I put the cursor there and then it starts to show pictures, then you know more if you want to open it or not.

I: Do you think it should automatically scroll through them or there should be some selection on the left side for example?

P: Just automatically is enough because it is already a small image so you don't want to put like even smaller things up there. Another idea that I think is either on Moss Copenhagen or I think also Victoria Secret there is a quick view so if I want to see more about it there would be a button to open up a pop up and you don't need to open a new page just to check out all the details about it. So I think that is a good idea because it can be tiring to keep opening up and going back. Opening like 20+ extra pages that is just annoying.

I: Also there was an idea that this product would not be shown separately in different color again and again, but instead it is just once here and then you can view the different colors by selecting it here. Do you think it is a good idea or would you rather have it displayed again and again in the list of products?

P: I know that H&M lists all of the colors separately and I think it is really annoying because if I like the style of something I would like to see right away whether it has other colors. Then it is also waste of time when I already found it and then I just have to keep scrolling and see if it comes up and what if some item has like 20 colors so then you have to look at the same item 20 times and that is annoying.

I: Interviewer explains the product page and asks for participant's opinion.

P: Okay. So would the item change its size or would the model be changing its size?

I: Both. So if you choose XS with the product then you could change the model size as well. So you can change both the product size and the model size.

P: Okay so it is not like try it on but what it looks like on the model with these specifics.

I: Exactly.

P: But then I wouldn't call it try it on because to me that applies to how would it look on you . Because why is that scale thing there, it looks like you could move it up to 65 kilograms then what would happen?

I: Then the model would get bigger.

P: But isn't it a bit offensive to try to make a guess of the body of the customer. Because if they by starting up see that there is a model for 58kg and 170cm and the dress fits perfectly

on them and then they need to change it to I dunno 88kg they are just gonna realize that they are too big for the item. I am not sure that it is a good idea.

I: Do you think it would be better if instead of weight you could choose your size, like XS S M?

P: I would use different models that are S or M or L fits perfectly and then write down their specifics like 58kg and 170 cm and for the M you can then write 64kg and 170cm and you can have those, but then it is a lot of work to have photos with all of them. For example what ASOS does is write in your specifics how tall are you how many kg you are and then you can choose if you want loose fit or slim fit or how you want it and then they are gonna suggest you of how many percentages would you fit into which category based on your preferences. But if it would be actual visuals with a model changing body I think it would be very risky. But I really like the idea. I just think there could be more thoughts to it.

I: So you think instead of weight and height you could just choose the size of the model shown here? Like a model is this height and size and such..

P: Yeah that is what most websites do. And it doesn't even have to be done for all sizes because they can already see for example from S M L how it fits on the model so they can compare it to themselves. Like if they are 20kg less than they probably need a smaller size.

I: Interviewer explains catalogue page with drop-down and asks for participant's opinion.

P: That is good. I like that it shows how much you are missing to the free shipping.

I: Interviewer explains shopping cart page and asks for participant's opinion.

P: I think it is clear

I: So would you find these reserved items useful or not?

P: I would but I think I told you that if I sit down shopping it is not just looking I actually shop too. I usually buy stuff that I need and then if I don't do it then I just have it in my favorites. So maybe for me it would be more interesting to have it from the favorite but at the same time If something is lacking stock for ex. I had this issue with H&M recently that there were some clothes that I really wanted and it was sold out all the time and then suddenly it was in stock and I just had to buy it right away cause otherwise someone else is going to. Because they write there are few left in stock so you just have to do it because in 2 minutes it is gonna sell out again.

I: So maybe in that situation it would be good to have something like that.

P: Yeah, definitely yes.

I: What about this feature, do you think it is useful to share your whole shopping cart with your friend?

P: I don't think that I would use that. If I ask someone then I usually just send a screenshot and show it to a friend. And it is not about my whole purchase but about a specific item for example. So I am not sure that I would use it.

I: Interviewer explains the homepage popup page and asks for participant's opinion.

P: So does this mean that after purchases I get some points or something like that? Because to me it looks like you can check out as a guest but if you log in or sign up you can get those benefits.

I: Yes that is exactly how it would work.

P: If you want to do a favor for yourself I would probably put something like sign me up or ask me later or don't ask me. But don't ask me if it is usually not there. Because sometimes it just pops up and no I don't have time for it right now but maybe later yes. And later it is very difficult to find those benefits. I guess for signing up it is different because it is always going to be there but for other promotional stuff they usually have this kind of window and it says like ask me later. But this looks good I guess. How can I deny it?

I: You can just click outside but yeah there should be clear cancel button

P: It can get stressful when I don't find where to click.

I: Interviewer explains account page and asks for participant's opinion.

P: Yeah it is fine.

I: Interviewer explains account page - wardrobe and asks for participant's opinion.

P: I think it is especially nice because you can keep track of what are the parts of the outfit you are missing.

I: Do you find it useful? Do you think you would use it yourself?

P: Yea I think it is nice because like when I told you about those 2 pieces clothes or co-ords then you can make sure that you have all the parts.

I: But the idea is also that you can test how something would fit with the clothes you already own in the purchased ones.

P: Okay. That is a very good idea. But then it would be nice to have a collective app where you have all of your clothes available online, so a new business idea. But even for me for example from H&M it would be really good because I have a lot of clothes from there so it would be really nice. Like for example I would really like a skirt but do I even have anything to wear with it? Maybe if this shop would also have a physical store then maybe you can all some items manually to your purchased. Because like for example I also shop in physical stores in H&M and I cannot keep track of those things that I put there.

I: So you think it would be useful to have some kind of section where you can add your products manually.

P: Yeah if you have this section here I think it would be nice to add manually your purchased ones. I think it is a nice feature. It is great

I: Interviewer explains benefits page and asks for participant's opinion.

P: Points system is very popular so it is good. We also have that in Coolshop.

I: Do you think that this recycling thing is a good idea?

P: I mean does the company really want to pay so much money for recycling clothes and also give benefits for it? I don't know if it is worth it because if I would get one I have a lot of clothes for recycling so that is heavy and shipping would cost some money. So I don't know if it is good for the company.

I: But if you are not thinking about the company but just for yourself, would you use it?

P: Yeah, I would use it definitely. Because a lot of times it is a struggle, well maybe not in Denmark because you have red cross places all over but in Hungary or other places. Yeah it is very motivating that you don't need to care about it too much and you also benefit from it and do a good purpose.

I: Do you find the website easy to use?

P: Yeah, it is very nice that it is so clean and not having a lot of distractions. I don't know if it is from a brand webshop or it is a collective one.

I: Yeah it is for many brands similar to Zalando or Asos.

P: Then I think it is very good because all the details can get lost very fast.

I: Would you consider shopping on this website if they had products you find interesting?

P: I would definitely use it. Especially this point system is great and this wardrobe thing is interesting.

I: Does it answer some of the concerns you might have expressed during the first interview?

P: I think I remember one of the bigger concerns was suggesting other parts of the outfit and this is the website that would be very obvious to use at least for my preferences is very good.

I: Do you have any additional comments?

P: No, I don't think so. Maybe size charts for clothes. That is very necessary.

I: So when you are on the product page you could see what exactly are the dimensions of sizes?

P: Yeah but not just like that. Because this is the collection website so every brand has different sizes so maybe you can import different charts from those companies and having somewhere link or option to check the size chart for clothes is very important.

Participant 3

I: Is it okay if I record this conversation?

P: Yes

I: So first I am going to show you some of the designs that I have done. I will go through them one by one and then I will ask you your opinions about them.

Interviewer explains the homepage and asks for participant's opinion.

P: I think it is nice. It looks appealing. So it just tells the highlights or it just shows the category or so?

I: What do you mean by category?

P: Like these ones that I see in front of me, are they the only products you have on the website or? (Participant points at the brands section on the homepage)

I: So you mean the brands?

P: Yeah

I: So in this case it is just the most popular brands or your favorite brands.

P: So these are just like promoted brands.

I: Yeah, so it is not everything there is.

P: Oh, okay. Then I think it is good.

I: So what do you think about this idea of showing fashion posts and articles? Do you think it is nice to have?

P: I think it is nice to have. In the real size, you think the font would be bigger?

I: Yes I guess. Of course we would make sure that everything is readable and so.

P: Yeah, I don't know if I would be reading this unless I have some time but if I am shopping I would rather go straight for the product.

I: So it might not necessarily be something for you.

P: No.

I: Interviewer explains the catalogue page and asks for participant's opinion.

P: I like the hide viewed products for example so then I don't have to look at the same things again. But if it is possible then I would suggest that you put the gender filter as the 1st thing, so it goes sequentially. So if it is as first thing it could go quickly, otherwise I have to scroll down. So if it was here (at the top) I just select gender in my case male automatically and then I would go.

I: Yes so like bigger categories on the top.

P: Yeah so in a more simple way. So if I choose jackets I would also see female ones then I have to go down and select male specifically. So I don't know if this is gonna help, but if I choose male then it will probably not load more objects in the page.

I: No, it would not load anymore, it would just show less and less every time.

P: So it would be faster to load right or it would not affect the performance?

I: No it doesn't have anything to do with performance in this case. But do you think it would make sense when you are logged in default to that you are a male and everytime it would be automatically checked, so you don't have to choose it at all?

P: That would be better. Unless I am shopping for a female girlfriend or something I don't think it matters for me to see the stuff that is not related to me.

I: What do you think in general about that all the products are on one page instead of separating them to multiple pages? Like in ASOS for ex. You could go to navigation you could choose male female pants...do you think it makes sense to have everything in one page instead?

P: Yeah I think that is good in the way, so I don't have to do something like a chain, like click one thing to go into another thing. This is easier to just put the filters.

I: So you prefer it this way?

P: Yeah.

I: Interviewer explains the catalogue page with hovering effect and asks for participant's opinion.

P: So when I put the cursor over it shows more details about the product?

I: Yeah

P: Yeah, that is a good interactive way of knowing the product, rather than clicking and going back for the next product.

I: Interviewer explains the product page and asks for participant's opinion.

P: The virtual try-on is a really nice thing, it is a nice to get an idea of how it would look, so that is nice. I think this buy outfit thing is also existing already, I have seen it in ASOS where it is called buy the look. So this is also very nice feature.

I: So you like the try it on and buy outfit thing?

P: Yeah

I: Otherwise I think it is pretty similar to what you might have seen on other websites.

P: Yeah

I: Interviewer explains catalogue page with drop-down and asks for participant's opinion.

P: I think that looks fine.

I: Interviewer explains shopping cart page and asks for participant's opinion.

P: I think the reserve item functionality is a good way to give me some time to make the decision so that I don't have to panic that the item will be sold out. So that is a really nice idea.

I: So it would be useful for you as a shopper?

P: Yeah, it could be

I: Does it ever happen to you that something comes to sale that you really want but you don't want to buy it right away because you would have to search for other products?

P: Yeah, sometimes.

I: Interviewer explains the homepage popup page and asks for participant's opinion.

P: So once I go to the page it opens this popup, so is it mandatory to sign up or?

I: No, not mandatory, just a suggestion.

P: as long as it is not mandatory I think it is okay. But if it is mandatory there are many times I would just close the website because I am not sure why I should sign up even before I can check out the website.

I: Does this popup itself make you wanna sign up or should something be changed with it?

P: Yeah I don't think it would make me want to sign up, I would rather first go through the website and then I decide to sign up myself.

I: So first you want to validate what is on the website before you choose to sign up.

P: Yeah

I: Interviewer explains account page and asks for participant's opinion.

P: It is just the usual, it is fine.

I: Interviewer explains account page - wardrobe and asks for participant's opinion.

P: So if this was going to be like a pc platform I would personally like if it is more like a drag and drop rather than +. It is my personal preference. But otherwise it is nice.

I: Do you think it is a useful idea, would you use it yourself?

P: I might, I don't know because I am not used to this, but maybe it would become useful. I mean I can see that there are categorized groups but yeah, I think it is okay.

I: Interviewer explains benefits page and asks for participant's opinion.

P: I guess this is a nice idea I would say.

I: Do you think you would recycle your own clothes?

P: I would like to but it would be also nice to know how the recycle works and what is all of this about

I: Like how ethical they are or so?

P: Yeah, exactly. Or like what is the purpose of recycling.

I: Do you think you would consider becoming a member and paying every month to get even more points?

P: That depends on what the website offers for me. If I like the products and if it fits my shopping then yeah, I would become a member to save money or earn more points.

I: Do you find the website easy to use?

P: Yeah, I think so.

I: So you didn't see any difficulties or issues that come to mind?

P: No, not anything in particular.

I: Does it answer some of the concerns you might have expressed during the first interview?

P: Yes, the virtual dressing sounds nice, then try it on feature. I mean there are some websites like the ones selling glasses that have virtual try on feature. But the thing is that it takes some additional loading time, sometimes it doesn't load well or you need faster speed. Or other times the product how I expect it on the try on doesn't really look perfect. But if those things could be fixed then this is a good feature.

I: So if we would implement it right way it would be actually useful?

P: Yeah

I: Would you consider shopping on this website if they had products you find interesting?

P: Yeah I would like to. It seems interesting so I would try.

I: Do you have any additional comments?

P: No

Participant 4

I: Is it okay if I record this conversation?

P: Yes.

I: So first I am going to show you some of the designs that I have done. I will go through them one by one and then I will ask you your opinions about them.

Interviewer explains the homepage and asks for the participant's opinion.

P: I think it looks nice. There are a lot of useful and important things to have like if I were to come to this page, it is nice to see those news and blog posts if I want to because not many sites, as far as I know, offer this. Otherwise I would say that in general, the page in itself looks a bit boring. If I would come to this it looks a bit empty I would say. In a way it is nice that it is simple and there are not too many things taking away my attention but on the other hand it just looks kinda empty. I don't know, it is probably just my preference.

I: So what kind of changes do you think would be good to add so it wouldn't be so boring?

P: Honestly I don't know. Maybe more colors or something. Maybe the banner is, it is just a bit weird that there is just one short sentence saying best affordable fashion. So maybe it could have like longer thing about the company itself or something.

I: Interviewer explains the catalogue page and asks for participant's opinion.

P: I like the idea in general that everything is in one page so I don't have to jump around and think what is where and whatnot but somehow I feel that it can be a bit overwhelming if you

would come as a new used and you would have to go through all the filters and you wouldn't necessarily know what exactly you wanna look for. I think it is a really nice idea that you can save filter settings. It makes it faster so you don't always have to select those selections of filters again and again. Also I think it is nice that you can hide already viewed products. So it will make the shopping faster for me because of course I don't wanna see the products that I already decided not to choose to buy before, so that is nice to have.

I: Interviewer explains the catalogue page with hovering effect and asks for participant's opinion.

P: I think it is nice, I think I was asking for this as well that I don't want to see the same product many times. I guess you would show the different color if I would click the different color .

I: Yeah, then the picture would change to selected color

P: I think that is nice to have, nothing else to say about it.

I: Interviewer explains product page and asks for participant's opinion.

P: It is a fine page. It is similar to other websites I have seen. The try-on feature looks interesting if you can make it work right. But I don't know because different clothes have different kinds of fits so my only concern is if you can actually make it work. But it is a nice thing to have I would say. And I also like this buy outfit section so I don't have to go back to the catalogue page and choose all those filters again so I would find this product if I would like to have it.

I: Interviewer explains catalogue page with drop-down and asks for participant's opinion.

P: Seems basic. I guess it is what should be done or everyone has it, at least most of the best sites. I like that it shows you in a really big text how much you are missing for the free shipping. That is what I am always going for so it is nice to see it clearly.

I: Interviewer explains shopping cart page and asks for participant's opinion.

P: I think this idea of reserved items is very nice because I can imagine that there can be times where I want to get an item because it suddenly gets hugely discounted, but I understand that I might not have the time to buy it right away but I would still go for the free shipping so it makes sense to me to reserve it this way. And it would really make my experience on this website better. I also like that there is this functionality to ask your friend, I might not do it much but I think some people might use it. But otherwise yeah, like some other pages it looks quite basic, like what I have seen before.

I: Do you think it is a bad thing?

P: No. I still have the feeling like in home page like that it is missing something, like it is a bit empty, but on the other it does its job and I think it does everything that it needs to do, in order to be a nice and useful e-commerce website.

I: Interviewer explains home page with popup and asks for participant's opinion.

P: I guess it should tell me more about why I should sign up, what are these benefits. I don't want to just put my email somewhere, just because they say that you can get benefits, I want to know exactly what I am getting for this.

I: Interviewer explains account page and asks for participant's opinion.

P: Looks basic. I don't have any comments about this page. I guess it looks like any other account page

I: Interviewer explains wardrobe page and asks for participant's opinion.

P: Personally I don't think I would use it. I am that kind of shopper that I don't think I would be trying this way if clothes fit with something else that I bought before. But I can see the appeal that it could give for some people that really like shopping and want to be sure if the clothes fit their outfit. So it could be useful for some people, but not me personally.

I: Interviewer explains benefits page and asks for participant's opinion.

P: I really like websites where you have some kind of user benefits or membership benefits because you feel like the time that you spent there and the things that you did don't go to waste but instead you get some kind of value the more you use it, so it is nice to have. I don't know if I would actually recycle my clothes there but again it could be useful for certain types of people. It should also mention somewhere what exactly these points are for because right now I don't really know what to do with them. If I can earn points without becoming a member that would be a nice thing because I don't want to pay a monthly membership.

I: Yes, you can earn points even without paying. Just when you pay you get some benefits like free delivery even without reaching the minimum amount.

P: So that is great I think.

I: Do you find the website easy to use?

P: I think it looks really simple to use, but as I said I had this concern all throughout pages that it looks a bit empty and a bit boring. If I was you I would try to make it more beautiful to my eyes lets say.

I: Do you have any suggestions for that?

P: No, not really, I don't know anything about designing.

I: Does it answer some of the concerns you might have expressed during the first interview?

P: Yeah I think there were a lot of good things as I was saying the 1st time that I don't want to see the same product over and over again, that I don't wanna jump through the pages and so on. So I think you fixed a lot of issues that I had. And if I were buying from this website I would be shopping much easier so that it is good.

I: Would you consider shopping on this website if they had products you find interesting?

P: Yeah I think so

I: Do you have any additional comments?

P: Not really no.