

REDESIGNING A SINGLE PAGE CHECKOUT

AN EXPLANATORY SINGLE CASE STUDY

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Abstract

The aim of this thesis has been to research how single page checkout can be structured when implementing persuasive design through information architecture using classical rhetoric as persuasion framework, based on the three forms of appeal. The theoretical aspect has been based on theory within checkout, information architecture focusing on navigation, labeling and organization, persuasive design and the three forms of appeal. Through collaboration with a webshop named Wheelsshop.dk and a web bureau named Tigermedia the research and redesign of a single page checkout has been conducted. The study has had its philosophical origins in the fields of social constructivism and has been based on user centered design. From this perspective the methods used for data gathering have been introduced within the framework of information ecology examining context, content and users. Through research meetings with both Wheelsshop and Tigermedia knowledge within the context has been gathered. A competitive benchmarking was done for gathering knowledge and compare single page checkouts including Wheelsshop's test checkout. A contextual inquiry was conducted to investigate the users and study their experience of the checkout before any design optimization was done. Through the research it was found that to create a redesign for Wheelsshop.dk's single page checkout 20 statements should be followed. It was found that it is helpful to use the forms of appeal as foundation for structuring the information architecture through persuasive principles. It helps clarify the purpose for the structure of a checkout and thereby the intention becomes exposed.

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1 | Introduction

This master thesis is focused on how single page checkout can be structured when implementing persuasive design through information architecture using classical rhetoric as persuasion framework based on the three forms of appeal. For accomplishing this, a specific case has been evaluated and redesigned and had become subject for the complex variety of factors, such as ethical reflection, technical problems and budgetary concerns.

The thesis is pragmatically oriented as it is centered on the specific case. Nevertheless, it should also be noted that I see the case study as applicable for enabling me to research how information architecture can be optimized through classical rhetoric. Thereby it becomes an explanatory case study that explains this phenomenon to future research.

The foundation of the master thesis is not to provide a complete and definitive is not to provide a complete and definitive answer to the question which aspects must be designed to establish a more persuasive checkout for users to be more willing to complete the purchase.

Instead the thesis contributes new knowledge in terms of single page checkout and how it can be designed to better suite users mental map, and secondary this knew knowledge can be transferred to other systems containing user interaction.

Apart from researching the complexity in information architecture combined with persuasive design and classical rhetoric in checkout, the need for researching checkout's improvement opportunity in general can be understood if problems within e-commerce are considered, especially the implication of the abandonment rate within online shopping.

1.1. E-commerce

E-commerce is constantly evolving with a growing market share («Digital buyer penetration worldwide», 2015). It is convenient for customers to shop as they have a wider range of products to choose from, it is easier to compare prices, products can be delivered to the customer's doorstep. Also for shops, e-commerce has advantages, as they get access to a wider range of customers. However, there are also issues connected to this kind of shopping for both customers and shop owners. It only takes the customer a heartbeat to choose another e-commerce shop for the exact same product, and the shop's earnings will be lost. Therefore it is important to make it possible for the customer to find the desired product on his own as there are no shop assistants to help. Other challenges can also be bad information architecture, graphic design or interaction design or lack in the software development. This thesis is focusing on information architecture and its problems.

One crucial element within e-commerce is the moment of checkout. Customers usually continue to checkout when they have found the desired product and want to purchase it, however the abandoned cart rate lies at approximately 68.53 % («31 Cart Abandonment Rate Statistics - Baymard Institute», 2015). This is a voluminous number as most customers in this phase should feel ready to complete the purchase and it therefore means lost profits. This is problematic as this phase is the one of the most relevant in terms of conversion rate (De Pasquale & Brugnoli, 2013). Online shops that invest money in e-commerce with the purpose of attracting customers to their website, have a problem when numerous of customers visit their web shop, but discarding the purchase as they lose the profit.

The statistic in figure 1 shows reasons for online shopping cart abandonment.

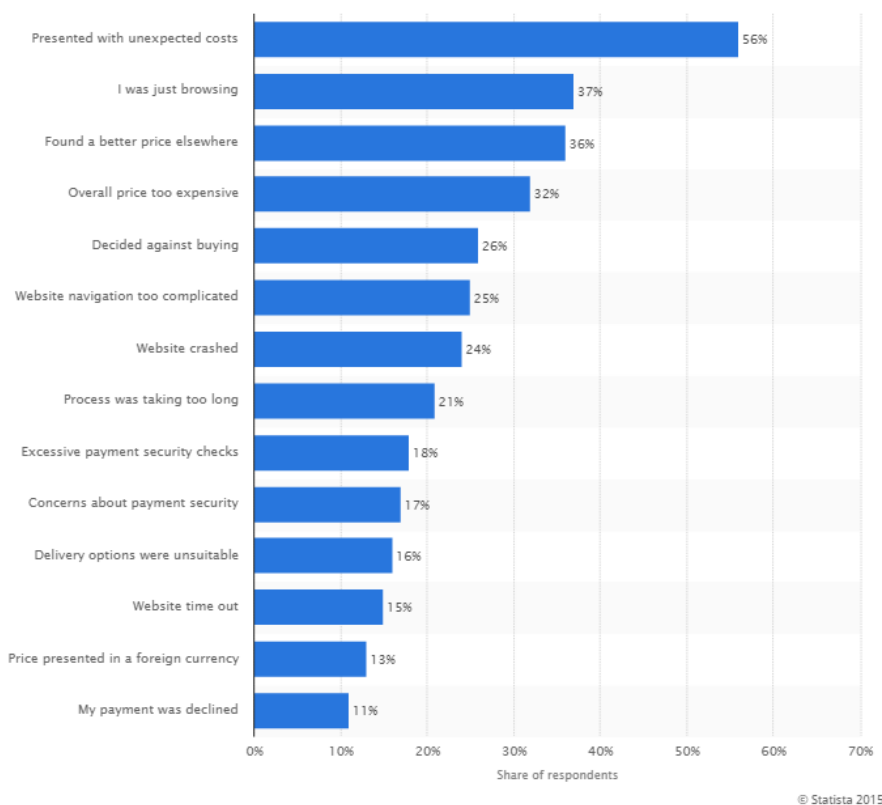


Figure 1 Online shopping cart abandonment rate («31 Cart Abandonment Rate Statistics - Baymard Institute», 2015).

Some of the reasons for abandonment stand in relation to software development and system errors such as “website crashed”, “website timeout” and “payment was declined”. These have nothing to do with the interface design, others are strongly related to the subject of information architecture: “website navigation too complicated”, “presented with unexpected costs”, “delivery options were unsuitable”.

Though, there are also more specific reasons for the abandonment: “I was just browsing”, “decided against buying”, “process was taking too long” and so on. These customers are already in the checkout phase, but decide to leave the site. The question here is, is it possible to persuade them to complete the purchase and thereby reduce the abandonment rate? Is it possible to create a design based on information architecture that focuses on persuading customers to complete the purchase when they are in the checkout phase? I expect dropouts due to lack of information architecture can be reduced by optimizing the information architecture. As to dropouts with more specific reasons it is unclear whether they can be reduced through this kind of optimization, also as I do not know what for instance “decided against buying” covers and I do not have access to the full report.

Though, it is my conviction that these types of dropouts could be reduced if the focus is on the customer's willingness to complete a purchase through persuasion. This is my conviction as persuasion change a person's behavior or attitude (Fogg, 1998). The focus is not on the experience of completing a checkout as within experience design (McLellan, 2000) nor is it the ability to create ubiquitous computing through pervasive design (Resmini & Rosati, 2011). Persuasion is relevant as it is focusing on the ability to change a customer's behavior and attitude to increased willingness to complete the purchase. Hence, this thesis will focus on how single page checkout can be structured for aiming the customer's willingness to complete the purchase when online shopping based on the theory of persuasion and the understanding of information architecture within the checkout process

1.2. Motivation

The motivation and interest for this area arose through a mentor program which I collaborated with one of the owners (Frederik) from the web bureau Tigermedia. For my term paper during the 8th semester, Tigermedia introduced me to the e-commerce site Wheelsshop.dk by which I analyzed their main page focusing on information architecture.

Through this term paper, I discovered the different perspectives on website design Tigermedia, the owner of Wheelsshop and I had. Both Tigermedia and Wheelsshop had never heard of information architecture and had never done user tests (except A/B tests).

Due to this new knowledge of user design I wanted to research further on e-commerce as I realized other e-commerce sites might also be ignorant to user design. I found the checkout phase interesting, as its design is not centered on the user seeking behavior, but is system oriented focusing on the tasks users have to do when completing the checkout. It is important to have best possible guidance so the customers complete the task and do not leave before finishing it. I therefore wondered whether it is possible to improve the checkout phase through information architecture where the focus is on the structure of the design, so the customers would feel more willing to complete the purchase. It made me think of persuasive design and how it is used to persuade the users. Persuasion could change a customer's behavior and attitude to more willingness for completing the purchase. Furthermore, I thought of speakers using classical rhetoric to persuade its audience. Using classical rhetoric and persuasive design to design the information architecture in a checkout could be beneficial as it would lead to perform a certain behavior or have a certain attitude. Pragmatically illustrated it meant that it could lead the customers to complete the checkout and thereby reduce the

abandonment rate. Though, redesigning the checkout through information architecture, persuasive design and classical rhetoric will not make it possible to reduce the abandon rate totally. Realistically it may be that it would only reduce the abandon rate slightly, but that would still benefit the online shops profit performance in a positive direction.

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As I examined this area of checkout design, I discovered how little had been written on the subject. Several reports have been done within guidelines for e-commerce (De Pasquale & Brugnoli, 2013; Fang & Salvendy, 2003; Hudak-David, 2004; Najjar, 2011; Zainudin, Wan Ahmad, & Nee, 2010) and some have been written on how persuasion affects and improves websites (Alhammad & Gulliver, 2014; Fogg, 2003; Winn & Beck, 2002). However, no research has been made on the topic of persuasion as the underlying basis for improving the information architecture at the checkout which made this topic scientific relevant to examine. Therefore I made collaboration with Wheelsshop through Tigermedia with the aim to redesign their checkout based on information architecture using persuasion as underlying basis.

1.3. Assumptions

From the beginning I had assumptions about the research process and result. I expected Wheelsshop.dk's checkout to be a generalizable single page checkout as none of the checkouts indicated the opposite. I was convinced that the checkout could benefit from incorporating persuasion into the design and that exiting elements could be explained through persuasion, which is why they would be beneficial for the structure. I had considerations of how it methodically could be possible to conduct research towards the customer's perspective of persuasion, but I assumed it to be possible if I was able to get the customers to speak about their feeling concerning the system. Whether my assumption was confirmed or proven wrong will be explained throughout the thesis.

1.4. Wheelsshop.dk

The webshop Wheelsshop.dk was launched in Denmark in April 2013, and in the spring of 2014 the company launched Wheelsshop in Germany, Norway and Sweden as well. Last year, the company had a turnover of 12 million DKK for only the Danish website, so even though it is a relatively new company it is rapidly growing. The people owning the website are also the only employees in the company: Erik and Henrik. Henrik has an interest in tires and rims and Erik is interested in the online sale.

My starting point for examining the checkout was to conduct research on their existing Danish version of Wheelsshop. However, after a meeting with the owner of Wheelsshop it was clear that they did not have any interest in the existing checkout as they had created a new design for the checkout. The existing design was a multiple checkout process, but they wanted to have a single page checkout and had already created a design for it. Therefore, I decided to make an evaluation on the new design, as it would be more useful knowledge for

the owner of Wheelsshop to have. The new design is also in Danish, as they want to test it on the Danish version first.

1.5. Prior work

How information architecture through persuasive design and classical rhetoric can optimize a single page checkout has not been investigated. The steps for what generally an e-commerce checkout should contain is a fairly standard process (Daniel, 2011; Nielsen, 2001), but besides blogs, literature concerning the interface design of single page and single page checkout is lacking (Halarewich, 2015; Lanka, 2010; Petrovic, 2012; Rodriguez, 2014; Roggio, 2010). Though, research comparing hierarchical and multiple navigation showed that a linear line was easier for the user to navigate through whereas hierarchical navigation became too complex (Medhi, Toyama, Joshi, Athavankar, & Cutrell, 2013). Another study concluded that participants performed best on a single page list where all search items were shown on one single page on a PC screen (Druin, 2009).

Both of these studies were conducted on non-literate participant, yet another study conducted on undergraduate computer science students investigated checkout concerning whether users with different cognitive processing styles preferred single page or multiple checkout. The outcome was that users who tend to structure the incoming information in detail preferred a single page checkout design (Belk, Germanakos, Constantinides, & Samaras, 2015). The study did not focus on how the design could be optimized. Though, there is literature claiming classical rhetoric can help optimize websites (Hasle & Kjær Christensen, 2007), and Winn & Beck (2002), illustrating how classical rhetoric, more specifically forms of appeal are present in the design of an e-commerce. Also Winn & Beck state that by designing with classical rhetoric in e-commerce the design can be optimized to persuade its customers, thus verifying my hypothesis that it is possible to optimize the checkout through persuasion.

1.6. Checkout process

The term checkout is also known as checkout process, check-out or check out (Daniel, 2011; Nielsen, 1993; Rossi, Schmid, & Lyardet, 2003). In this thesis it will be referred to as checkout. To understand what checkout is, one needs to understand what e-commerce and webshops are. E-commerce is a commerce that is transacted electronically for instance over the Internet (Daniel, 2011). The overall goal for all e-commerce webshops is to sell products and thereby satisfy the customers. The structure of a webshop is essential, as inability to shop or complete a purchase prevents the website to sell and its core goal is lost (Nielsen, 2001).

When customers are surfing through the webshop, the shopping experience is essential. When the items are found and the customers want to purchase, the buying experience begins. The buying experience starts when the customer enters the shopping cart, which shows the items the customer has chosen to purchase. During next sequence the customers needs to complete the order, the checkout (Nielsen, 2001).

The main difference between the shopping sequence and the checkout sequence is the shift in the perspective from customer seeking to task oriented. The customer needs to complete the purchase quickly and easily with no confusion or unanswered questions so that they might cancel the order (Nielsen, 2001).

For the checkout to be successful it is not only about the information architecture working or not. Other aspects also influence the checkout sequence:

- o The multiple range of web browser
- o The multiple range of devices
- o Rapid change in standards, technologies and requiremnts
- o Adhoc development

(Kienle & Distanto, 2014)

The problem is how the different range of web browsers needs multiple web technologies for not causing problems for completing the checkout. This also applies to the multiple ranges of devices as there is a wide spectrum of form and performance factors to embrace for instance processing speed and connection bandwidth. Another aspect is the rapid change there is in standards, technologies and requirements. How it goes from having static web sites to now a day having dynamic web pages generated by a web application. The technology has to follow the development constantly. Adhoc development can cause unexpected problems as modifying the checkout can change the entire layout (Kienle & Distanto, 2014).

Hence, optimizing the information architecture is only one part of the entire checkout process. It is vital to be aware that there are several aspects when constructing a checkout and all aspects more or less has an impact for the checkout to be successful.

1.7. Single page vs. multiple page checkout

There are two kinds of checkout. Multiple page checkouts, where each step has its own page as in figure 2, and single page checkouts (also known as 1-page or one page, but will be referred to as single page) as illustrated in figure 3 (Daniel, 2011; Halarewich, 2015; Rodriguez, 2014; Rossi et al., 2003).

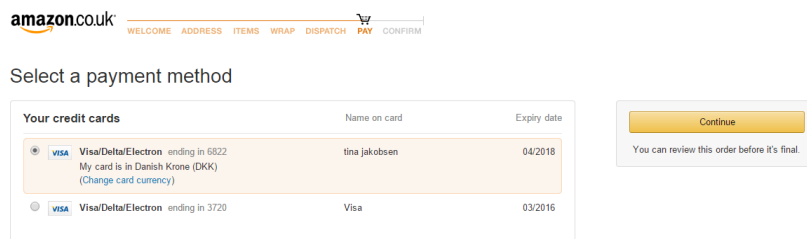


Figure 2 Multiple checkouts on Amazon.com.

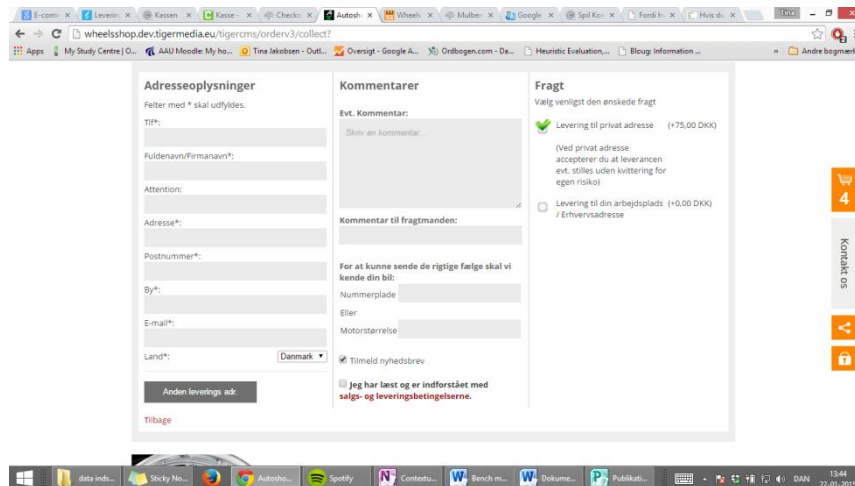


Figure 3 Single page at Wheelsshop.dk's test website.

Multiple page checkouts are normally generated through web application “A web application is often based on events that trigger JavaScript code that manipulates part of the current page’s Document Object Model (DOM) in effect causing a state change in the web application.” (Kienle & Distant, 2014, p. 209). This means JavaScript gets triggered by users pressing “next” to continue to the next step in the checkout then manipulating parts of the page document object model. This causes a change, which means the users get access to the next step. They are built upon traditional hierarchically information architecture with a linear structure (Morville & Rosenfeld, 2007).

Single page design is having all elements relevant to the checkout in one page. It is conducted through AJAX, which entails content and functionalities to change dynamically and continuously to users action, free from page reloads as is the case in multiple page checkout. Kienle & Distant (2014) claim it to have a massive impact on the user experience and claim

AJAX to be used for improving the usability. If Kienle & Distant (2014) are correct in their belief it then becomes relevant to research on how single page checkout can be optimized as the knowledge within this structure is limited. Single page checkout is in relation to the phenomenon “single page design” or also called “one page design” («What (exactly) is a One Page Website?», 2014). Its aim is to provide minimum of information for user to process. There is only one page, though instead tries to get the user to focus on the most important content («What (exactly) is a One Page Website?», 2014)

There are pros and cons with both checkout designs. Pros for using single page design are among others it being easier and faster for the customers to use (Roggio, 2010). Different blogs tell that single page checkouts have a higher conversion rate than the multiple page as has been shown in different A/B split tests (Lanka, 2010; Petrovic, 2012; Roggio, 2010), while others have the opinion that it depends on multiple things whether the customer would prefer single page checkout or multiple page checkout (Halarewich, 2015; Rodriguez, 2014). Whether single page has the best structure is challenging to determine, but it can be concluded that several websites are starting to use single page checkout. Because Wheelsshop's owner already has created a single page checkout and already has decided to use this structure, the focus for this thesis is not whether single page checkout is better than multiple page checkout, but how single page checkout can be optimized by making use of information architecture and persuasion through classical rhetoric.

My own considerations regarding single page design made me think of a physical formula. When completing a physical formula the formula is not divided into several parts, but the whole formula is given at the same time. It is not questioned whether the formula should be divided. Instead, it is natural the formula is given in one piece instead of dividing it when handing it to the person who should complete it. People are capable of completing the formula even though all elements are shown at once. Moreover dividing it could enhance the risk for making it more time consuming and messy for the user's mental map. Hence, my own hypothesis is that single page checkout is applicable as the checkout relates to well-known physical formulas and thereby fit the customer's mental map. It is relevant to research on single page to research how to optimize it to be in concordance with users mental map.

1.8. Problem clarification

Science has already discovered the power that persuasive design can have on e-commerce webshops for keeping customers on the website (Winn & Beck, 2002). However, how the checkout phase should be structured when implementing persuasive design through infor-

mation architecture using classical rhetoric as persuasion frame has not been discovered. One of the fundamental rhetorical concepts is the concept of persuasive appeals: logos, pathos and ethos. All three appeals have to be used if the speaker wants to persuade its audience. Therefore all three appeals need to be represented in the checkout if it should be able to persuade a customer to finish the purchase. Improving the checkout through classical rhetoric is relevant as it can persuade and lead the customers to complete the checkout and thereby reduce the abandonment.

This is relevant for other webshops that already use or want to use a single page checkout. If the structure can be optimized towards persuading customers the abandonment rate could be reduced, and the webshop could create a higher profit.

However, as this is an explanatory single case study where my research question is focusing on “how” (Yin, 2009) and as the research is based on results from Wheelsshop.dk, the knowledge gathered will first of all be useful for other e-commerce sites selling tires and wheels. However other types of webshops will still benefit from using elements from the results as the basic principles of how to build the checkout structure is still relevant to all types of webshops using single page checkouts.

This research will also be relevant for multiple page checkouts as it gives knowledge about how to implement classical rhetoric in a checkout as the basic element in a checkout is the same whether it is single page or multiple page (Daniel, 2011; Nielsen, 2001).

One concern mentioned towards case studies is the problem of providing little basis for scientific generalization, which questions my ability to conclude anything from a single case study (Yin, 2009). But as Yin (2003) also argues, my intention is to expand theory and not proving theory or statistical generalization which makes case study usable.

Therefore, the issues for this thesis to examine how persuasive design based on the three forms of appeal can improve a single page checkout when it is done through information architecture. Information architecture can be divided into four systems: organization system, labeling system, navigation system and search system (Morville and Rosenfeld, 2007). As checkout phase has a task oriented perspective, the search system becomes less relevant for this thesis. Because of this, the information architecture used for this thesis will be about labeling, organization and navigation.

1.9. Problem statement

How can the forms of appeal from classical rhetoric improve the information architecture on a webshop's single page checkout when using persuasive principles to execute it?

1.10. Structure of the Thesis

1 | Introduction: Included and introduction to my thesis, focus area, problem statement and background knowledge within the context of the problem statement.

2 | Research meeting with Wheelssshop and Tigermedia: Incorporates a comparative introduction of Wheelssshop' and Tigermedia's thoughts on the checkout and an introduction to the design of the checkout.

3 | Theory: This section is to give an understanding for how the theories can be used to optimize the checkout and contributes to form the theoretical foundation for the thesis.

4 | Method: Describes the multiple ranges of zones in my design structure, encompassing design traditions and methods that support positioning this thesis in the complex relation among each other.

5 | Analysis: Analysis of the competitive benchmarking, where the checkout theory is used for creating the analysis and analysis of the contextual inquiry, where an affinity diagram is used.

6 | Redesign: A redesign on the checkout of the specific case used in the thesis.

7 | Discussion: A discussion of some of the difficulties I faced during my thesis. Inter alia how the methods worked and how the forms of appeal worked as a framework for information architecture

8 | Conclusion: An overall conclusion of my findings for the specific case's redesign and a conclusion for using the findings for this thesis in a broader perspective.

9 | Further perspective: How the use of classical rhetoric as meta layer for information architecture implemented through persuasive principles can be used in other contexts.

The theoretical literature used for analyzing the data is theories concerning checkout structure providing knowledge on how to structure the checkout. Also used are theories within information architecture concerning labeling, navigation and organization for understanding the basis structure of how checkout should be structured to fit the customer's mental map, and finally theories concerning persuasive design and the three forms of appeal to create a connection between persuasive technology and classical rhetoric.

Based on Wheelshop.dk's checkout I consider it relevant to apply Morville and Rosenfeld's (2007) framework of an information ecology concerning context, content and user. The basic principle herein is the importance of understanding all three aspects for developing good information architecture. Research meeting is used to gather knowledge within context, competitive benchmarking is used for content, and contextual inquiry is used for user. The underlying basis for the information ecology is the design approach user-centered design, which makes users an integral part of my development process. This is in line with the social constructivist view used, which is included to underline the importance on users rather than the technology.

The thesis will start with a comparative introduction of Wheelssshop' and Tigermedia's thoughts on the checkout and an introduction to the design of the checkout. This introduction is based on data from the research meeting, which was held as an interview with respectively Wheelssshop and Tigermedia. The research meeting was a pre-study for understanding the context of the checkout and was not meant to be analyzed and combined with any theory. For the readability it is beneficial to have insight in these meetings from the beginning when reading the thesis. A comparative exposition of the interviews is therefore placed at the beginning. Because this introduction is before the method section, the theory and reflection of how the research meeting was conducted will first be introduced in the method section. Due to software problems, some tests were done with the wrong checkout structure, which made the analysis chaotic. To improve readability, an explanation of the problem and how the structure differs will be explained in the methods section.

1.11. Thematic Frame

This thesis is subject for the study program of the 10th semester of information architecture at Aalborg University. In section 19 of the study program it is stated that the student may produce a thesis on a topic which the student chooses freely within the frame of the program (Studieordning, Informationsarkitektur, 2007).

The goal of the frame of the program is to get knowledge within:

- o Information ecology
 - o Implications of research work
 - o Planning and construction of information architectures
 - o Design construction
 - o Motivating professional choices and priorities
 - o Applying and developing relevant design methods on a scientific basis
- (Studieordning, Informationsarkitektur, 2007).

The aim of the thesis is to demonstrate that I independently master above-mentioned competences and that I can independently assign information architectures on the basis of the rhetoric and information ecology. I intend to do this by conducting a pragmatic thesis based on theory and method. As my research topic is based on an already existing system, my starting point is evaluation, even though I will end up conducting a redesign of the system.

2 | Research meeting with Wheelsshop and Tigermedia

This chapter incorporate a comparative introduction of Wheelsshop's and Tigermedia's thoughts on the checkout and an introduction to the design of the checkout, based on data from the research meeting. I present this early in the thesis as for the readability it is beneficial to have insight in these meetings from the beginning. It was held as an interview with respectively Wheelsshop and Tigermedia. It is a pre-study to understand the context of the checkout and is not meant to be analyzed and combined with any theory.

The research meetings with respectively one of the owners from Wheelsshop (Erik) and one employee from Tigermedia (Frederik) was a pre-study to understand the context of the checkout. Notes from the meetings are in appendix A and B. I will give a review of the contents from both meetings in this section.

When I began this thesis I thought I was going to evaluate on Wheelsshop.dk's existing checkout, but when I had my first meeting with the owners of Wheelsshop I discovered that the owners had created a new checkout they wanted to use instead of the existing. Therefore, we saw it as useless if I began to research the existing checkout. Instead we agreed that I worked on their prototype of the new checkout, which they had already designed and can be seen in figure 4.



It was also clear during the meeting that the owner of Wheelsshop started the company without any business plan. The owner Erik knew something about e-commerce and the other owner Henrik knew something about cars. Based on these skills they decided to start their own webshop selling tires and wheels.

The target group is broad and contains all sort of drivers who have shopped online before – both novice and experts online buyers. They wanted Wheelsshop.dk to be a website that is easy and simple for customers to use and who had the best selection of tires and rims. But what is easy and simple and what is the best selection of tires and rims was not and is still not defined.

They wanted to have a single page checkout as they wanted to follow the idea about being easy and simple, and they saw single page checkout as a good way to illustrate this. At the same time they had heard that single page checkout was the newest and smartest within webshop checkouts.

Through the meeting with Tigermedia I learned that a prototype of the new checkout was already converted to a high fidelity test version running on a website (as it is shown in figure 4), where several of the functions worked. There were things missing and the design was not perfect, but it was still possible to run a user test on it. I was aware that there would be things that might confuse the users as the website was still only a test.

During the meeting with Erik from Wheelsshop the payment function was discussed. I learned that the new design was not a 100% single page checkout. When the customer is going to pay, an extra page is coming up where payment information can be filled in (see figure 5), but the owner of Wheelsshop wanted to have it all on one page.

The screenshot displays the ePay payment application interface. At the top left is the ePay logo with the text "PAYMENT SOLUTIONS". To its right, it says "ePay DEMO" and "Du har mulighed for at tilføje eget logo og firmanavn på din egen konto i ePay." Below this is a red bar with "TEST ONLY" in white. A progress bar shows three steps: "1. Choice of payment method", "2. Proceed with payment" (which is active), and "3. Receipt". The main form area contains input fields for "Card number" (3333 3333 3333 3000), "Expiry date" (12 / 12), and "CVC" (123). The "Amount" is displayed as "USD 754.99". A green "Complete payment" button is at the bottom right of the form. Below the form, it shows "Date: 23/01/2013" and "Order number: 56340". There are logos for VISA, MasterCard, American Express, and Facebook. A link "Change payment method >" is at the bottom right. The footer includes the ePay logo, a security statement: "ePay / Payment Solutions is PCI certified by VISA / Mastercard and all communication is encrypted via a secure connection.", and a small icon of a shopping cart.

Figure 5 Epay payment application.

Frederik from Tigermedia gave more details about this payment problem. The payment happens through a company called Epay, which means when one of Wheelsshop.dk's customers wants to pay, they are led to a new page which is created by Epay with Wheelsshop's layout. If it should be a 100% single page checkout, Epay's page should be skipped, and Wheelsshop should develop the payment page from scratch. This is both time consuming and expensive. At the same time Tigermedia was also concerned that a single page checkout would involve too much information in one page.

This meant that I during the research had to make sure the customer did not feel overwhelmed by an information overload on the single page checkout. It also meant that the design I was going to evaluate, was not a 100% single page checkout as the Epay software was used for the payment.

It was still not sure 100% single page checkout was financial possible for Wheelsshop.

Based on these meetings it was possible for me to understand which considerations I needed to have in mind, and it showed me what the owner of Wheelsshop saw as important and Tigermedia told me what was possible.

This was the pre-study to get an understanding of the basis for the checkout. The next section will clarify theories used for examining the research question.

3 | Theory

This section is to give an understanding of how the theories can be used to optimize the checkout and contributes to form the theoretical foundation for the thesis. The first part has its focus on theory about checkout and the basic principles when designing a checkout. The next part is about information architecture focusing on navigation, labeling and organization, and theory about the three forms of appeal and persuasive design. The theories will be explained in relation to the question of this thesis, and only theory relevant for this will be mentioned.

3.1. Checkout

Checkout has been described from different aspects. Nielsen (2001) and Daniel (2011) both focus on usability on webshops. The usability specialist Nielsen (2001), known for his well-established knowledge within usability (Kalbach, 2007; Morville & Rosenfeld, 2007; Rogers, Sharp, & Preece, 2007), describes checkout design in his highly recommend book “E-Commerce User Experience” (2001) when researching e-commerce (Hudak-David, 2004). He bases the usability of checkout design on multiple page checkouts with a linear step by step procedure. His research investigates how the users react to existing websites. Even though usability differs among the different information architecture and even though his focus is on multiple page checkouts, elements from Nielsen (2001) is still useful as it gives guidelines for what to be aware of when evaluating Wheelsshop.dk's test website. The elements from a multiple page checkout are still relating to the single page checkout as they, whether the number of pages, need to fit the customer's mental map.

There is a wide amount of literature within the technical consideration concerning single page checkout (Abels & Beenken, 2007; Lee, Chan, Lee, & Chan, 2014; Rasheed & El-Masri, 2011; Rossi et al., 2003). However, literature towards the interface design of single page checkout is lacking besides blogs (Halarewich, 2015; Lanka, 2010; Petrovic, 2012; Rodriguez, 2014; Roggio, 2010). Daniel (2011) specialized in e-commerce, SEO and Web Marketing outlines a list for the structure of single page which follows Waisberg & Kaushik's (2009) view of it. It gives an indication of how single page checkout should be designed and is a relevant supplement to Nielsen's (2001) view on multiple page checkout design.

Nielsen (2001) and Daniel (2011) help to understand how the checkout has to be designed when looking at it from an e-commerce perspective.

3.1.1. Guidelines for checkout

Daniel (2011) set up guidelines for the form of single page checkout which are:

Step 1: Billing details.

Step 2: Shipping details.

Step 3: Shipping option.

Step 4: Payment method.

Step 5: Create password.

Step 6: Order preview box with simple overview of the items being paid for.

Step 7: Click “confirm order” button.

(Daniel, 2011, p. 94)

These steps are only guidelines and Daniel (2011) recommends testing them to get to know what works best for the respective webshop. Daniel (2011) recommends the billing details to be before shipping details to fit the customer's mental map which is supported by Nielsen (2001). Nielsen (2001) also points out that it is important the customer can see the difference between shipping and billing as it otherwise would disturb the customer. The customer should not be forced to give too many personal informations as the website can risk losing the customer's trust, as it can create concerns for what these personal informations are used for. This makes it important to explain the intention for gathering the information (Nielsen 2001). Besides that, more data to be filled in would take more time and create a bigger possibility for errors, even though some of the information would be optional (Nielsen, 2001). Daniel (2011) recommends in point 6 that a checkout has an order preview, Nielsen (2001) supports this though calling it an order summary. Nielsen (2001) is very detailed by describing what the order summary should contain.

A good summary (preview) shows:

- o *Items to be shipped, including gift messages and wrapping options.*
- o *Total charge including price for each item, shipping, tax and other additional costs.*
- o *Shipping and billing addresses.*
- o *Shipping method.*
- o *Estimated delivery date.*
- o *Payment options.*
- o *State of the transaction (for example the order is not placed until after you provide payment information on the next screen and press the confirm order button).*

- o *Links to information the customer might want, such as privacy, security, customer service, returns, guarantees, and customer profile.*
- o *Method for making changes to the order.*

(Nielsen, 2001, p. 266)

Nielsen (2001) also recommends having linking to privacy and security policies as he discovered that 25 percent of the users in his checkout usability test were interested in a site's security policies, and he believes even more would have been interested if it was not fake information that was used in the tests.

Further on, Nielsen (2001) also has focus on how errors occur when the customers enter something wrong in the checkout as error recovery is very important for user success. Sometimes the customer can proceed before the error is fixed which is problematic if the customers do not see or understand the error message.

Therefore, Nielsen (2001) recommends three elements for creating good error messages:

- o *Tell the user politely that a problem exist.*
- o *Explain clearly in which field(s) the problem occurred.*
- o *Explain what information was expected or how to fix the error . (Nielsen, 2001, p. 263)*

This concerned for what to be aware of when conducting a single page checkout. The theory is used in a competitive benchmarking with the purpose of getting an idea of checkouts on different websites, and how Wheelsshop.dk's checkout can be compared to the theory and other websites. The next section is about information architecture and the elements being used in this thesis.

3.2. Information architecture

I cannot create the perfect information architecture checkout design that would fit each customer's mental map, but by making use of user centered-design, I can get closer to a better understanding of how it could be designed to fit the target group best possible. Normally, each of the different information systems (labeling, organization, navigation and searching) affects each other and it can be difficult separating them completely. For single page checkout it is even harder as everything is merged into each other in one page. The focus of information architecture in this thesis lies on organization, navigation and labeling. The infor-

mation architecture system – searching, is not included in this research as checkout is not about the customer searching for items, but for the customer to complete a task.

Theories concerning organization, navigation and labeling is based on Morville & Rosenfeld (2007) and Kalbach (2007). Morville & Rosenfeld (2007) focus on information architecture on websites in general, which helps to understand how organization, navigation and labeling should be structured when developing a checkout.

Even though Morville and Rosenfeld's (2007) book has been published in 1998, the text is still standard-bearer within information architecture which makes it relevant (Boyden, 2003; Farkas, 2000; VanArsdall, 2008). Kalbach (2007) looks at website design from the navigational aspect. It supplements Morville & Rosenfeld (2007) areas organization, navigation and labeling from a navigational perspective and is a recommended source for guidelines within website development (Damrau, 2008; Wiley, 2008). Both Kalbach's (2007) and Morville & Rosenfeld's (2007) books has been publish before single page website and single page checkout was developed. They are however applicable for this thesis as the essence of how to improve users' capability to utilize website information architecture are the same whether it being multiple or single page design. Thus, will theory from Kalbach (2007) and Morville & Rosenfeld (2007) pertinent to single page be applied. For a deeper understanding of how the labeling affects the user and how they understand them, Cabré (1999) is used to supplement the labeling section. In the book she focuses on terminology, but it is her view on special and general language that is used in this thesis. Cabré's (1999) book is a comprehensive view of terminology, and is useful as it is a supplement for labeling theory, and she addresses general readers (Orozco et al., 2001).

3.2.1. Organization

Organization is the overall architecture describing how customers move around the site. It is a complex field and customers have different cognitive understandings of what makes a logical organization (Morville & Rosenfeld, 2007). Organization is closely related to navigation and labeling, as the hierarchical organization structures of web sites often play an important part of primary navigation system and the labels (Morville & Rosenfeld, 2007).

The organization system consists of organization schemes and organization structures. Organization schemes are the overall characterization of the content of the site (in this case the single page checkout) and influence the grouping of content. Organization structure defines the primary way for how the customer can navigate (Morville & Rosenfeld, 2007).

Organization schemes can differ. Exact organization schemes are simple and relatively easy to design, for example in alphabetical order. Ambiguous organization schemes are more dif-

difficult to design as they are created out of subjectivity (Morville & Rosenfeld, 2007). One kind of ambiguous organization schemes is a named task-oriented scheme.

Task-oriented schemes focus on organizing the content into a collection of processes, functions or tasks (Morville & Rosenfeld, 2007). This form of schemes is suitable when the website is interactive and needs input from the customer, for example when a collection of tasks is required to be done by the customer (Kalbach, 2007; Morville & Rosenfeld, 2007).

There are different genres of organizational navigation. In this thesis the genre is checkout. These genres can have different organization structures such as linear, webs, hierarchies, facets and so on (Kalbach, 2007). The focus of this thesis lies on linear structures. Linear structured pages are arranged in a sequence, which means the customers cannot go to one page without a certain act or something else had happen on a previous page (Kalbach, 2007).

3.2.2. Navigation

Organization and labeling both contribute to an effective navigation system. Morville & Rosenfeld (2007) have a broad perspective on website navigation where the focus lies on how the customer goes from one page to another, which will not be the subject of this thesis. The theory on navigation used in this thesis is by Kalbach (2007), according to whom navigation can be seen as successful when it is unnoticed by the customer.

Kalbach (2007) defines web navigation in three ways:

1. *The theory and practice of how people move from page to page on the web.*
2. *The process of goal-directed seeking and locating hyperlinked information; browsing the web.*
3. *All the links, labels and other elements that provide access to pages and help people orient themselves while interacting with a given website.*

(Kalbach, 2007, p. 5)

I will concentrate on the third definition as all components of the checkout phase help customers navigate through the checkout. Other elements that also help customers navigate and that create a system of navigation are the mental map, words and how the organization is done (Kalbach, 2007). It is important to remember that navigation not only is about communicating the knowledge of where to navigate to the customers, but also their experience of the process. If the navigation is targeted for the customer, the possibility for the customer to successfully adapt the information is higher (Kalbach, 2007).

For the customer's experience to be good, Kalbach (2007) mentions three basic needs. Designers must make sure the customer always find these key pieces of information:

- o *Where am I?*
- o *What is here?*
- o *Where can I go from here?*

(Kalbach 2007, p. 10)

This is general for all websites, but can still be translated into single page checkout, these elements are important to think through when designing checkout.

Navigations types

Navigation and page types are near related. The navigational scheme may have different purpose on different page types. The page type and its purpose should quickly be clear for the visitors. It is because of the page type and context users understand the navigation. The checkout page type is a functional page type (Kalbach, 2007).

Functional page types aim for the user to perform a certain task online. There may not be much text on these kinds of page types. The main purpose is for the user to complete the task and to try to make it as easy for the users as possible so they do not stop in the middle of the task and thereby not complete it (Kalbach, 2007).

Ease of learning

Users do not expect to learn how to navigate through a website, they simply expect they intuitively know how to use it. Therefore, it also is important that the checkout's navigation is clear. If the customer first needs to learn how to navigate through the checkout it would lower its success (Kalbach, 2007).

This can be explained by how customers' mental map look like. Half of the population has a serialist way of thinking and the other half has a holist way of thinking. Where holists see the website as a whole, serialists see the website as parts, meaning serialists see one element of the checkout before they see the next element (Russell-Rose & Tate, 2012). Therefore, the checkout needs to have a monotonous structure in all aspects, which means navigation. Though, also labeling and organization need to be monotonously structured, so customers with a serialist way of thinking will experience it as easy to navigate through the checkout.

3.2.3. Labeling

Labels are a way of presenting something and to do it in the most efficient manner (Morville & Rosenfeld, 2007). This is important, as labels can become the content, functionality and structure of the website (Kalbach, 2007). Labels are important for single page checkouts as they in relation with organization and navigation become a way to navigate.

There are no rules for designing the perfect label or label system, there are only guidelines, which also means that it is not possible to be sure the label is perfect. However, the guidelines can help aiming for more suited labels (Morville & Rosenfeld, 2007).

Labels for single page checkouts are from the category 'labels as heading', which means heading that describes the chunk of information that follows (Morville & Rosenfeld, 2007, p. 90). Checkout is not about creating a hierarchy; it is about labeling steps in a process and convey sequence. This is all to make sure the customers fill out the checkout in the right order (Morville & Rosenfeld, 2007).

Morville & Rosenfeld (2007) recommend the labeling system to be consistent as it gets the system to be more predictable and thereby easier to learn. For the checkout's labeling system to be consistent, the elements shown below are in focus.

Consistent labels

When developing a label system, consistency is important for people with a serialist way of thinking. One element for creating consistent labels is the use of the same syntactical approach throughout the label system (Kalbach, 2007; Morville & Rosenfeld, 2007). A checkout therefore requires the label system to have a similar syntax whether it is noun, verb or sentence based label (Kalbach, 2007; Morville & Rosenfeld, 2007).

Focus labels

It is important to phrase the term used as label in a navigation system as narrow as possible (Kalbach, 2007). A book about "potatoes" should be placed under the subject "vegetable" and not under the parent class "crop". It is important to make a label as narrow as possible without being too specific. If a category for instance contains elements such as cats, dogs, hamsters and so on it should not be labeled "Animals" if an option is "Pets". At the same time, "Felines and Canines" would not be a possibility, as it would exclude hamsters (Kalbach, 2007). A focused label makes the labeling system predictable for the customer and creates a feeling of confidence when navigating (Kalbach, 2007).

Descriptive labels

Kalbach (2007) explains how it can be tempting to create labels for categories that can serve as a catch-all so the label gets too broad and thereby confusing and meaningless. It needs to provide enough information so the targeted group understands the label intuitively (Kalbach, 2007).

Page title

The purpose of a page title is making it clear to the users which page they are entering. When entering the checkout page, it should have a page title that confirms that customer has entered the checkout phase (Kalbach, 2007).

Audience

It is important to remember the audience, in this case the target group for the checkout. It requires not using terms as labels that some users do not understand and confuses them, also if it only temporarily confuses the users (Kalbach, 2007; Morville & Rosenfeld, 2007). This is why it is important to know who the audience is and develop labels that fit the audience's mental map (Morville & Rosenfeld, 2007). It is important to avoid technical terms, as not every user understands them (Kalbach, 2007). In addition, abbreviations should be used carefully. They can save space, but can stop the user's reading rhythm and in worse case they do not understand the abbreviation (Kalbach, 2007).

General language and special language

As just described, the audience's understanding of the language is important when researching and conducting label for the checkout. Cabré (1999) explains more detailed how it is relevant to figure out, whether the use of the language is suitable for the customer. Among other things, she explains the difference between general and special languages. First of all it is important to remember that a label is not only a label, but context will always exist around it with a many-faceted reality which can be understood with the help of Jakobson's (1963) communication model (figure 5) (Cabré, 1999).

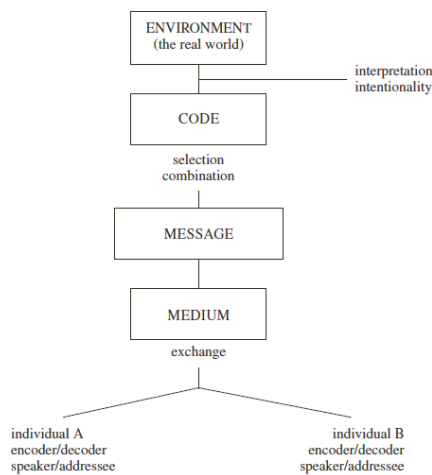


Figure 6 Figure 1 Elements of the communication process according to Jakobson (1963).

A label is not just a label; it is not only the text, but also the context around it. The label is surrounded by a reality – the user is in a situation that affects the labels. How the user reads the label is defined by the user's context (Cabr , 1999). One thing to consider when the user reads the label is whether the checkout is making use of general language or special language.

General language

Languages consists of subcodes. Subcodes are a way to act in a certain context meaning in a group where specific communication patterns arise. In addition to subcodes all languages have a set of unites, rules and restriction that all speakers of the language know. These aspects are called general language. When the units from the general language are used in a situation, these situations are named unmarked language (Cabr , 1999).

Special language and the relation to general language

When a set of subcodes (which also overlap with the subcodes of the general language) are used, for example when professional people speak together, it is called special language.

Situations where special language is used is called marked language (Cabr , 1999).

When the general language consists of both marked and unmarked varieties it can be seen as set of intertwined and interrelated sets. These sets all share the general language, but each one of the subset can be a special language (Cabr , 1999). To exemplify it, the general language is Danish. Danish farmers can talk together in a general language, but with subcodes from special language (professions aimed), so both marked and unmarked varieties are used.

However, if special language is only defined by the subject field, then every part of language is special language; cooking, book keeping and so on. It is needed to include other pragmatic

criteria. Cabré (1999) refers to Picht and Draskau (1985) who say *“what defines a special subject text is the topic, and that a text should still be considered as belonging to a special language when it is aimed at a general audience, even though its degree of specialization, and thus of abstraction, is lower.”* (Cabré, 1999, p. 64)

Therefore, the language is not only about a system of rules and units, the speakers' use of the language should also be considered. Different aspects have to be taken into account, such as elements as the participant, the communicative circumstance and the purposes or intentions associated with the communication (Cabré, 1999).

To see the difference between special language and general language, I need to look at three aspects as general and special language can be closely connected: linguistic, pragmatic and functional aspects.

Linguistic (lexical, morphological, and syntactic)

The linguistic aspect differs dependent on whether the language is special or general. General language has words like brain, medicine, slice, pressure. Words that are in the area between general language and special language are imaging, invasive, scanner. Words connected to a special language are adenosine triphosphate, lactic acid (Cabré, 1999)

Pragmatic (situation, originators and recipients of the message)

The content of special language texts contains scientific, technical, or professional topics (Cabré, 1999).

Functional (the communicative intention)

The communication model by Jakobson (1963) illustrates language as not only a way to communicate with each other. Special language has features that distinguish it from general language:

- o *They do not implicitly present personal positions; when they do occur they are indicated by such phrases as e.g. according to the author, in our opinion, we believe that, etc.).*
- o *They often represent an implicit dialogue between the writer and the recipient of the message.*
- o *They attempt to persuade the reader indirectly, although it might not be done explicitly, by providing arguments, citing data, providing examples, explaining, etc.*

- o *They introduce metalinguistic elements such as explanations, definitions, parenthetical material, synonyms, etc. (Cabré, 1999, p. 76)*

These aspects can help to investigate whether the labels are general or special and thereby investigate whether the language of the labels is suited for its users.

All these different elements connected to information architecture will help form the basis for creating a persuasive design for Wheelshops.dk's checkout. The next section is about persuasive design and the elements used in this thesis.

3.3. Persuasive design

In this thesis, persuasion will be based on Fogg's (2003) persuasive design principles and framed by the three forms of appeal from classical rhetoric. I will explain about the three forms of appeal and how and which design principles have been used. At the end, I will explain how Fogg's (2003) design principles relate to information architecture.

3.3.1. Classical rhetoric – three forms of appeal

Derived from the classical rhetoric the three forms of appeal Logos, Pathos and Ethos were conducted by Aristoteles 2300 years ago and are a way to persuade a speaker's audience (Gabrielsen & Christiansen, 2009). Logos persuades through the logical argumentation with the help of facts and information. It is centered on the rational argument where the speaker seeks to justify an assertion. Pathos aims at the audience's feelings such as love, hate, similarities, concerns, compassion, excitement, disappointment and so on. The goal is to persuade emotionally by appealing to values and thereby influencing the audience's attitude and evoke emotions. The last form of appeal, ethos, is the persuasive and confidence-building effect of the speaker's character. The speaker persuades through his/her character and it all depends on how this character appears to the audience (Juel, 2011). Important to remember is that these three forms of appeal have to be balanced and suiting the situation for persuading in the best possible way (Christensen & Hasle, 2007).

These forms of appeal are used for persuading when speaking to an audience, but they can also be implemented in Wheelshop.dk's checkout. Using the forms of appeal as a framework for Fogg's (2003) design principles provides a checkout that has the ability to persuade the user.

3.3.2. Persuasive technology and its principles

Aristotle's use of rhetoric focused on persuading by speakers speaking to an audience. Today, persuasion has been investigated in a broader field such as social psychology and others such as rhetoric, psychology and marketing (Fogg, 2003). Fogg's term – Captology (figure 7) is the area between computers and persuasion, when computer technology begins to persuade its user (Fogg, 2003, p. 5). For this thesis, the term Captology will not be used as it is not that used today. Due to me using technology to persuade the users of the checkout, the term used for this thesis would be persuasive technology design. I will shorten this by only referring to it as persuasive design.

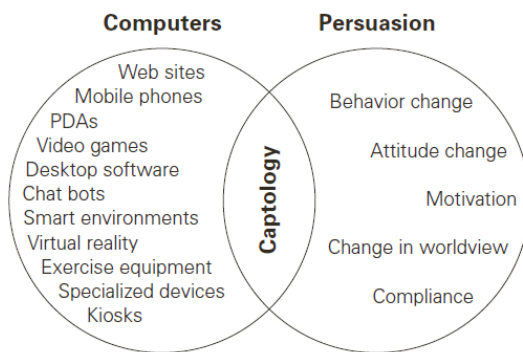


Figure 7 Captology the area between computers and persuasion (Fogg, 2003, p. 5).

The three forms of appeal can support the implantation of persuasive design to the checkout. As Fogg (1998) writes:

“Aristotle certainly did not have computers in mind when he wrote about the art of persuasion, but the ancient field of rhetoric can apply to captology in interesting ways.”
(Fogg, 1998, p.230-231)

This means by using the tools from persuasive design, I can optimize the website with the help of rhetoric. The goal is not tricking customers, but encouraging them to a certain action (Kalbach, 2007). By using persuasive design a more sustainable user behavior can be created by focusing on the checkout design.

Persuasive principles

Using the form of appeal to implement persuasive design would be done with seven principles from the book “Persuasive Technology – using computers to change what we think and do” by Fogg (2003). These principles are:

- o Principle of Ease-of-use
- o Principle of Expertise
- o Principle of Tunneling
- o Principle of Suggestion
- o Principle of Responsiveness
- o Principle of Reduction
- o Principle of Reputed Credibility

These principles are placed in relation to the forms of appeal seen in figure 8.

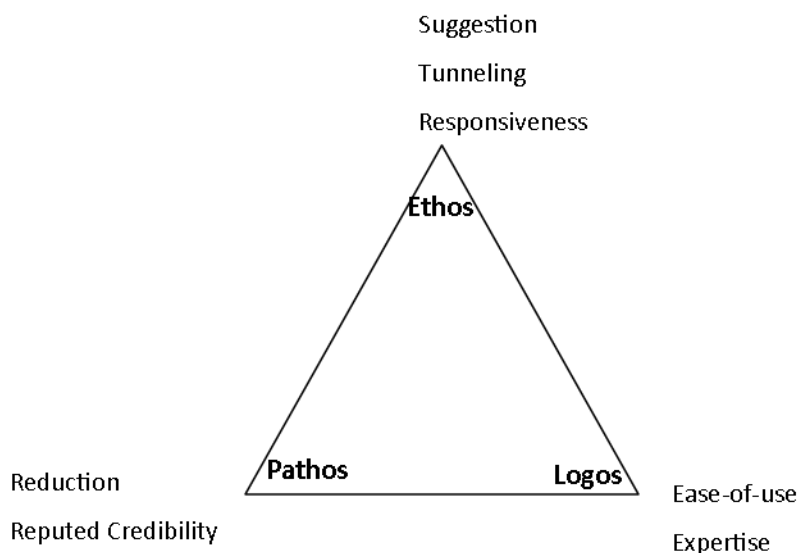


Figure 8 Principles used in relation to the forms of appeal.

The collaboration between logos, pathos and ethos is also influenced by the situation. This means that principles fitting for one appeal in one situation (in this case Wheelsshop.dk's checkout), could in another situation be suited better to another appeal. Also principles not used in this case could be used in another case. What each principle contains and how it relates to the given form of appeal in this thesis, will be explained below.

Ethos

Suggestion, Tunneling and Responsiveness relate to ethos as these principles are relevant for question whether the customers trust the checkout. Suggestion means that something is offered at the right time and is often built on already existing motivations. For example, when

people are doing something and in extension to it find something other useful. If the suggestion comes in the right time and at the opportune moment, it will be more trustworthy for the users (Fogg, 2003). Tunneling is how the checkout contains consistency. When the users stick to an idea or a process, they tend to follow it. This means that the computer technology can be used to persuade customers to follow a process by guiding them, and they will trustfully follow the checkout's path. Responsiveness is to what grade the customer finds the checkout responsive. If the checkout is responsive for the customer, it will earn credibility more easily, which means the checkout appears more trustworthy (Fogg, 2003). These three principles contribute to ethos and help to build a confidence-building effect on the speaker's character. The checkout persuades due to its character and it all depends on how this character (the checkout) appears to the customer.

Pathos

Reduction and Reputed Credibility are principles that relate to pathos in relation to how the checkout persuades via the customer's feelings. Reduction is about reducing a complex behavior and process it to simple tasks. This stands in relation to pathos as if the users were overwhelmed by for example data or a work task. It can seem chaotic for the user, which affects the user's feelings in a negative way. Reducing the complex area helps to motivate the user. Reputed Credibility is how the user trusts something due to third parties' recommendations. It plays a huge role in the human interaction, especially respected sources help boost the credibility for the technology (in this case the checkout). In relation to pathos, Reputed Credibility helps to appeal to the customer's values and thereby create a positive attitude towards the checkout.

Logos

Expertise and Ease-of-use relate in this design to logos as these principles are used for persuading through logical argumentation, facts and information. Expertise is when the checkout is seen as media with expertise. Expertise is knowledge, experience or competence. The logical argumentation are also the facts of how checkout seems to the customers. It is everything that can justify the customer trusting the checkout. Ease-of-use is how easy the checkout is for the customer to use. If the checkout is not fitting the customers' mental map, they cannot see the point in using it. When it is difficult to navigate, it loses its credibility. The customers might have to stop and think which again weakens its credibility, as it does not seem logical for the customers anymore.

3.3.3. Ethical considerations

Fogg argues *“For purposes of captology, persuasion is defined as an attempt to change attitudes or behaviors or both (without using coercion or deception)”* (Fogg, 2003, p. 20). However, where is the boundary between coercion and persuasion? And what is the ethical line for using these persuasive principles when designing a checkout? This will be defined in the following.

Powers (2007) argues that the line between coercion and persuasion is blurred and in some situations can be difficult to distinguish:

“When Elvira’s employer makes it very clear that all employees are to donate to a certain political party and she knows that it will be obvious who did and who did not contribute, is she persuaded or coerced? Is a choice truly available to her if she knows that she will lose her job if she does not contribute?” (Powers, 2007, p. 129)

Fogg (2003) argues that I as a designer have to consider my intention with the design. If my intention is unethical, my design will be as well. However, there are still ethical problems for how the persuasive principles are used. Gram-Hansen & Gram-Hansen (2013) explain how implementing persuasive principles all depend on defining which, how, when and where it would be most efficient. This means it can be difficult to define which, how, when and where a persuasive principle would provide the biggest return. Consequently, the principle I use can be coercion for the user without me even knowing, and another principle would have benefited more. An example is the two principles Reduction and Suggestion. Reduction is to minimize something for the user and Suggestion is to suggest something. If a game was created, where users had to answer questions, help could be provided by giving three answers to choose from. It would seem obviously to base this design element on the principle Suggestion, as the answers given would be a suggestion for the user. But if the user does not answer correctly, the answer options would have a negative effect on the user. If instead it was created on the principle of Reduction, the answer option would regardless of the outcome of answers have a positive effect as the user would be able to reduce the answer options to three instead of it being unlimited.

The dilemma and consequences of basing a design on Reduction or Suggestion raises the question – how will users react to my design of a checkout? Redström (2006) argues:

“Just as the designer makes certain decisions, so does the user; there is always a choice between accepting and disregarding the proposed way of doing things. The fact that a given design represents a certain perspective on the issues dealt with does, of course, not imply that the user is bound to think the same way.” (Redström, 2006, p. 115)

All this means that I as a designer can have considered which persuasive principle would be most ethical to use, but how the users will react to it is unpredictable. I cannot be sure they would perceive the design intention the way it was thought of. Redström (2006) concludes that I have to be aware of my intention for the design, but also the consequence of my design considering ethical/unethical scenarios that could happen.

The conclusion for creating the design based on persuasive principles is that I have to create the design based on the best ethical sense, but accept the users may perceive it differently than the intention was. The consequence hence is that the persuasion will not happen.

Therefore, I have to be aware on not only the intention of the design, but also other ethical scenarios the design could create. That is why the line between coercion and persuasion is a gray area.

3.3.4. Persuasive design in relation to information architecture

I use information architecture as a foundation for Fogg's (2003) principles of persuasive design. Fogg (2003) founded the principles by analyzing different already existing systems.

Marianne Lykke (2009) Professor in Information Architecture and Information Interaction criticizes the principles based on the factum that these principles are not revolutionary as they cover already well-known and well-discussed areas. However, she also points out that information architecture can still benefit from persuasive design by using it as a framework to improve users' capability to utilise website information architecture. By implementing the principles from persuasive design, using rhetorical forms of appeal as a framework, can thus help improve the information architecture on a webshop's checkout. This means that I can use persuasive design as a meta layer to improve the information architecture on

Wheelsshop.dk's checkout, by changing users attitude to complete the purchase into a more willingness approach.

4 | Method

In this section, I will describe the multiple ranges of zones in my design structure, encompassing design traditions and methods that support positioning this thesis in the complex relation among each other. I will start by introducing social constructivism as my philosophical foundation, followed by my design approach being user-centered design. It will be explained which part of user-centered design is used and how it will be used throughout the thesis. At the end, methods for collecting data will be listed and I will describe how they were conducted. All methods will be introduced within the framework of information ecology. The methods introduced are research meeting, competitive benchmarking and contextual inquiry.

4.1. Social constructivism

My social constructivist view is based on Wenneberg's (2010) book *"Socialkonstruktivisme - positioner, problemer og perspektiver"*. I will here introduce my use of social constructivism and its relation to my thesis.

The most common type of social constructivism is "A critical perspective" (translated from "Et kritisk perspektiv") (Wenneberg, 2002). I base social constructivism on "A critical perspective" as it connects social constructivism to technology.

Critical perspective tries to expose what seems natural on the surface, but in closer inspection is the result of a social process. It can for instance seem natural for people in Denmark to drive on the right side of the road, but people from England see it as natural to drive on the left side of the road. Critical perspective tries therefore to show that things are not always what they seem to be. Wenneberg (2010) questions though, whether the phenomena under the surface also can be an expression of social structure, when we stop to expose the natural? This means that the critical perspective leaves an empty space where the definition of the social in itself is not defined. The more radical view of social constructivism, "A theory of the social" (translated from "En teori om det sociale"), tries to explain what social in itself is. The perspective involves different theories of the social reality, which I will not use directly in this thesis, but I am aware of this empty space the critical perspective leaves.

4.1.1. The role of technology

Even though technology is a human made artifact, one with a technology philosophical perspective can still argue that it is a natural process of development and that the development of technology is determined by a technology rationality which can only be in one way. So

when one wants to improve technology, it can only be done by making the technology more efficient, for instance the 386-chip comes after the 286-chip (Wenneberg, 2010).

From a social constructivism perspective, it can be argued that there is a social process behind what looks like a natural process of development concerning technology. The development of technology is also affected by humans' requirements or wishes. Wenneberg (2010) mentions Pinch and Bijker (1984) who point out that technology is not determined by the technology rationality, but instead it is the stakeholders' interests, practice processes and worldview that determines how technology is designed. Social constructivism's point is that the development of technology would always take place within a certain culture or practice. Therefore, with this perspective, I look critically at the world and recognize that there is more under the surface due to the surroundings consisting of social constructions.

4.1.2. Social constructivism in this thesis

Due to "critical perspective" being my philosophical foundation within social constructivism, I do not presume that there is a determined development of technology. My interest for this thesis is not how fast the checkout process can be, or how the newest software can be implemented.

According to social constructivism, I assume instead that development of technology is affected by humans' requirements or wishes. Therefore, the development of checkout should be based on stakeholders' interests, practice processes and worldview. I get the knowledge and understanding for how to best redesign the checkout process from the interaction with the owner of Wheelsshop, Tigermedia and the customers (referred as the users).

I have a critical view and accept that things are not what they seem to be. But I also know that I create a new expression of social turns during the research and the interaction with different stakeholders. My result for an optimization of the checkout is thus the result of a new expression of social structures and it can be argued whether it would be possible to see under the surface again with a critical perspective. As said before, I will not reflect more about this, but accept the fact that there is an empty space. How the methods are based on my philosophical foundation will be described further in the next two sections.

4.2. User-Centered Design

Definition of user-centered design:

“The active involvement of users for a clear understanding of user and task requirements, iterative design and evaluation, and a multi-disciplinary approach.” (Mao, Vredenburg, Smith, & Carey, 2005).

The design approach for this thesis is based on user-centered design (UCD). I will in this section explain the principles and advantages of the UCD approach and how it will be used throughout the thesis.

Having a design approach is a way to give a common understanding for selection and deselection of different choices throughout the thesis. The use of UCD will not be explicit shown, but will give an implicit understanding to the philosophy within the interaction with the stakeholders of the checkout.

UCD places users in the center of the attention when a product is developed. It consists of methods using users as an integral part of the development process. Instead of guesswork and assumptions of how users would use the system, UCD provides the design process an understanding of the users and their needs (Kalbach, 2007).

How much the user is involved in the design process can be shown with the help of the model by Damodaran (1996) illustrating forms of user involvement (figure 9). To the right is the participative involvement of the users, which can relate to participatory design, where the users are involved throughout the whole process. UCD as design approach is located on the left side under informative involvement, where the goal is to provide the users' knowledge to the designer (Damodaran, 1996).

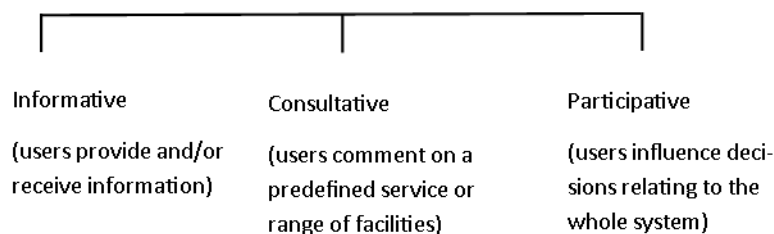


Figure 9 User involvement in system design (Damodaran, 1996, p. 365).

The advantage of participative design approach is the influence the user can have on design decisions, but this can be time consuming in the design process. Also, participative design

can only happen if the user is urging to take part in the design process (Sanders, 2008). Wheelsshop owners and Tigermedia do not have this urge to be a part of the process. Informative design has the advantage of not involving the user throughout the design process, the users are instead only meant to be actively involved in the beginning and the end of the design process. This can create a lack in immediately response to design ideas (Sanders, 2008). Despite the lack of response within design ideas, informative design approach is still more beneficial to use as it suits Wheelsshop and Tigermedia willingness to participate. It could be argued that users of Wheelsshop could be a part of the design process, but participative design focus is on the work rather than the product (Rogers et al., 2007). This can be a problem as I have a narrow focus concerning implementing persuasion into a single page checkout. If using participative design, this focus could be lost. USD focus on the users, but also on the product and the process users are going through, which means it fits better to my research question.

It is said that poorly constructed websites can make half of the visitors to go to another webshop, which can make it a disadvantage that customers are only one mouse-click away to a new webshop. That is why UCD also is useful when conducting research on webshops as it can be a key to a more user-friendly web design based on the user experience (Mao et al., 2005). The idea is therefore not to focus on the system, but to focus on the users of the system and get their experience of it. This happens through interaction between users and me as the expert. Using this design approach interaction with the users would therefore be done prior to system design (Gould & Lewis, 1985).

John D. Gould and Clayton Lewis (Gould & Lewis, 1985), who developed UCD, laid down three principles that helps produce "*a useful and easy to use computer system*" (Gould & Lewis, 1985, p. 300). These were:

- o Early focus on users and task
- o Empirical measurement
- o Iterative design

My thesis will focus on the first two: early focus on users and task and empirical measurement. The iterative design will not be used due to time limit and to the owner of Wheelsshop's expectation. I approve the iterative design principle as important for a design process, but at the same time accept that working with a real company case makes it untenable to always fit theory with work situations. Wheelsshop is a Small and Medium Enterprise (SMEs), and will not use time and money on a second iteration of the checkout design, as they rather just want to try the design on the real website after the first test.

Through these principles the users can be involved in different levels. Involvement can happen as an active part throughout the entire design process or the users can be brought in for testing different aspects of a system (Gould & Lewis, 1985; Rogers et al., 2007). The involvement in this thesis was not a total commitment for the users. For the owner of Wheelsshop the involvement to the design process happened through telephone and e-mail correspondence. Tigermedia, with their professional knowledge of the technology, was also involved through telephone and e-mail correspondence as well. End-users of the website were involved in the testing period. These tests were done by giving the users simple tasks and through these tasks investigate their performance, thoughts and so on (Gould & Lewis, 1985).

In relation to social constructivism, it is not about the technology and how it can be optimized most effective. It is through the social process I can see what is behind the surfers and thereby see what and how the checkout should be redesigned. I needed to find the real patterns and had to go behind the superficial reality and see the technology from the user's point of view, as the checkout design is not only affected by the system, but is also a result of a social structure which can be seen when using UCD as design approach.

4.3. Information ecology and methodology

According to Morville and Rosenfeld (2007), for an information architecture project to be successful a thorough research phase is essential. Figure 10 shows the model of an information ecology by Morville & Rosenfeld (2007, p. 25). A Venn diagram concerning context, content and user illustrates the complex relation among those three. Davenport (1997, p. 10) describes an information ecology as *"Besides thinking holistically about an organization, there are four key attributes of information ecology: (1) integration of diverse types of information; (2) recognition of evolutionary change; (3) emphasis on observation and description; and (4) focus on people and information behavior"*. Nardi & O'Day (1999, p. 49) define information ecology as *"a system of people, practices, values, and technologies in a particular local environment"*.

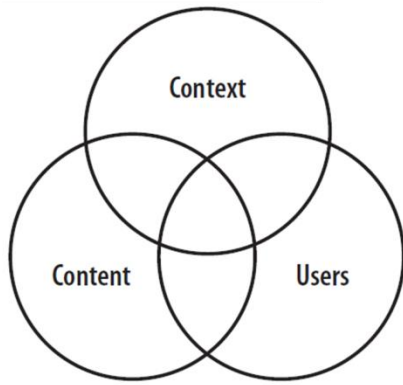


Figure 10 Information ecology (Morville & Rosenfeld, 2007, p. 25).

I agree that investigating all the concerns within information ecology when designing IT systems is important. However, I consider Davenport (1997) and Nardi & O'Day's (1999) perspective on the use of information ecology as being oriented towards a more philosophical manner. Morville & Rosenfeld's (2007) model and view on information ecology is more pragmatically illustrated, which I prefer when using it in an empirical study as this. Morville & Rosenfeld's (2007) model shows the natural dynamic when developing information architecture both in the design, but also its environment in which it exists. This means, according to Morville and Rosenfeld (2007), that it is important to understand all three aspects for developing good information architecture which also Davenport (1997) and Nardi & O'Day (1999) agree upon.

Morville & Rosenfeld's (2007) way of looking at information ecology is quite simple, but as Morville & Rosenfeld (2007) write concerning their approach of using the information ecology model *"Is this an oversimplified view of reality? Yes. Is it still useful? Absolutely"* (2007, p. 25). And it is useful as it helps me to focus on the different aspects of the organization when designing the information architecture.

Therefore, this model has helped to decide and illustrate which data was needed to be gathered throughout this thesis. In figure 11 the Venn diagram is shown again, but combined with methods used for gathering data. As the figure shows data was collected from all three aspects of the information ecology as this would get the best possible result according to Morville & Rosenfeld (2007). The research meetings with both Tigermedia and the owner of Wheelsshop are in the context area. The goal of this was to get answers for my questions, which I as the information architect needed for conducting the research. In the content area, the purpose of competitive benchmarking was to get a review of already existing single page webshop checkout and to compare Wheelshop.dk's checkout to the existing ones. And in user's areas is the contextual inquiry to get knowledge from users (customers) actually using the checkout.

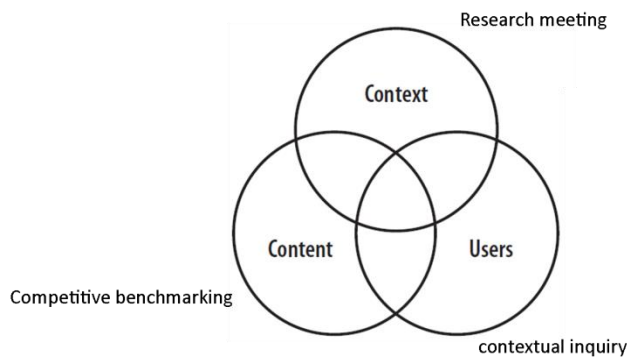


Figure 11 Information ecology combined with methods used (Morville & Rosenfeld, 2007, p. 25).

From my design approach point of view it can be questioned how benchmarking can be related to user-centered design. Morville & Rosenfeld (2007) recommend strongly to gather data from all three areas in the information ecology and benchmarking collects data from the content area. In this context, benchmarking should be seen as an expert evaluation being a supplement to user-centered design. This can be explained more closely with the help of my philosophical foundation. For it to be possible for me to redesign the checkout, I need to see what the current checkout is based on as other webshops' checkouts are not only based on new systems and technology, but also on social culture. I need to know how these social cultures have formed checkouts on other webshops so I am able to see the social process in relation to Wheelsshop.dk's checkout.

Research meetings and contextual inquiry are more obvious in relation to both user-centered design and social constructivism. I aim for the users interest and practice process to see the actual mechanisms and connections under the surface. This is done through research meetings and contextual inquiry by researching the customer's perspective, performance, thoughts and so on regarding the checkout.

Below, the different methods are described more detailed, what and how they have been used in this thesis.

4.3.1. Context – Research meeting

Morville and Rosenfeld (2007) recommend starting the project investigating the business context first. Among other things it is important to investigate the goals, vision, mission, audience, content, infrastructure, environment and technology – in general the context around the checkout. I did the interviews with respectively the owner of Wheelsshop and Tigermedia. The outcome of the meetings was introduced at the start of the thesis (p. 16) to provide the fundamental understanding of the case from the beginning, but the structure of the interviews will be explained here.

The research meeting is often held separately for different groups of professionals with different focus on the system. Morville & Rosenfeld (2007) divide the research meeting into three areas: strategy team meeting, content management meeting and information technology meeting (Morville & Rosenfeld, 2007). For gathering information for this thesis, I separated research meeting into two meetings – one with a person from Tigermedia and one with one of the owners of Wheelsshop, both held in the start of the process. These meetings were primarily held to get background knowledge concerning the ideas and technology behind the checkout. The reason for collecting information from Tigermedia and Wheelsshop's has to do with the social constructive view, according to which it is important to understand the culture and practice process behind Tigermedia and Wheelsshop.dk for redesigning the checkout. For the research meeting with the owner of Wheelsshop the focus was the context regarding the background and ideas behind Wheelsshop.dk. It was important to get knowledge from the owner of Wheelsshop as I had experienced from previous meetings that Tigermedia did not have background knowledge about establishing Wheelsshop.dk. On the other hand, I had in these previous meetings also experienced that Tigermedia had the clearest view of the technology behind the Wheelsshop.dk, therefore was it also important to have a research meeting with Tigermedia.

Both meetings and questions for the meetings were based on Morville & Rosenfeld's (2007) view on research meetings. For structuring the questions in both interviews I combined it with semi structured interview by Kvale & Brinkmann (2008) and structured it into two interview guides (the two interview guides can be seen in appendix C and D).

I chose semi structured interviews because I wanted to have an informal conversation between two people discussing the same object. This interview form should neither be an open everyday conversation or closed questionnaire, but an interview that could go into different directions (Kvale & Brinkmann, 2008). This view on interviewing works well with Morville & Rosenfeld (2007) as they also focus on not having a too formal agenda, but on letting the interviewee tell what is on their mind.

The interview with one of the owners of Wheelsshop (Erik) was conducted as a telephone interview. Morville and Rosenfeld (2007) recommend the interview to be held as a face-to-face meeting as this creates trust and respect and only by that the real goals and landmines will occur. But as both owners of Wheelsshop are under a lot of work pressure and were not interested in too many meetings, I saw it as ethical wrong to hold a physical meeting, as it would be time consuming for them (Kvale & Brinkmann, 2008). Therefore, a telephone interview was established. Morville & Rosenfeld's (2008) concerns towards lack of trust and respect if the meeting is not face-face is a pitfall, but I argue that trust and respect were already

established during the physical meeting from my aforementioned project. The meeting with the owner of Wheelsshop was focused on the background for establishing the website and the different strategies for running the website. The interview was characterized by an interest to know the thoughts that the owner of the website had for establishing the website and which thoughts they had about me investigating the checkout. The interview with one from Tigermedia – Frederik - was done face-to-face. The focus for this interview was on the content and the technology for the website.

The analysis form

Both interviews were done focusing on what Erik (Wheelsshop) and Frederik (Tigermedia) said and how they said it (if any part was more relevant for them than others), following an interview statement with another question and being sensitive to emotional areas for the interviewee (Kvale & Brinkmann, 2008). Data from both interviews was mainly collected through notes taken during the interview and memories written afterwards (Kvale & Brinkmann, 2008). For the telephone meeting, it was a natural limit that I was not able to record the meeting and therefore only had notes for the data collection. The meeting with Tigermedia was recorded, but only as a backup, as it was a natural part of the meeting to write notes during the interview due to previous meeting forms. Because these research meetings were only a preliminary examination, I chose not to make a comprehensive transcription as it was not relevant for this type of data at this early stage of the research process.

4.3.2. Content – Competitive benchmarking

To get an understanding of the content of single page checkouts, I conducted a competitive benchmarking (Morville & Rosenfeld, 2007). The method is based on comparing several websites based on different aspects. Morville & Rosenfeld (2007) describe competitive benchmarking as “*take notes about the most interesting features of each site*” (Morville & Rosenfeld, p. 245). The goal for this research during competitive benchmarking was to understand how webshops' single page checkout is structured and to understand the difference between them and Wheelsshop.dk's checkout. This was relevant as e-commerce is a competing field and I cannot be sure webshops with successful single page checkouts have revealed the success to literature as they want to keep it as a secret from their competitors. This benchmarking would therefore teach me how single page checkouts are currently structured, and it would give knowledge for what to be aware of in the contextual inquiry.

Morville & Rosenfeld's (2007) definition of competitive benchmarking is superficial and their definition of what and how it should be investigated is unclear. I therefore supplemented their

view of competitive benchmarking with Withrow (2006) and Myer's (2002) view on the topic¹ as they describe competitive benchmarking within information architecture. Both Myer (2002) and Withrow (2006) expect companies to already have competing websites they would want to be used in research. This was not the case for the owner of Wheelsshop, as the research is not about their product, but about the checkout and they therefore did not have any competing webshops I could base the research on. Due to this, I had to decide which to use in the benchmarking. I did not see it as necessary to use webshops from the same trade as Wheelsshop.dk as it was more important that the websites were webshops, they were well-established (so I could expect they had put some effort into the checkout design), had single page checkouts and some of the webshops should be in Danish to be sure the layout was related to the Danish version in for instance payment design.

Therefore, I chose:

- <http://nicehair.dk>
- <https://www.coolshop.dk>
- <https://cdon.dk>

Also, I wanted to have a large website that was well established, where I could expect the checkout to be thought through and a lot of customers were using it. I decided to use <http://www.mulberry.com/>, an international webshop that uses single page checkout. These four webshops together with the test website from Wheelsshop.dk (wheelsshop.dev.tigermedia.eu) constituted the five webshops that was going to be used in the competitive benchmarking. The number of webshops was based on recommendations by Withrow (2006).

Inventory

Withrow (2006) recommends using an inventory when making the benchmark between the websites, as it gives quick comparisons. Both Withrow (2006) and Myer (2002) have different research areas, which benchmarking could be based on. I wanted to base the competitive benchmarking on theory within checkout design to be sure I got relevant data from the benchmark. I thereof based my benchmarking on checkout theory within e-commerce (see theory p. 20). The inventory can be seen in figure 12.

¹ Both withrow and Myer refer to this method as competitive analysis; however, I will refer to Morville & Rosenfeld's term competitive benchmarking.

Areas to research	nicehair.dk	cool-shop.dk	cdon.dk	mulberry.com	wheelsshop.dev.tigermmedia.eu
Order What is the order of the elements (Daniel, 2011) 1. Billing details 2. shipping details 3. shipping option 4. payment method 5. user login 6. order preview 7. click confirm order					
Personal information How much personal information is needed (Nielsen, 2001)					
Shipping/billing address Is it clear to understand what's shipping address what is billing? (Nielsen) Is billing details before shipping details? (Daniel, 2011)					
Errors occur Is it clear if there is a problem, does it explain polity, explain clear what/ where the problem is, explain what information was expected (Nielsen,					
Order summary Is all information about the transaction showed (Nielsen, 2001)					
Security Is security showed in the checkout (Nielsen, 2001)					

Figure 12 An inventory to the competitive benchmarking.

The analysis form

The performance of the benchmark was done based on Myer's (2002) recommendation which was:

- *Visit one site at a time, and take the same (or at least, similar) paths through each site. Follow the checklist of criteria.*
- *For each criterion, take lots of notes.*
- *Try to give a score for each criterion as you complete them.*
- *If the company that you're doing the analysis for has an existing site, rate them last. After visiting the company's competitors, this will give you some sense of objectivity. This also provides a good measurement comparison for the readers of your report.*

(Myer, 2002, retrieved from

<http://www.ibm.com/developerworks/webservices/library/us-analysis.html>.)

For each criteria I checked in my inventory, I gave each website a grade from 1-5 based on:

1=bad, 2=poor, 3=fair, 4=good, 5=outstanding (Myer, 2002, retrieved from

<http://www.ibm.com/developerworks/webservices/library/us-analysis.html>.)

I created the analysis based on a qualitative analysis. Notes taken were aimed to be center of the analysis. The ratings were used to calculate the average value of each website, as it would give an overall view of how each website performed superficially, and to see how Wheelsshop.dk was compared to the other websites. The rating was a superficial view of the checkout, and from my social constructivist perspective it can be said that it only examines how technology can be made more efficient. But it helped to give an overview of the websites, which was useful when making a more detailed qualitative analysis of each criteria from the inventory. This was useful for conducting the contextual inquiry where I then could expose how the design really was to the users through the social process.

The average value was calculated by adding all values in a set and dividing them by the numbers of items in the set (Myer, 2002). The result of the calculation can be seen in the section "analysis – competitive benchmarking" (p. 59).

It can be questioned whether the competitive benchmarking being completed only by me is an issue. Normally the data from the benchmark should be verified from another person to be sure the result is not subjective. In this research it was not possible to find one with the professional knowledge within checkout theory to verify my results. I am aware that my work

situation creates a lack, In a future job situation I recognize it as recommended having a fellow colleague to verify results from a benchmark to avoid subjectivity.

4.3.3. Users – Contextual inquiry

As my design approach is user-centered design, I aim to place users in the center of the attention. I want to understand what is behind the surfers of what seems natural, this is done by having focus on the users before any design optimization is done, and study their experience of the checkout. This follows my philosophical foundation as I believe the development of technology is affected by humans' requirements or wishes. If I do not investigate the users' requirements, I cannot be sure the optimization fits them.

Morville & Rosenfeld (2007) suggest contextual inquiry for data collection from the users to give an understanding of their view of the system. I used contextual inquiry as formulated by Beyer & Holtzblatt (1998), which is also recommended by Morville & Rosenfeld (2007, p. 252). Their description of contextual inquiry is a part of a larger customer-centered process called contextual design, which is used to process data from field work to generate software-based products. I will only focus on their data collection tools – contextual inquiry (Beyer & Holtzblatt, 1998). The concept is that I as the expert collect data through a master/apprentice relationship, where I (the expert) as the apprentice learn the system through a master (the users) who is working and telling about the system in the during (Beyer & Holtzblatt, 1998).

This method was used because I am interested in *how* the users experience the checkout on the test website for Wheelsshop.dk. Another possibility could have been log tracking, but it would have given me results similar to the theory from Daniel (2006) and Nielsen (2001) and would not give me new knowledge concerning the system. Task analysis was also an option, but as task analysis is too focused on the flow of the task, it would create a lack of context that was needed to get the right data as for instance what the users think about missing labels. By using contextual inquiry, the structure of the work becomes explicit as the user tells about what he is doing. Winn & Beck (2002) demonstrated how classical rhetoric can be implemented in the e-commerce web shop through think aloud method which I also could have practiced, though with contextual inquiry the master (user) can easier pause and make a reflection of what he is doing, and the apprentice (expert) can ask questions about something the user (master) did or think of the checkout in the doing.

Users

I wanted to base the research on Wheelsshop.dk's own target group, but it was quite broad consisting of drivers who had shopped online before on webshops, being both novice and expert in online shopping and having novice or expert knowledge within tires and rims. Beyer & Holtzblatt (1998) recommend that a few interviews would return a wealth of data. I chose to run the test on 5 users to be sure I would get enough data from them. Due to Wheelsshop.dk's broad target group, I decided to use users who could be customers to the webshop, who were drivers, who had shopped online before, but as extra condition they should also have tried online shopping more than one time before and have at least some knowledge about tires and wheels so no terminology would confuse the customers unnecessary.

The users knowledge within online shipping (technical knowledge) and knowledge within tires and rims (domain knowledge) can be seen in relation to Russell-Rose & Tate's (2012, p. 5) model "Two dimensions of expertise: domain and technical" in figure 13 The figure illustrates the user's ability to navigate through Wheelsshop's checkout. They are divided into four different dimension. Whether they are novice or expert in online shopping and whether they have a novice or expert knowledge in tires and rims. The model shows a wide user's diversity as there are users represented in all four dimension. This diversity helps to give a more average evaluation of the checkout. If all users had been come from only one of the four dimensions, the checkout had be designed towards that particular user group and eliminated a design that modified this broad target group Wheelsshop is aiming for.

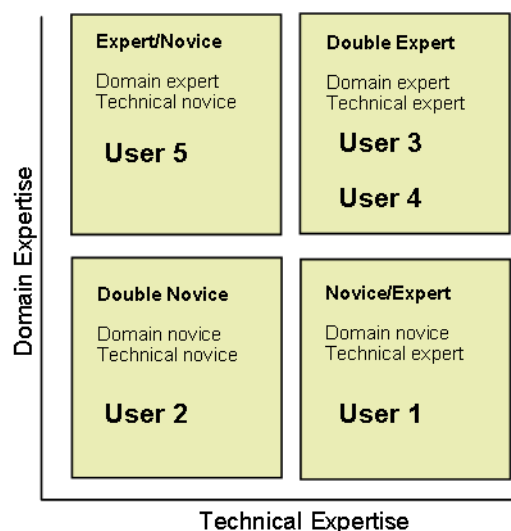


Figure 13 (Russell-Rose & Tate, 2012, p. 5)

Due to the requirements, it meant that only men were used for the test. Whether this influenced the result is hard to say, but the owner of Wheelsshop.dk had an expectation that most of the buyers were men, and thereby the expectation of the target group fit the expected user group for the checkout.

The data was collected through the software application “Morae” (<http://www.techsmith.com/morae.html>), which both filmed the user and the frontend of the computer (Recordings of the users can be seen in appendix H). Thereby I could analyze what they physically did on the screen. I also took notes, so that I would be able to make a wrap up (defined further down) at the end of the meeting. The notes were also used in my analysis afterwards.

Four principles

For the interview to be successful I followed four principles. Contextual inquiry is structured through these four principles and it was important they were clarified before the interviews were done. These principles are Context, Partnership, Interpretation and Focus (Beyer & Holtzblatt, 1998).

Context

As a basis rule for contextual inquiry to be a success, the interviews had to happen in the users' own physical context, as it enabled me to gather ongoing experience instead of a summarized experience and I got concrete data rather than abstract data (Beyer & Holtzblatt, 1998). This meant instead of the users summing up how they would do the checkout and only giving me the overall impressions, I would instead via the ongoing experience see the detailed structure of the checkout that the users experienced. And instead of abstract data where the users would say “I just type in address information” I could say “will you show me how you do it” and then get concrete data.

Four out of five interview were held in the users' own house as that would be the context where they would shop online. Due to personal circumstances, the last one was not possible to test in the user's own house, instead the test was held in his mother's house as it would be natural for him to shop online there, which created as close a natural context as possible for the users when online shopping.

Partnership

For getting the best data from interview it was important I worked as collaborator for understanding the users' work procedure during the checkout. Instead of a normal interview during which I would be sitting with all the power and was the one to decide when a topic would end

and a new one start, it was the users' rhythm that was followed and it was the user who decided when to talk and what to talk about throughout the interview. As an apprentice, I wanted to know how they conducted the checkout, I wanted to understand the system from their point of view. However, as the interviewer I still had to create more of a partnership than an ordinary apprenticeship, as it was important to break the workflow and make it okay to pause so the user could question himself in the action he was doing. This partnership created an opportunity for me to ask for new ideas for a redesign, where it was allowed to hear the users' view of this idea for the redesign, the users could then invalidate/confirm the idea and I would not have to spent more time thinking of it (Beyer & Holtzblatt, 1998).

Interpretation

During the different interviews it was needed that I not only observe what the user did, but that I shared my interpretation, so that I was sure my interpretation was correct and validating them. This is also why it was important to share my ideas with the users. If the users invalidated my idea, it could maybe be the wrong interpretation I had, which I then could validate with the user (Beyer & Holtzblatt, 1998).

Focus

For me to be sure which focus I had during the interview, I had to define my point of view. The focus in the interviews was all centered around labeling, navigation and organization within information architecture on a single page checkout and persuasive design through persuasion. By that I could guide the users to talk about what would be relevant when optimizing the system. By having this focus in mind during the interview, it made it easier for me to keep the conversation on topic and useful for the research without me taking the control of the interview from the user. This focus helped to see what was relevant, I did that by using intrapersonal trigger (Beyer & Holtzblatt, 1998) by listening to my own feelings about the conversation. This made it easier for me to understand where I could and should make a break, if there was something I missed or was curious about (Beyer & Holtzblatt, 1998).

Interview structure

Each interview had its own rhythm, but they all shared a structure that helped med and the user to stay focused on the interview's subject. Therefore, all interviews had four parts: The conventional interview, the transaction, the contextual interview proper and the wrap-up (Beyer & Holtzblatt, 1998).

The conventional interview

In the first part of the interview it was important the user and I were comfortable around each other, which conventional interaction helped with. I introduced myself and my focus for this

test, asked if video recording was okay, explained how the user's checkout procedure was the important part and the user's needed to teach me how he conducted the checkout and corrected my misunderstandings of it (Beyer & Holtzblatt, 1998).

The transaction

After this traditional interaction, I explained the rules for contextual interview. I explained this was as a master/apprentice relations ship, where I wanted to learn from the user. This meant when the user went through the checkout phase, I would constantly question why they did as they did, and their view on different elements on the checkout. Likewise I also made it clear if the interruption was in a bad moment, the user could tell me to wait (Beyer & Holtzblatt, 1998).

The contextual interview proper

The user started to do the online shopping on Wheelsshop test website, while I observed and interrupted. Wheelsshop.dk is built centered on a comprehensive search machine. To make sure that the user would not be too focused or confused about the search machine, I put one of the items into the basket to avoid the user using the search machine. This meant, the user was handed the computer when the item was already in the basket and the user only had to purchase the order. The software Morae was recording while I was taking notes. It was casual and I followed the rhythm of the user's buying process, while I used the four principles as guide for the interaction in the interview (Beyer & Holtzblatt, 1998).

It can be argued whether the user should have done the purchase from the beginning, but as I have in a previous study researched the overall perspective of Wheelsshop.dk. I knew the user could lose focus due to the search machine as it is difficult to use, and for putting items in the basket it is necessary to use the search machine. Therefore, my assessment based on this knowledge was that I would get more knowledge about the checkout if the user was not introduced to the search machine.

The wrap-up

At the end of each interview I wrapped up my understanding of how the user did and felt about the checkout. I skimmed my notes and made a summary to the user so he had a chance to correct or add if something was missing (Beyer & Holtzblatt, 1998).

The analysis form – affinity diagram

In order to analyze the data from contextual inquiry I did an affinity diagram as seen in figure 14. In appendix E is an overview of the affinity and in appendix F the entire affinity diagram is shown. Beyer and Holtzblatt (1998) recommend the use of an affinity diagram when using contextual inquire. Kuniavsky (2003) also recommends an affinity diagram instead of a more

traditional expert reading of the data, as an affinity diagram gets out the maximum of the data from contextual inquiry. It gets the scope of the user's problem with the system as it shows the issues, worries and key elements of the work practice (Beyer & Holtzblatt, 1998).



Figure 14 Affinity diagram based on data from the contextual inquiry.

The basic principles are to structure the data through a hierarchical structure where similar issues are grouped together. This helps to create the overview of problems, which the users experience (Beyer & Holtzblatt, 1998).

When processing the data Beyer & Holtzblatt (1998) recommend doing an interpretation session. This works best if it is a team that has to process the data. The interviewer walks through the notes from the interview, and the teams discuss the interview with the interviewer. They create notes as they walk through all the interviews, which is the written data that is used for the affinity diagram. This walkthrough is a kind of small analysis of each user: *"no one needs to take additional time to write up or analyze this customer"* (Beyer & Holtzblatt, 1998, p. 126). So it is not the intention to have direct quotations from the users, the important aspect is for the designer to see the system from the user's perspective.

As I have written my thesis alone, I did not see it as optimal to have a group walk, instead I decided to make a modification of the approach. Instead of the notes based on group discussions, I made the notes as I walked through the videotapes of the users (figure 15). On each note I made sub notes within everything I thought of concerning theory and the knowledge from benchmarking and the research interviews. If I felt it was necessary, I would also make a screenshot to remember more exactly what the note was describing. Because I wanted justification for the claim, I decided to put the timestamp for each claim. Things noted were

observations concerning tools, sequence, interaction, mental model – anything that had any relation to the checkout (Kuniavsky, 2003). Beside of the timestamp, I also noted an identification of the users, which I categorized as U1, U2, U3, U4 and U5 (Kuniavsky 2003).

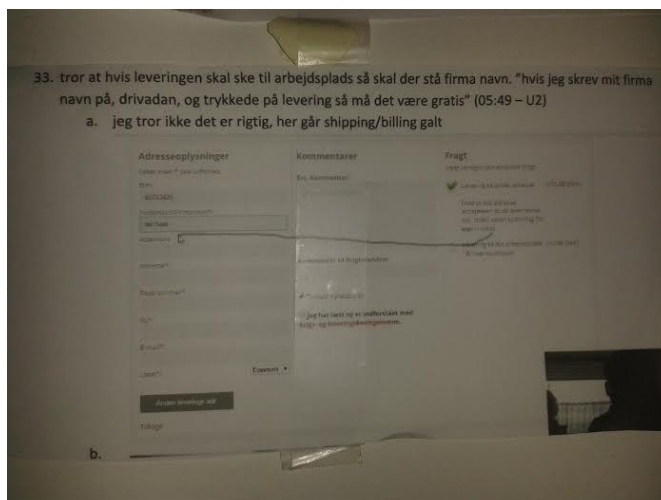


Figure 15 Notes from the contextual inquiry used for the affinity diagram.

A problem with this type of working with data is the influence that my own opinion can have. At the same time a direct transcription of the contextual inquiry would not have made sense for the affinity diagram as the context would be missing. If the affinity diagram was done as group work, my insights could then have been up for discussion and my view of the issues could have been validated. This did not happen as I did it alone. I am aware of this problem and also the factum that this work situation contradicts to my philosophical foundation as the knowledge is not gathered through social interaction. The affinity diagram could be done together with external people, but it would not make sense as they would miss the context of the contextual inquiry and there could be a lack of interest in creating the affinity diagram. Therefore, I am aware that my work situation creates a lack, and in further work situations it would be recommended doing it as group collaboration.

The affinity diagram in action

The affinity diagram was done in one day as Beyer & Holtzblatt (1998) recommend as it else can get exhausting to allow it to drag on. I started to divide the notes into clusters. It did not matter how the notes related to each other as long as I felt they were relating to each other. When no more notes were related to a certain cluster, I would write a label on a yellow note, describing each aspect of the issue for that certain cluster. I would avoid technical terminologies, and instead use simple sentences to exemplify the issue (Beyer & Holtzblatt, 1998). Beyer & Holtzblatt (1998) recommend it to be a blue note, but as it was not possible for me to find blue post-its, I decided to use yellow notes. The consequence of using another color instead of blue is not described by Beyer & Holtzblatt (1998), but I did not see it a problem that the color was different. The number of notes for each yellow group was between 2-4

notes. According to Beyer & Holtzblatt (1998), this would force me to see the variation of the notes and push more knowledge up to the blue group level. I repeated this process with all my notes.

Kuniavsky (2003) recommends an extra note level which should have been used as a starter before the yellow note. Beyer & Holtzblatt (1998) do not mention this type of note and Kuniavsky (2003) does not explain why he sees this extra note as important. Due to the lack of argumentation for using this extra level of notes, I decided to base the affinity diagram on Beyer & Holtzblatt (1998) recommendation and started the affinity diagram from the yellow group.

When all notes were clustered into yellow groups, I clustered the yellow groups together and grouped them with a pink note. The label for the pink note would specify issues that defined that area of concern. At the end, all pink notes were again clustered with a green note and the label would describe that area of concern within the work practice. This hierarchical structure of all the notes then showed me issues with the checkout all tied to a real instance (Beyer & Holtzblatt, 1998). As Beyer & Holtzblatt (1998, p. 160) write: *“When well written, the labels tell a story about the user, structuring the problem, identifying specific issues and organizing everything known about that issue.”* The affinity diagram helped me to understand the checkout from the user’s point of view. What the diagram exactly showed, is explained in the analysis section.

4.4. Wrong checkout structure

When conducting the test of Wheelsshop.dk's test checkout, I discovered that the structure of the checkout was not correct. Instead of a single page checkout it occasionally changed to a multiple checkout as seen in figure 16 and 17.

The screenshot shows a web browser window with the URL `wheelsshop.dev.tigermedia.eu/tigercms/orderv3/collect?`. The page is the checkout page for Wheelsshop. The header includes the Wheelsshop logo, navigation links (Forside, Tilbehør, Kundeservice, Betingelser, Galleri, Nyhedsbrev, Login), a search bar, and a shopping cart icon with 4 items. The main content area is divided into sections: 'Adresseoplysninger' (Address information) with fields for Tlf*, Fuldenavn/Firmanavn*, Attention*, Adresse*, Postnummer*, By*, Land* (set to Denmark), and E-mail*; 'Evt. Kommentaar' (Optional comment) with a text area and a checkbox for 'Tilmeld nyhedsbrev'; 'Fragt' (Shipping) with two options: 'Levering til privat adresse (+75,00 DKK)' and 'Levering til din arbejdsplads / Erhvervsadresse (+0,00 DKK)'; and 'Betaling' (Payment) with four options: 'Kredikort' (selected), 'Klarna', 'Bankoverførsel', and 'SparXpres'. The 'Kredikort' option includes a note about interest and a link to terms. The 'Bankoverførsel' option includes account details. The 'SparXpres' option includes a note about delivery time and a link to terms. At the bottom, there are 'Tilbage' and 'Næste' buttons.

Figure 16 Wrong structure on the checkout, this is page one.

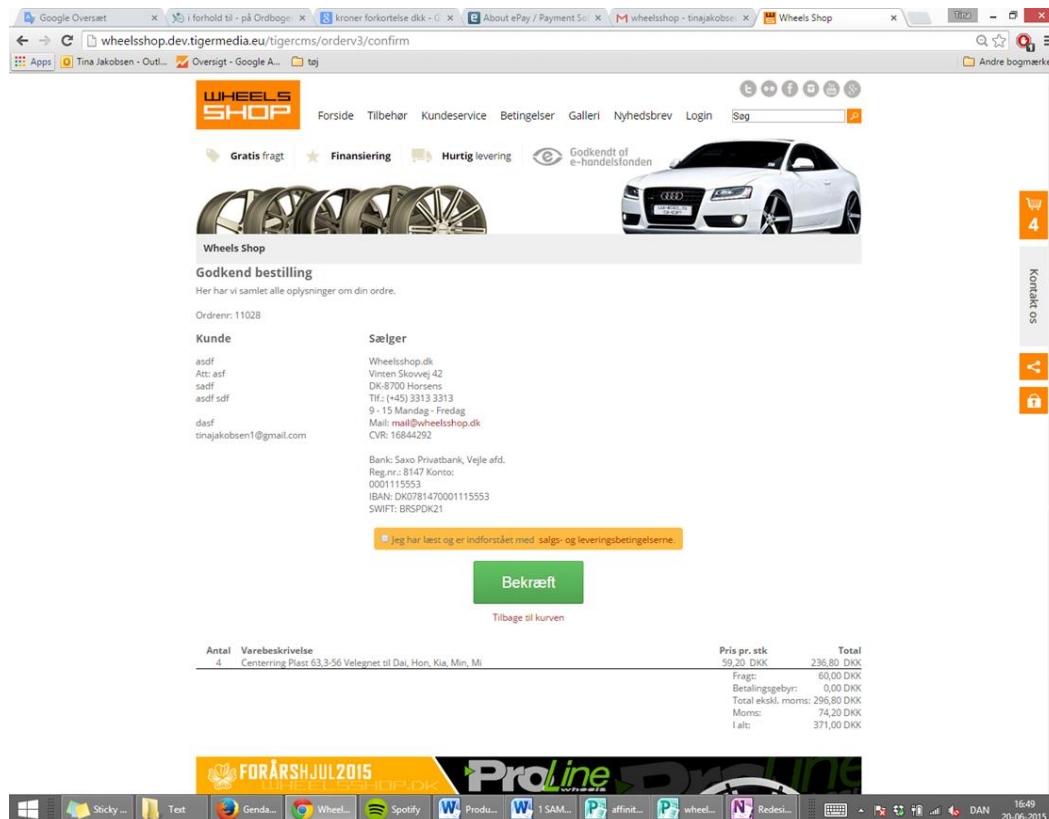


Figure 17 Wrong structure on the checkout, this is page two.

Besides being divided into two pages instead of one, the structure of the checkout is different. Instead of three columns the incorrect checkout only has two. I first discovered this structure when the user testing was initiated. The first time it was incorrect, I contacted Tigermedia who solved the mistake, but it happened again later on. Therefore, user 1 and 3 tested the checkout with an incorrect structure.

The reason for this is that Tigermedia has several versions of the same system (and thereby also the checkout). There is one version which is operating, another version under development running on the test website. And then there is several versions used for experimentation. This can create confusion which can lead to a system being updated with designs that were not meant for the system in question.

Despite of the wrong structure, there were still elements from the test that were relevant for developing a redesign of the checkout, and therefore the results from these two tests were still used.

4.5. Redesign

To illustrate the redesign of the checkout, high fidelity wireframes with a high degree of detail is used (Kalbach, 2007; Morville & Rosenfeld, 2007). High fidelity wireframe can easily focus on the interface and graphic (Morville & Rosenfeld, 2007), but in this case the visual design purpose is to illustrate how to improve the information architecture and not how the graphic design can be changed from a graphical designer's point of view. This type of wireframe is chosen to simulate the actually checkout for presenting an estimated view of what it would look like. This is done for the owner of Wheelsshop to get a concrete picture of the change in the redesign (Kalbach, 2007).

These methods formed the basis of my work for the thesis. The next section the analysis where the theory described has been used to analyze the data gathered.

5 | Analysis

I will now in this section analyze the data gathered. First there will be an analysis of the competitive benchmarking, where the checkout theory is used for creating the analysis. Afterwards will come the analysis of the contextual inquiry, where an affinity diagram is used. The analysis of the affinity diagram is based on results from the competitive benchmarking and the theories.

5.1. Benchmarking

As mentioned in the method section, I created a competitive benchmark with the webshops nicehair.dk, coolshop.dk, cdon.dk, Mulberry.com and Wheelsshop's test checkout (<http://wheelsshop.dev.tigermedia.eu/>). As also mentioned in the method section, the purpose of this benchmark is for me to understand how a single page checkout is structured compared to Nielsen (2001) and Daniel's (2011) view on beneficial checkout design, and how Wheelsshop.dk's test checkout was compared to other checkouts.

Results from the benchmark can be seen in appendix G and a simple statistical calculation of the numbers from it is shown in figure 18. The benchmark illustrates the six sets compared to each website. The statistical calculation illustrates how the websites are compared to each other to give an overall view of the benchmark.

Areas to research	nicehair. dk	coolshop. Dk	cdon. dk	mulberry. com	wheelsshop. dev.tigermedia.eu
Order	4	2	2,5	4	3
Personal information	4	4	2	4	4
Shipping/billing address	3,5	2	1	2	2
Errors occur	4	3	2	4	4
Order summary	3	3	3	4	3
Security	1	3	4	5	5
Mean	3,3	2,8	2,4	4	3,5

Figure 18 Results from benchmark.

The statistical calculation indicates that Wheelsshop is quite average, the calculation does not tell the entire truth as these numbers don't contain a lot of information. However, they give an idea of how Wheelsshop's test checkout can be compared to the four other webshops. It illustrates that Wheelsshop.dk's checkout is well structured according to Nielsen (2001) and Daniel's (2011) guidelines, even though some good elements still need to be worked on. I will in the following go through each of the six areas from the benchmark to ex-

licitly research how Wheelsshop's checkout is compared to Nielsen (2001) and Daniel (2011), and compared to the other checkouts.

5.1.1. Order

Daniel (2011, p. 94) recommends the orders of a single page checkout to be:

- Step 1: Billing details.
- Step 2: Shipping details.
- Step 3: Shipping option.
- Step 4: Payment method.
- Step 5: Create password.
- Step 6. Order preview box with simple overview of the items being paid for.
- Step 7. Click "confirm order" button.

This order is not followed strictly and not all steps are represented in any of the checkouts. Figure 18 illustrates a simple version of how the seven steps are placed in each checkout. The arrows illustrate how the structure is for each checkout. As it can be seen, the checkouts follow some orders of Daniel's (2011) form, but not strictly and none of them has all elements included. What can be learned here, is that the structures varies and does not follow the recommended guidelines from Daniel (2011). Also, it is only mulberry.com that has the payment phase on the same page as the rest of the checkout procedure. On the other websites, including Wheelsshop.dk test website, it is needed to press 'confirm order' before the payment registration can be completed. During the research meeting it was discovered this was due to Wheelsshop using Epay's software for payment, which meant they needed to be directed to an external page where Epay's software could run. If they wanted to have a 100% single page checkout with payment on the same page, they need Tigermedia to create the payment software for them. It is not sure, but it could be that nicehair.dk, coolshop.dk and cdon.dk also use Epay as payment software and therefore also is forced to have an extra step for the payment.

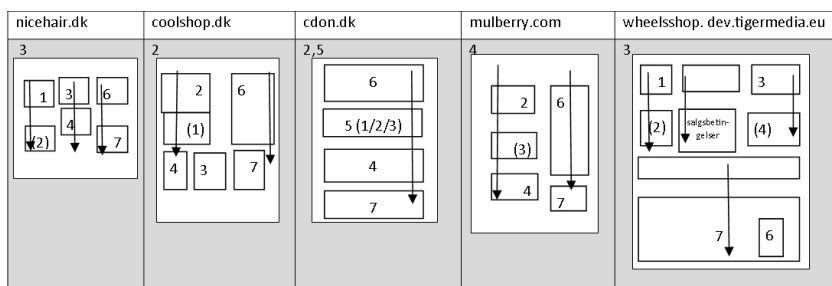


Figure 18 How Daniel's (2011) seven steps are placed in the checkout.

Figure 18 also illustrates the difference from single column to tree columns in the structure of the checkouts. The preferred numbers of columns is not anything either Nielsen (2001) or Daniel (2011) mention. Whether it should be one, two or three columns is something I am aware of when I do the contextual inquiry as I need to know how the users feels about the fact that Wheelsshop uses three columns first, and have some kind of a single column within one step, and an extra step inside that step (figure 19). I need to know if this is confusing or not for the users.

Figure 19 The confirm button is at the right, but around is the order preview at the right and below it.

Another aspect that was important to see when doing the contextual inquiry, is how step “4. Payment method” is not shown in Wheelsshop.dk’s checkout before the user has agreed on “Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.” (figure 20). Nielsen (2001) and Daniel (2011) have not described these elements and none of the other checkout make use of such a feature. The question is, is this features a positive fact for the users or does it confuse them?

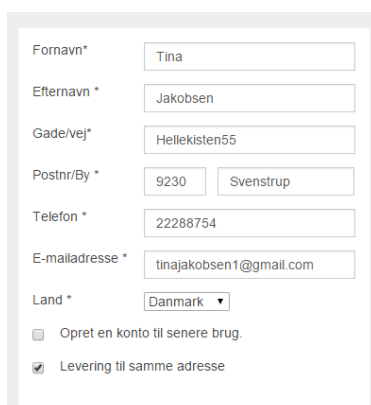
Figure 20 “4. Payment method” is not shown before the user has agreed on “Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.”

5.1.2. Personal information

Nielsen (2001) recommends having a minimum need of registration. With help of the benchmark I can see that most checkouts follow this guideline expect cdon.dk. Cdon.dk users need to register as users before they can pay, which conducts a lot of information the customer needs to give before they can complete the order. Wheelsshop makes use of the advantage of only including a minimum of personal registration as recommended by Nielsen (2001). The users only need to type in name, address, e-mail and telephone number.

5.1.3. Shipping/billing address

Both Nielsen (2001) and Daniel (2011) write about shipping and billing address. How it is importance to make it clear what is billing and what is shipping and how the step of filing in the billing address should be placed before the shipping address. However, the reality does not follow theory. Each checkout has its own way of designing shipping/billing address. Nicehair.dk places the shipping address first and then billing, but do not use any header so it is not explicit that it is shipping (figure 21). Coolshop.dk uses headers, but the shipping address is placed before the billing address (figure 22) which can be confusing from a theoretical point of view. Cdon.dk's users needs to register as users before any address can be shown (figure23). Mulberry.com has a header, but it says "delivery" meaning shipping, and they do not ask for any billing address, this might seem confusing (figure 24). Wheelsshop.dk's header is only named "adresse oplysninger" (address information) and asks for a shipping address below (figure 25). It can be concluded that none of the checkouts follow the theoretical guidelines. It was therefore necessary in the contextual inquiry to find out, how the users feels about the solution Wheelsshop.dk's has on their checkout concerning the billing/shipping area.



The screenshot shows a checkout form with the following fields and values:

Fornavn *	Tina
Efternavn *	Jakobsen
Gade/vej *	Hellekisten55
Postnr/By *	9230 Svenstrup
Telefon *	22288754
E-mailadresse *	tinajakobsen1@gmail.com
Land *	Danmark
<input type="checkbox"/> Opret en konto til senere brug.	
<input checked="" type="checkbox"/> Levering til samme adresse	

Figure 21 Does not use any header so it is not explicit this is shipping.

Forsendelsesadresse

Firmanavn (ikke krævet)	Land
<input type="text"/>	<input type="text" value="Danmark"/>
Fulde navn	Telefon
<input type="text"/>	<input type="text"/>
Vejnavn + husnummer	E-mail
<input type="text"/>	<input type="text"/>
Postnummer	Gøttag e-mail
<input type="text"/>	<input type="text"/>
By	
<input type="text"/>	

☒ Brug en anden faktureringsadresse
☐ Modtag specialtilbud fra Coolshop
☐ Send produktrelaterede info/tilbud om mine køb

Figure 22 Coolshop.dk. Shipping address comes before billing address.

2 Adresseoplysninger

Allerede kunde

E-mailadresse

Kodeord

☐ Husk mig

[Har du glemt dit kodeord/e-mailadresse?](#)

[Registrér dig som ny kunde.](#)

Figure 23 Cdon.dk. Users need to register as users before any address can be shown.

Delivery

Which country would you like us to deliver to?

How do you want to get your order?

☐ **Deliver to an address**
 Standard delivery (1 - 2 working days)

☐ **Collect in store - free** What's this?
 Available in selected Mulberry stores within United Kingdom (1 - 2 working days)
 The store will contact you when your order is ready to be collected. undefined

Figure 24 Mulberry.com. It says “delivery” (shipping) and do not ask for any billing address.

Adresseoplysninger

Felter med * skal udfyldes.

Tlf*:
asdf

Fuldenavn/Firmanavn*:
asdf

Attention:
adf

Adresse*:
af

Postnummer*:
asdf

By*:
adsf

E-mail*:
tinajakobsen1@gmail.com

Land*: Danmark ▼

Anden leverings adr.

Figure 25 Wheelsshop.dk's test checkout. Is only named "Adresseoplysninger" (address information) and below it ask if shipping address is another.

5.1.4. Occurrence of errors

In case of errors, Nielsen (2001) illuminates the importance of explaining clearly and politely what the reason of the problem is and what could be done instead. All checkouts have a certain degree of explanations when errors occur. However, the quality of the explanations differs. On some webshops the customers can only confirm the purchase when everything is filled correctly, but the page would not say what has been filled in wrong. Other webshops make it clear to the customer by highlighting the entire box or lines in another color and showing a text saying "This box should be filled". Wheelsshop.dk's checkout gives clear information when an error occurs. The box lines become blue and a text saying "skal udfyldes" (should be filled) is shown.

5.1.5. Order summary

Nielsen (2001) developed a list of things that should be in an order summary if it should be perfect for the users. They are:

- o Items to be shipped, including gift messages and wrapping options.
- o Total charge including price for each item, shipping, tax and other additional costs.
- o Shipping and billing addresses.
- o Shipping method.
- o Estimated delivery date.
- o Payment options.

State of the transaction (for example the order is not placed until after providing payment information on the next screen and pressing the confirm order button)

Links to information the customer might want, such as privacy, security, customer service, returns, guarantees, and customer profile.

Method for making changes to the order

In all four checkouts some elements from Nielsen (2001) list are missing, and none of them follow his criteria 100%. Wheelsshop.dk is average of having things from the list compared to the other websites. However, Wheelsshop does not include the estimated delivery date, state of transaction or methods for making changes. Estimated delivery date is something the owner of Wheelsshop wants to include in the summary, but the software is still in process to be created. State of transaction is not presented because of Epay is used for the payment option, and customers need to press the “confirm order” button before it is shown. The feature of making changes in an order is not an option as Tigermedia explained due to the complexity of choosing wheels and tires. It is too complex to make order change in the checkout phase.

5.1.6. Security

The subject of security is about if and how the security is shown in the checkout (Nielsen, 2001). Wheelsshop is along with Mulberry.com one of the best webshops to show the rules of security. On Wheelsshop.dk a link can be pressed and a new browser window will open to show the security rules. So for both the theoretical aspects and compared to the other websites, Wheelsshop.dk's checkout is well designed.

5.1.7. Summary

To sum up what has been discovered in the competitive benchmark. Compared to Nielsen (2001) and Daniel's (2011) guidelines for a beneficial checkout design and compared to the four other checkouts, Wheelsshop.dk's checkout does not have a bad design. There are elements that can be a problem for the customers, but according to theory there are good elements as well. Compared to the other checkouts, Wheelsshop.dk fulfills an average of the conditions. However, the users can still experience it differently in contextual inquiry and Wheelsshop.dk is still a prototype, which can itself generate problems. There can be elements that theoretically are included in the checkout, but are not visible when users are testing it. But it confirms my assumptions from the beginning (introduction p. 6) that Wheelsshop.dk's test checkout is a generalizable case study.

From this analysis I have discovered aspects I should be aware of when I am conducting the contextual inquiry. I should be aware of:

- o Is it confusing that there are three columns at first, and then one column at the bottom?
- o The step "4. payment method" is not shown before the customers have agreed on "Jeg har læst og er indforstået med salgs- og leveringsbetingelserne." Neither the theory or the other websites have an element like that, but is this a positive element for the customer or not?
- o Shipping/billing - is it a problem page only says "address information" and not "billing information", does that confuse the customers?
- o In case of errors, is it easy for customers to understand what the reasons for the errors are?
- o The website does not include an estimated delivery date, state of transaction, methods for making changes – is that something the customers need?

With these considerations in mind, and a new perspective of what the checkout looks like both in reality and compared to webshop checkout theory, I did a contextual inquiry to see what was already working, what could be optimized and how persuasive design could help to improve the checkout when it is based on the three forms of appeal.

5.2. Affinity diagram based on contextual inquiry

As mentioned in the method section, an affinity diagram was created for analyzing the data from the contextual inquiry. The entire affinity diagram can be seen in appendix F and a shorter overview of it can be seen in appendix E. The diagram is divided into six main areas, which are:

- o Overall structure
- o Billing/Shipping
- o Comment boxes
- o Payment
- o Approve Checkout
- o Outside context

This analysis is centered on these six main areas divided into 25 statements. Within each statement, assertion and explanations are given and some followed with suggestions for a redesign. Based on these statements a redesign of the checkout is then possible. During the analysis, users from the contextual inquiry is referred to as U1 (user 1), U2 (user 2), U3 (user 3), U4 (user 4) and U5 (user 5).

5.2.1. Overall structure

What users generally think of the page

1. Design needs to be logical to the users' mental map.

When the users entered the checkout, they were asked about their first impression of the overall structure. They answered as this:

26. *"jeg skal udfylde min adresse" (03:21 – U2)*

1. *"jamen altså der står jo at feltet (Re: tlf.) skal udfyldes" (00:58 – U1)*

49. *"jeg har sagt videre til kasse og så før jeg kan betale skal jeg have skrevet hvilken adresse jeg vil have leveret på og hvilken måde jeg vil have leveret på" (02:57 – U3)*

The first two quotes (U2 and U1) focus on the first part of the checkout, and the last (U3) focuses on the entire checkout. It illustrates how the users either are serialists or holists in their way of seeing the checkout. U2 and U1 are serialists, which mean they see the checkout as parts. U3 sees the checkout as a single entity meaning the user has a holist's per-

spective. This observation is connected to the appeal logos, where the persuasion needs to be logical for the user. This means, that whether the user has a serialistic or holistic view, the checkout structure needs to be logical for the user. To make sure that the checkout fits users who have a serialist's way of thinking, the principle from persuasive design Ease-of-use can be helpful. This principle focuses on how the website wins credibility by being easy to use. The navigation, organization and labeling system need to be continuous so the structure is logical for users with a serialist's way of thinking.

In the benchmarking it was also questioned, whether three columns were lucrative or not (benchmark analysis p. 59). The affinity diagram showed that three columns work well (figure 26). The users in the contextual inquiry (U2, U3 and U4), where the structure of the checkout was correct, moved naturally to the right instead of scrolling down. User 1 and 5, who, by accident, tested the checkout with a wrong structure (figure 27) scrolled down instead of seeing the "Kommentar Boks" at the right.

The screenshot shows a checkout form with three distinct columns. The left column, titled 'Adresseoplysninger', contains fields for Tlf*, Fuldenavn/Firmanavn*, Attention, Adresse*, Postnummer*, By*, E-mail*, and Land*. The middle column, titled 'Kommentarer', includes a text area for 'Evt. Kommentar:', a section for 'Kommentar til fragtmanden:', and checkboxes for 'Tilmeld nyhedsbrev' and 'Jeg har læst og er indforstået med salgs- og leveringsbetingelserne'. The right column, titled 'Fragt', offers two shipping options: 'Levering til privat adresse (+75,00 DKK)' and 'Levering til din arbejdsplads (+0,00 DKK) / Erhvervsadresse'. A small inset image shows a person's head and shoulders, looking at the screen.

Figure 26 Three columns work well in the checkout.

The screenshot shows a checkout form with a cluttered and less logical structure. The left column, titled 'Adresseoplysninger', contains fields for Tlf*, Fuldenavn/Firmanavn*, Attention, Adresse*, Postnummer*, By*, Land*, and E-mail*. The right column, titled 'Evt. Kommentar:', includes a text area for 'Skriv en kommentar...' and a checkbox for 'Tilmeld nyhedsbrev'. The form is less organized than Figure 26, with a lack of clear separation between sections and a more cluttered layout.

Figure 27 The checkout with a wrong structure.

Based on this statement a structure with three columns should remain in the redesign, but the overall design concerning navigation, organization and labeling system should be monotonous.

2. Keep the order of the forms.

There was no indication that the users had problems with the order of the forms, that had to be completed. This is interesting as the order on Wheelsshop.dk's checkout is not the one recommended by Daniel (2011) and Nielsen (2001). The difference in the orders can be seen in figure 28. Therefore, the question, whether it was a problem payment options was first seen when "salg og betalings betingelser" was pressed (see benchmarking p. 59), seems not to be a problem as the users did not have any objections concerning this features. If Wheelsshop thus wants to keep this function, this research gives no counterargument for why they should not.

- Step 1: Billing details.
- Step 2: Shipping details.
- Step 3: Shipping option.
- Step 4: Payment method.
- Step 5: Create password.
- Step 6. Order preview box with simple overview of the items being paid for.
- Step 7. Click "confirm order" button.

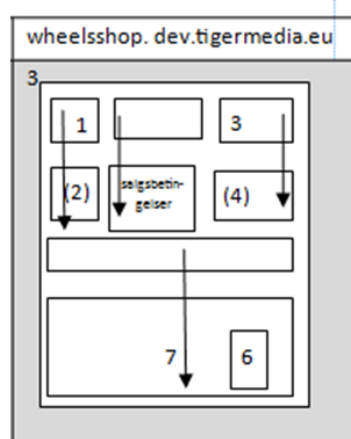


Figure 28 At right the order from Daniel (2011) and at the right the order Wheelsshop.dk's test checkout uses.

In addition to the overall structure being designed for serialists and three columns remaining to create the persuasive principle Ease-of-use to support logos (statement 1), it can through this statement be discovered that logos is already represented through the persuasive principle Ease-of-use. This is due to none of the users mentioning the order of forms as a problem, which can be concluded that the order is fine and will therefore not be changed.

Design needs to be changed

3. A more foreseeable structure.

The affinity diagram showed that the overall navigation of the organization is important. One user wrote:

87. "det der irritere mig er at jeg skal scrolle ned (re. for at få et overblik) så bliver jeg forvirret" (07:07 – U4)

It needs to be clear for the users when to scroll down. Another user explained how he needs a structure that explains him in which order the forms should be completed in a simple way:

28. "trin 1 du skal udfylde dit navn adresser og hele lortet fordi det skal sende, næste trin kort, hvad for et kort skal du betale med, næste indskriv dine kort" (03:49 – U1)

These elements need to be improved, but it can be argued which form of appeal it should be based on. If it is based on logos, the focus would be on how the overall structure can be easy to use and the persuasive principle Ease-of-use could help improve this. The navigation would then be designed in a way that would make sense for the user through a logical constructed navigation. But it was proven in statement 1 that a structure with three columns worked, as the users intuitively moved to the right instead of scrolling down, which means that the logical structure already exists, it just needs to be more explicit. Instead of designing the structure based on logos, the structure of the checkout navigation would benefit more by designing it through ethos. In this case, the design would need to be built based on how users feel convinced that the checkout knows where to lead them without them thinking about it themselves. This can be done with the persuasive principle Tunneling, where the checkout then guides the user through the steps in the checkout. In a redesign, the overall structure therefore needs to show the users more explicitly in which order the forms should be completed.

Design that does not need to be changed

4. Page title is not needed.

Kalbach (2007) notices that a page title is important for the navigation of the website. However, when the users were asked if they needed a title showing that the page was the checkout, the respond was the opposite:

92. "nej, jeg synes det er fint nok det her" (02:17 – U5)

50. "jeg kan ikke komme i gang om noget det skulle hedde, men jeg tænker heller ikke det er nødvendigt" (03:48 – U3)

2. "når jeg så når til den her side(re. Checkout) så giver det sig selv at jeg skal betale" (03:53 – U1)

25. "jeg er ikke tvivl om at jeg er her, men det gjorde da ikke noget den stod der" (03:09 – U2)

Even though the theory recommends a page title, it can be concluded that the users do not need it, as they already know intuitively that the page is the checkout page. An explanation for this fact can be that users already have learned to use a checkout and added it to their mental map so they intuitively know what it is when they see it.

The test checkout has a page title named "Autoshoppen" (se figure 29). "Autoshoppen" does not give any important information to the users. From a persuasive point of view the checkout would benefit by completely erasing the page title as this can improve pathos. Pathos is about communicating to the user's feelings and if something feels easy to do, it is more likely the user wants to do it. An example for this could be the less text to be read, the easier it becomes to get an overview. This form of appeal is conducted through the principle Reduction. I want to reduce the complex work task (which is to finish the checkout) and instead make it more simple. This is done by reducing all unnecessary labels and only have labels relevant for finishing the checkout. This is why a page title will not be shown in a new redesign, meaning the label "Autoshoppen" will be removed.

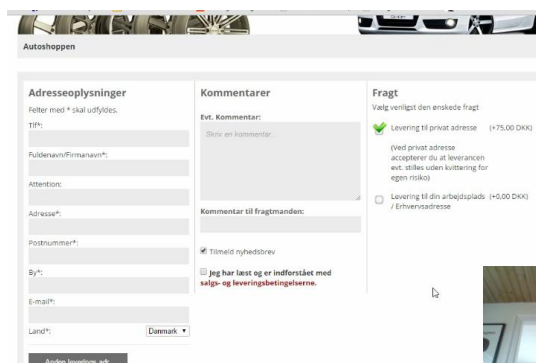
The screenshot shows a web page titled "Autoshoppen" at the top. Below the title is a navigation bar with a home icon and a search bar. The main content area is divided into three columns. The left column, titled "Adresseoplysninger", contains fields for "Fødselsdato/Fødselsår*", "Attention:", "Adresse*", "Postnummer*", "By*", "E-mail*", and "Land*" (with a dropdown menu set to "Danmark"). The middle column, titled "Kommentarer", has a text area for "Evt. Kommentar:", a "Skriv en kommentar" button, and a checkbox for "Tilmeld nyhedsbrev". The right column, titled "Fragt", shows two shipping options: "Levering til privat adresse (+75,00 DKK)" and "Levering til din arbejdsplads (+5,00 DKK) / Erhvervsadresse". At the bottom of the left column is a button labeled "Ånden leverings- og returpolitik".

Figure 29 The page title is named Autoshoppen.

5.2.2. Billing/Shipping

The affinity diagram showed various optimization options in the billing/shipping area (figure 30). These options will be explained more detailed now.

Figure 30 Billing and Shipping area.

Billing area – label problems

5. Change billing label.

Daniel (2011) and Nielsen (2001) recommend billing forms to be before shipping forms. My benchmark showed that not all checkouts followed that rule, but Wheelsshop.dk did. Nielsen (2001) also recommends it to be clear what is billing and what is shipping for not confusing the customers. The problem on Wheelsshop.dk is that the billing area is named “Adresseoplysninger” (address information), which is a wide term. The users would know they should enter their personal informations, but they could be confused about what the information is used for. An example is shown below, where the user thinks the billing information is for shipping:

52. ”personlig oplysninger til levering, og jeg har valgt leverings til privat adresse herover (re: over i fragt)” (05:38 – U3)

This is also explained by Kalbach (2007) as the label needs to be as “focused” as possible for the user to feel more confident when they are navigating through the checkout. By using the term “Adresse oplysninger” it is not focused enough for what the personal informations are used for. The label has to be aimed towards the users as precise as possible for supporting the forms of appeal. Raising logos is done through correct argumentation, facts and in-

formation. Logos is affected when there is trouble with the label. The label needs to be correct for the users to believe the argumentation. If the users do not understand the logical argumentation, in this case “adresse oplysninger”, the logical argumentation fails and the credibility is lost for the checkout. Therefore, because of the persuasive principle Expertise it is important to remember that all labels should be correct. The adapted labels persuade the users to see the checkout as an expert, where it is safe to enter personal information. It is something that can change the view of expertise for the users, which increases logos. Therefore, the label is going to be changed from “Adresseoplysninger” to “Faktuering” to avoid any misunderstandings as this would create a more precise and focused term.

6. The form “Attention” affects the users.

The affinity diagram showed that the word “Attention” had a negative effect to some of the users. They said:

94. *”hvad er det (re. Attention) der, det ved jeg sku ikke hvad er” (04:25 – U5)*

30. *”så er jeg lidt i tvivl om hvad de mener med det her (re attention)” (05:01 – U2)*

Other users knew the meaning of attention and thought of it as a good element:

54. *”attention - hvis jeg sender til mit firma så kan man sætte en att. Hvis der er 900 i virksomheden så kan den komme hen til den rigtige, det er godt den er med”. (06:24 – U3)*

56. *”men det er rar den (re. Attention) er med for rigtig mange webbutikker har den ikke”. (06:38 – U3)*

The problem with the label “Attention” is that it is the correct term to use, though it can also be used in its shorter form “att.”. As Cabré (1999) explains there is general language (unmarked sets) and special language (marked sets). In this section, marked and unmarked sets of subcodes are used, and “Attention” becomes a marked set. Attention belongs to special language because it is a technical term for the recipient of the shipment and is therefore for customers who have knowledge within shipping terms. “Attention” as a term persuades customers by being a focused label, but the problem is that it does not fit the entire target group. Kalbach (2007) explains how it is necessary to consider the language of the audience, if the word is too technical for the audience, it has to be changed. The problem with “Attention” is that it is the correct term and there is no other word that can replace it adequately enough. It could be replaced with a sentence such as “afleveres til (delivers to)”. Though, this would disturb statement 1 though, meaning it needs to fit the users' mental map, and making it a sentence instead of a noun would disturb the label system by not having the same similar

syntax, as the label system consist of nouns. At the same time not using the term "Attention" could confuse customers using special language.

From the perspective of logos, labels have to be clear and informative for the users. Cabré (1999) explains that you sometimes just need the correct word as nobody would understand anything otherwise. Creating a sentence such as "afleveres til (delivers to)" would confuse both the special and general language users. Since filling in the blank "Attention" is optional, general language users can skip it and special language users can complete it if they want to, and the term "Attention" can remain. This can help increase the persuasive principle Expertise, as the customers can trust the checkout because customers who do not understand the term will skip it, and customers who do understand it can complete it.

7. Change label "Fulde navn/firma" to "Navigational choice".

The blank "fuldenavn/ firmanavn" is both placed at "levering" (figure 31) and under "Anden leveringsadresse" (figure 32). Both will be examined now.



Figure 31 Billing area with the blank "Fuldenavn/firma navn".

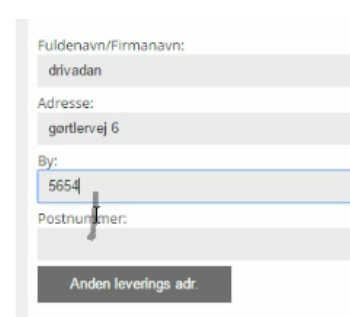


Figure 32 Shipping with the blank "Fuldenavn/firma navn".

Some of the user had no problem understanding the difference between "Fuldenavn" and "Firmanavn" where other got confused:

"31. det (firmanavn) må være hvis det er et firma der køber det, det ved jeg sgu ikke" (05:18 – U2)

93. "fulde navn må være mit navn og firma må være hvis jeg havde et firma"(04:04 – U5)

The quotes above could indicate that the problem with this label is that it is not descriptive enough. By using the label "Fuldenavn/firmanavn" it becomes a failed attempt to create a

focused label and instead it becomes a catch-all label that does not intuitively make sense for its users.

A way to solve this problem is to make these options a navigational choice. By building this forms based on ethos and using the persuasive principle Tunneling, the checkout can guide the customer through the process. Right now the form confuses the customer, by making it a navigational choice that customers only have to tick off whether they are a company or a private person, and they can then trustfully follow the checkout's path (Tunneling) without thinking about it.

Shipping area – navigation problem

8. Change abbreviations from "adr." to "adresse".

The navigation label "Anden levering adr." functions well as users understand what it means:

57. "anden leverings adresse, det er, som køber har jeg skrevet min egen adresse (re: informationerne skrevet ovenfor) men hvis jeg vil have leveret til en anden adresse f.eks til min storebror" (06:55 – U3)

6. "i og med der står anden leveringsadresse kan det være jeg gerne vil have den leveret ind til dk plant(re. Hans arbejdsplads)" (05:20 – U1)

95. "det er en anden adresse hvis nu det skulle sende til en anden en" (06:37 – U5)

The label being understandable for the customer creates a positive effect for persuading as the possibility for the customer to trust the checkout is higher. That being said though, Kalbach (2007) still recommends avoiding abbreviations, which means that "Anden levering adr." will be changed to "Anden leverings adresse" to make sure not to disturb the customers' rhythm when navigating the checkout and to avoid the customers not understanding the abbreviation. The purpose of this change of label is to enhance logos. I want the checkout to appear convincing to the customers by making them feel that they should complete the checkout. This is done through the persuasive principle Ease-of-use by making sure that every customer understands all labels without having to stop up and think about what the abbreviation might mean, and thereby the checkout is more easy to complete.

9. Shipping should be separated more from billing.

The shipping address needs to be more separated from the billing address, as the users has a hard time navigating between the two boxes. Figure 33 illustrates how "Anden levering adr." is shown.

Fulgdenavn/Firmanavn:
 Adresse:
 By:
 Postnummer:
 Anden leverings adr.
 Tilbage

Figure 33 "Anden leverings adr." is shown.

The users say about the area of "Anden leverings adr.":

7. *"men jeg mangler der står leveringsadresse" (10:42 – U1)*

37. *"hvorfor skal jeg udfylde det (navn adresse osv) to gange, det var da mega irriterende" (08:29 – U2)*

Nielsen (2001) points out the importance of shipping and billing being clearly separated as it would disturb the user otherwise. It is therefore necessary to have a header label to separate the billing and shipping information. This should be done by placing the already existing button "Anden levering adr." between the shipping and billing information, which is now placed at the bottom.

By moving the already existing button, another problem would be solved the the same time. As it can be seen in figure 33, when the button "Anden leverings adr." is pressed it does neither disappear, nor change color or do anything else. This confuses the users:

8. *"det (re. knappen "Anden leverings adresse") undre mig lidt, for den mener jeg at jeg har trykket på engang, den kommer bare igen"(11:15 – U1)*

9. *"når man har trykket "anden levering" så måtte den gerne forsvinde" (14:01 – U1)*

In a redesign, the button "anden leverings adr." should therefore be moved between the shipping and billing information when "anden leverings adr." is pressed, which means that the box with the shipping information should be shown under the button to have an easier navigation of the checkout.

As the overall organization needs to follow the customers' mental map, so do the single parts. Shaping the organization towards the customers' mental map raises ethos and the customers believe that the system is trustworthy. Shaping the organization to raise ethos is going to be done through the persuasive principle Tunneling. Moving "Anden leverings adr." up between shipping and billing will help the customer to easily be guided through the organization of this area when shipping is shown. This way the area will become more trustworthy.

10. Reverse order of "By" and "Postnummer".

The order of the blanks "By" and "Postnummer" is different between billing and shipping as it can be seen in figure 34.

The screenshot shows a web form with two main sections: billing and shipping. The billing section is at the top and includes the following fields: Postnummer* (5450), By* (Otterup), E-mail* (michael100281@gmail.com), Land* (Danmark), Fuldenavn/Firmanavn (drivadan), Adresse (gørtlervej 6), By (5654), and Postnummer. The shipping section is at the bottom and includes a field for Anden leverings adr.

Figure 34 The order of "By" and "Postnummer" is different in shipping and billing.

User 2 is the one who is completing the form in figure 34. As it can be seen, he starts fill in the information "by" in shipping information the wrong way, which can be because it is reverse order compared to billing information. This goes against Kalbach's (2007) term "Ease of learning". The navigation should be so easy that the users know intuitively how to complete the forms or else it will lower the success. By reversing the order of "by" and "postnummer" between billing and shipping, the navigation is no longer clear, which creates the confusion for user 2, who fills in the shipping wrong. This also goes against the form of appeal ethos as we want the users to trust the computer and just follow through with the checkout. By using the persuasive principle Tunneling, ethos can instead be enhanced. This means that the order of "By" and "Postnummer" should be the same in both billing and shipping as it creates a tunneling effect that fits the users' mental map.

11. Miss attention button.

One thing missing in the shipping information area (figure 35) is an attention blank as in the billing area. One user says:

10. "der (re: anden leverings adresse) mangler jeg faktisk den der attention" (14:35 – U1)

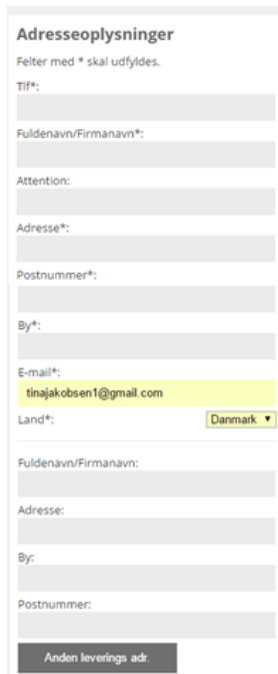


Figure 35 An "Attention" form needed in the shipping area.

I want to raise ethos by placing an "Attention" form in the shipping information area. Ethos is about how the checkout appears to the customer. This can be raised through the persuasive principle Suggestion. Ethos arises when making sure that the checkout fulfills the user's wishes for what is needed at the opportune moment. Placing an "Attention" blank in the shipping area creates a chance for the customer to feel that this option came at the opportune moment when they were just about to complete the shipping information. This would make the checkout trustworthy for the customers. There will therefore be placed a form with "Attention" in the new redesign.

5.2.3. Comment boxes

12. Change abbreviations from "Evt." to "Eventuelt".

The meaning of both comment boxes "Evt. kommentar" and "Kommentar til fragtmanden" (figure 36) was overall easy understandable for the users, some responses were:

11. "det kunne typisk være om levering at jeg ikke vil have leveret før på onsdag" (17:49 – U1)

74. "det er til f.eks specielle ønsker, om de kan give lidt rabat" (02:27 – U4)

41. "hvis de (re. Fragtmanden) skal smide den et eller andet underlig sted" (10:07 – U2)

"han (re. Fragmanden) må gerne ligge den uden en underskrift" (09:46 – U3)

61. "det er til fragtmanden, om det skal leveres i min garage" (02:48 – U4)



Figure 36 Comment area.

Even though the users understood both labels, it can still be phrased better according to theory. To improve the appeal of logos, the users' sense of logic must be addressed convincing them to complete the checkout, this means that the label needs to be understandable for all users. By making use of the persuasive principle Ease-of-use, I want to make sure the users experience the checkout as easy to use and understand. Having the same syntactical approach creates consistency, which makes it more simple and easy to learn for users with a serialistic way of thinking. Therefore, the label "Evt. Kommentar" is going to be changed to "kommentar til ordren". This creates the same syntactical approach in the label system as both comments labels become sentences.

13. Comment area is a good thing.

Comment boxes are good elements as they arise ethos and by that boost the customer's trust. According to the persuasive principle Responsiveness, the checkout earns more credibility when it is responsive. When the customer can communicate to the people of Wheelsshop.dk, the appeal of ethos is addressed and creates a confidence-building effect. Therefore, comment areas are good elements.

5.2.4. Payment

Structure needs to be changed

14. Create identical structure - Hide text.

The header label for payment (figure 37) is a good term as all customers understand the meaning of it, but the structure for the payment options can be confusing.



Figure 37 Structure for the payment options can confuse some of the customers.

One user quickly understands the different payments options:

78. *"om jeg vil have mulighed for at betale med kreditkort, bankoverførsel eller afdrag" (03:55 – U4)*

Whereas another user feels overwhelmed:

18. *"der er så mange muligheder (re. betalingsmuligheder)" (23:40 – U1)*

Kalbach (2007) mentions three basic elements from navigation theory that users need to know which are:

- o *Where am I?*
- o *What is here?*
- o *Where can I go from here?*

(Kalbach, 2007, p. 10)

These three basic elements need to be implemented in the payment section, but the amount of text makes the question "what is here" confusing and the text would not necessarily to be shown. As one user mentions:

65. *"jeg behøver ikke vide alt det der (re. tekst ved betalingsformerne), før jeg har trykket på den jeg gerne vil have" (11:53 – U3)*

User 1 had a hard time distinguishing between the different payment methods due to lack of navigation:

15. *"sparxpress er en afdragsordning, men det anede jeg ikke før jeg læste teksten"* (22:12 – U1)

By removing some text it would be easier for the users to navigate around and they would not be overwhelmed by all the payment options.

Another problem in the navigation is also the structure, which is not the same in the different payment options. To get more information about Klarna, customers have to press Klarna to see it (figure38). This can confuse the element "where can I go from here?" as it is not needed to press the other payment options to read their text. There needs to be consistency in the navigation so the customers do not get confused.



Figure 38 Information about Klarna is first seen when it is pressed.

With focus on persuasive perspective it is clear that the navigation confuses the customers and it creates a problem when persuading through pathos. The customers will not have a positive feeling about the payment option as it will not feel easy to do. By making use of the principles Reduction I want to improve pathos. If something feels easy to do and understand, it is more likely that the customers are convinced by it. In this case, the navigation becomes easier to understand and is therefore more motivating to complete the payment method section. Therefore I am going to hide the text in all payment options, so it would only be showed when a payment options is pressed and thereby creates consistency throughout the navigation.

15. Delete header label.

User 1 was asked whether it was necessary to have extra header label under "Betaling" (figure 39) to that was answered "nej" (23:49 – U1)



Figure 39 Header label unnecessary.

Morville and Rosenfeld (2007) advise that the goal of the label should be to communicate the information as efficient as possible. When there is a label that is superfluous, the label system is not as efficient as it could be. And if pathos should be improved, it is important that the checkout is designed so the customer experience it as easy to use. By using the principle Reduction it can help the appeal pathos. The header "Vælg betalingsmetode" is therefore going to be deleted, so the customer has to read less text, and it will feel easier to navigate.

16. Change payment method labels.

The payment labels "Klarna" and "SparXpress" do not fit the users' mental map:

43. *"hvad er det der sparxpress det er også kredit kort er det ikke"* (10:48 – U2)

Another user believes that sparXpress is something he should be a member of, and does not understand that it is a loan that everybody can take:

63 *"så skal jeg vælge betaling jeg har ikke nogen af de andre (re: sparxpress og klarna) så jeg vælger bankoverførsel"* (11:21 – U3)

One user figures out what sparXpress is, but first after he has read the text for the payment option:

97. *"det må være man laver et lån... 72 mdr svar inden 24 timer"* (08:06 – U5)

As explained in statement 5, it is a problem when customers do not understand the labels. As Cabré (1999) explains the language makes use of both marked and unmarked sets of subcodes. But the unmarked sets mean that the special language can only be used for the right audience. By using "Klarna" and "SparXpress" as head labels special language is used. It is the most clarifying term, but the users do not understand this marked subcode. It should be possible for customers to understand the payment options just by reading the headers. The checkout loses the effect of logos when the customer does not understand the label. Therefore, the persuasive principle Expertise is worth implementing here to improve the effect of logos. This is done by changing the header names for payment options to unmarked

subcodes. "Klarna" and "sparXpress" are going to be changed to "Afdragsordning (Klarna)" and "Afdragsordning (sparXpress)", so it can be seen that they are two different kind of installment agreements.

5.2.5. Approve checkout

What is workind and what is missing

17. Misses attention in "Godkend bestilling".

As mentioned before in statement 6, the "Attention" button is a good element to include in the shipping area. In the order preview – "Godkend bestilling" (figure 40) - it is mentioned again that the attention form is also missing there as user 1 mentions:

21. "her ved leverings adresse ville jeg gerne have haft en linje hvor der stod erik jensen (brugs navn)" (25:08 – U1)

Autosnappen

Godkend bestilling

Her har vi samlet alle oplysninger om din ordre.

Ordrenr: 6595

Kunde	Sælger
Erik Jensen Bårdesøvej 125 5450 Otterup 30129291 eje1953@gmail.com	Wheelshop.dk Vinten Skovvej 42 DK-8700 Horsens Tlf.: (+45) 3313 3313 9 - 15 Mandag - Fredag Mail: mail@autosnappen.dk CVR: 16844292
Anden leverings adr. DK plant Bårtnervej 5 5450 Otterup	Bank: Saxo Privatbank, Vejle afd. Reg.nr.: 8147 Konto: 0001115553 IBAN: DK0781470001115553 SWIFT: BRSPDK21

Figure 40 Order preview.

This area is to check, whether the checkout has all correct informations needed or not. This increases the effect of logos for the checkout when the customer can see that the checkout has everything under control. This is done through the persuasive principle Expertise. By showing the attention form from the shipping area in "Godkend bestilling", it shows the customer that it knows who the delivery should be attended to and thereby indicate the checkout has everything under control, and the customer can trust it. If an attention is used for another delivery address in a new redesign, it should therefore be shown in "Godkend bestilling".

Reorganize the structure

18. Move confirm button.

The confirm button is placed above product description (figure 41), but it should be placed underneath. This is important as the organization would make more sense as this would be the last thing to see. When the confirm button is placed before the product description, the affinity diagram showed that the users either could not find the product description, or simply did not see it before I mentioned it.



Figure 41 Move confirm button.

This is a problem because the customers think they have seen all elements in the checkout phase when they see the confirm button. When they see the product description below the confirm button there would be a lack of trust as the customers could wonder if there were other things they should be aware of before pressing the confirm button. The persuasive principle Tunneling is helpful for this aspect, as the customers should be guided through the checkout process. The confirm button should be placed below the description, so the customers are guided to press it when they have filled in all the relevant information. This effects ethos as it helps the customers' trust that the checkout has shown all the important elements.

19. Remove sales and delivery terms.

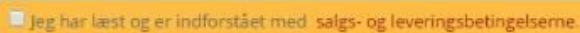
There are two "remove sales and delivery terms" placed at the checkout, which U4 discovers:

85. "jeg forstår bare ikke jeg skal krydse den af med salgs og leveringsbetingelser, jeg synes jeg har gjort det engang" (06:55 – U4)

And he is right as can be seen in figure 42 and 43 there are two places to agree on the sales and deliver terms.



Figure 42 Sales and delivery terms at the top of the checkout.



☐ Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

Figure 43 Sales and delivery terms at the bottom of the checkout.

One of the links should be removed to keep the label at a minimum, for not confusing the customer in the navigation and to make the organization as simple as possible. I examined the checkouts that were used in the competitive benchmark and discovered that all four checkouts placed sale and delivery terms at the bottom. To follow the users' mental map, I would therefore place the sale and delivery terms at the bottom of the redesign of Wheelsshop.dk's checkout.

Moving the terms helps to improve the effect of logos. The customer has to experience the website as built logical. It is not logical if there are two sale and delivery terms, the navigation gets confusing. Using the persuasive principle Ease-of-use and thereby reducing the two sale and delivery terms down to one helps to keep the navigation logical and being easy to use and thereby provoke a positive feeling towards the checkout.

5.2.6. Findings and an extra element (20. Extra element – third party endorsement)

In this analysis I have researched on how the checkout can be optimized. I have used the forms of appeal as framework for the optimization, and in figure 44 it can be seen how the different optimization suggestions are distributed in the three forms of appeal.

Logos

Ease-of-use

1. *Design needs to be logical to the user's mental map*
2. *Keep the order of the forms.*
12. *Change abbreviations from "Evt." To "Eventuelt".*
8. *Change abbreviations from "adr." to "adresse".*
19. *Remove sales and delivery terms.*

Expertise

5. *Change billing label.*
6. *The form "Attention" affects the users.*
16. *Change payment method labels.*
17. *Missing attention in "Godkend bestilling".*

Ethos

Tunneling

3. *A more foreseeable structure.*
7. *Change label "Fulde navn/firma" to "Navigational choice".*
9. *Shipping should be separated more from billing.*
10. *Reverse order of "By" and "Postnummer".*
18. *Move confirm button.*

Suggestion

11. *Missing attention button.*

Responsiveness

13. *Comment area is a good thing.*

Pathos

Reduction

4. *Page title is not needed.*
14. *Create identical structure - Hide text*
15. *Delete header label.*

Figure 44 Statements in relation to persuasive principles and forms of appeal.

As it can be seen, logos and ethos are well represented in the checkout design, whereas pathos is less represented. As it was learned from classical rhetoric (see section theory p. 30) for the three forms of appeal to have the most optimal effect, it is important that all three are represented. It is therefore necessary to improve pathos in the checkout. One way to do this is to use the persuasive principle Reputed credibility. Including a third party endorsement for the checkout would help appealing to values and create a positive attitude towards the checkout and thereby motivate the customers to complete the checkout. In the existing checkout, a Trustpilot badge is placed in the checkout (see figure 45), but this is not placed in the new design. The Trustpilot badge works as a third party endorsement and can improve the effect of pathos. Statement 20 will therefore be added and named "20. Extra element – third party endorsement". In a redesign, a Trustpilot badge will be placed like it is placed in the existing checkout. This will boost the credibility of the website, and make sure the three forms of appeal are all represented in the checkout and thereby make the best possible checkout design.



Figure 45 Trustpilot badge from existing checkout.

All statements combined with the persuasive principles and the three forms of all appeals are shown in figure 46

Logos

Ease-of-use

1. *Design needs to be logical to the user's mental map*
Structure with three columns will not be changed, but the overall design concerning navigation, organization and labeling system will be monotonous.
2. *Keep the order of the forms.*
The structure of different elements works well and should not be changed.
12. *Change abbreviations from "Evt." To "Eventuelt".*
"Evt." will be changed to "Eventuelt".
8. *Change abbreviations from "adr." to "adresse".*
"Anden levering adr." will be changed to "Anden leveringsadresse".
19. *Remove sales and delivery terms.*
Remove the first sales and delivery terms while the other remains.

Expertise:

5. *Change billing label.*
Billing label changes from "Adresseoplysninger" to "Fakturerings".
6. *The form "Attention" affects the users.*
But the form will remain.
16. *Change payment method labels.*
Payment method label is going to change name:
SparXpress change to "Afdragsordning (sparXpress)"
Klarna changes to "Afdragsordning (Klarna)"
17. *Missing attention in "Godkend bestilling".*
If an attention is used for another delivery address it should be shown in "Godkend bestilling".

Ethos

Tunneling

3. *A more foreseeable structure.*
The overall structure needs to guide the user through the order of the blanks.
7. *Change label "Fulde navn/firma" to "Navigational choice".*
Changes in both shipping and billing areas.
9. *Shipping should be separated more from billing.*
"Anden leverings adr." is moved up between shipping and billing information when "anden leverings adr." is pressed.
10. *Reverse order of "By" and "Postnummer".*
Forms in shipping and billing area follows a homogeneous order.
18. *Move confirm button.*
Move confirm button below order description.

Suggestion

11. *Missing attention button.*
A form with "Attention" would be placed in the shipping area.

Responsiveness

13. *Comment area is a good thing.*
A good thing as it helps communicate with the users .

Pathos

Reduction:

4. *Page title is not needed.*
Page title "Autoshoppen" will be removed.
14. *Create identical structure - Hide text*
Hide the text, so the text would only be showed when the payment method is pressed.
15. *Delete header label.*
"Vælg betalingsmetode" is going to be deleted.

Reputed credibility

20. *Extra element – third party endorsement*
Place trustpilot.

Figure 46 All Statements combined with the persuasive principles and the three forms of all appeals together with a brief description of each statement.

5.2.7. Outside context

Software errors

Because of the checkout being a test version in an early stage, there were things that affected the test. Some of these will be described here, in the discussion it will be discussed what the consequence of these problems are.

20. Not possible to make typing errors.

The test version did not distinguish between fake or real informations, when the customer typed in personal information. This meant that typing errors such as a wrong e-mail address was not something that was discovered. How errors occur was therefore not tested as the system could only generate the error alert if the user did not type in anything at all, which they did. Therefore, I was not able to gather data within error alerts in my contextual inquiry, and can only base it on the theoretical foundation from the benchmark. As the benchmark did not show any problems concerning the typing errors I will not make any change to the error alert design. I am aware of the ineffective examination though.

22. Not right information.

At one point, the checkout shows that the price for the delivery is 70 DKK, another place it say 60 DKK. This error affects the customer as the checkout loses its credibility, but it is not something that would be a problem for the real checkout as these informations are expected to be correct. However, it still can affect the result for how the customers feels about the checkout.

23. Elements are gone.

When the users were testing the system, one of them experienced that the entire payment section was gone when he entered the checkout. After a while it came back though. This is a problem in the software, which confuses the users, but this is what can occur when the test takes place in an early stage of the design process.

24. Organization is wrong.

As said before, the biggest problem is that the structure can be changed without my knowing. Two of the users tested a website, where the structure was incorrect. Also on the website with the correct structure was added an extra global navigation in the middle of the checkout phase, which would be removed when it is published. However, it still affects the user's navigation when testing the checkout and distorted the test result.

In the research meeting, Tigermedia expressed concerns that a single page checkout would be too overloaded with information (p. 19), but none has indicated this to be a problem in the contextual inquiry, and moreover all superfluous text has been removed so there is no foundation for this worry.

I can now through the contextual analyze validate Winn & Beck (2002) claims concerning the potential of optimizing the design on e-commerce's through classical rhetoric. Through the forms of appeal from classical rhetoric can the information architecture be improved on a webshop's single page checkout when using persuasive principles to execute it. And based on this is statement 1-20 now ready to be implemented in a redesign. In the next section, is a wireframe of the redesign, with the 20 statement implemented. Statement 21-24 will be discussed in the discussion section.

5.3. Redesign of checkout

Based on statement 1-20, it is possible to create a redesign of the checkout. It will now be shown and explained how this redesign could be conducted.

5.3.1. Original design with change

Figure 47 is an illustration of the original design of Wheelsshop.dk test website. The red circles are areas that will be changed in the redesign. The numbers associated to the red circles are the statement numbers from the analysis making it possible to track the background for the change and what the change should be. Figure 48 are the numbers and their statements.

The screenshot shows the checkout process on the Wheelsshop.dk website. The page is divided into several sections, each with numbered annotations indicating areas for redesign:

- 4. Autoshoppen:** The top navigation bar and header area.
- 5. Adresseoplysninger:** The address information section, including fields for Tlf*, Fuldenavn/Firmanavn*, Attention*, Adresse*, Postnummer*, By*, E-mail*, Land*, and Fuldenavn/Firmanavn*.
- 6. Attention*:** The attention field.
- 7. Fuldenavn/Firmanavn*:** The full name/company name field.
- 8. Adresse*:** The address field.
- 9. Anden leverings adr.:** The second delivery address field.
- 10. Postnummer:** The postal code field.
- 11. By*:** The city field.
- 12. Evt. kommentar:** The optional comment field.
- 13. Kommentarer:** The comments section.
- 14. Jeg har læst og er indforstået med salgs- og leveringsbetingelserne:** The checkbox for terms and conditions.
- 15. Betaling:** The payment section, including fields for Reg.nr., IBAN, and SWIFT.
- 16. Kreditkort:** The credit card payment option.
- 17. Anden leverings adr.:** The second delivery address field (repeated).
- 18. Bekræft:** The confirmation button.

The bottom of the page shows a summary table with columns for Antal, Varebeskrivelse, and Pris pr. stk. The total amount is 2.528,00 DKK.

Antal	Varebeskrivelse	Pris pr. stk
4	Advanti Racing Advanti Creed SF06 Silver5.5x14-4x108 ET43 Ø63.3	632,00 DKK
		2.528,00
		Frugt: 0,0
		Betalingsgebyr: 0,0
		Total ekskl. moms: 2.528,0

Figure 47 The Wheelsshop.dk's test checkout combined with the areas that will be changed in a redesign.

1. *Design needs to be logical to the user's mental map*
Structure with three columns will not be changed, but the overall design concerning navigation, organization and labeling system will be monotonous.
2. *Keep the order of the forms.*
The structure of different elements works well and should not be changed.
3. *A more foreseeable structure.*
The overall structure needs to guide the user through the order of the blanks.
4. *Page title is not needed.*
Page title "Autoshoppen" will be removed.
5. *Change billing label.*
Billing label changes from "Adresseoplysninger" to "Fakturering".
6. *The form "Attention" affects the users.*
But the form will remain.
7. *Change label "Fulde navn/firma" to "Navigational choice".*
Changes in both shipping and billing areas.
8. *Change abbreviations from "adr." to "adresse".*
"Anden levering adr." will be changed to "Anden leveringsadresse".
9. *Shipping should be separated more from billing.*
"Anden leverings adr" is moved up between shipping and billing information when "anden leverings adr." is pressed.
10. *Reverse order of "By" and "Postnummer".*
Forms in shipping and billing area follows a homogeneous order.
11. *Missing attention button.*
A form with "Attention" would be placed in the shipping area.
12. *Change abbreviations from "Evt." To "Eventuelt".*
"Evt." will be changed to "Eventuelt".
13. *Comment area is a good thing.*
A good thing as it helps communicate with the users .
14. *Create identical structure - Hide text*
Hide the text, so the text would only be showed when the payment method is pressed.
15. *Delete header label.*
"Vælg betalingsmetode" is going to be deleted.
16. *Change payment method labels.*
Payment method label is going to change name:
SparXpress change to "Afdragsordning (sparXpress)"
Klarna changes to "Afdragsordning (Klarna)"
17. *Missing attention in "Godkend bestilling".*
If an attention is used for another delivery address it should be shown in "Godkend bestilling".
18. *Move confirm button.*
Move confirm button below order description.
19. *Remove sales and delivery terms.*
Remove the first sales and delivery terms while the other remains.
20. *Extra element – third party endorsement*
Place trustpilot.

Figure 48 The statements for creating a redesign of the checkout.

6 | Redesign

Based on all these statements, a redesign of Wheelsshop's checkout can be conducted. In the beginning of the thesis it was mentioned that the payment option was difficult to integrate into the single page checkout, as the software used for it was a payment service provider – Epay. If Tigermedia would develop the payment service for Wheelsshop, it will be time consuming and expensive, and therefore it would not be sure that Wheelsshop would finance it. I have therefore created two checkout designs. They are identical, but one is with the payment service integrated in the design and the other is not. I did this so the owner of Wheelsshop can get a visual understanding of the difference of using Epay software or not and thereby choose whether they want to continue using Epay's software, but have the payment on an extra page, or get Tigermedia to develop the features on the single page checkout even though it would be expensive and time consuming.

6.1. Redesign without payment integrated

The first is a redesign where the payment is not integrated in the design. The redesign with open shipping is shown in figure 49 and in figure 50 it is with shipping closed.

Figure 49 Private buyer. Without payment options. The shipping being open.

Google Oversæt

incorporating - på Ordbo...

wheelshop - tinajakobsen...

Autoshoppen

AmalieSzigethy.Com | Kie...

wheelshop.dev.tigermedia.eu/tigercms/orderv3/collect?

Apps

Gyldendals Rade Or...

AAU Moodle: My ho...

Tina Jakobsen - Out...

Oversigt - Google A...

Heuristic Evaluation...

Bloug: Information ...

Information Archite...

Andre bogmærker

WHEELS SHOP

Forside Tilbehør Kundeservice Betingelser Galleri Nyhedsbrev Login

Seg

Gratis fragt

Finansiering

Hurtig levering

Godkendt af e-handelsfonden

4

Kontakt os

1

2

3

Faktureringsadresse

Felter med * skal udfyldes.

Privat

Firma

Tlf*:

Firmanavn*:

Attention:

Adresse*:

Postnummer*:

By*:

E-mail*:

tinajakobsen1@gmail.com

Land*:

Danmark

Anden leverings adresse

Kommentarer

Kommentar til ordren:

Skriv en kommentar...

Kommentar til fragtmanden:

Frugt

Vælg venligst den ønskede frugt

Levering til privat adresse

(+75,00 DKK)

(Ved privat adresse accepterer du at leverancen evt. stilles uden kvittering for egen risiko)

Levering til din arbejdsplads

(+0,00 DKK)

Erhvervsadresse

Betaling

Vælg betalingsmetode

Kreditkort

Betal med visa/dankort, mastercard, visa

Bankoverførsel

Afdragsordning (SparXpress)

Afdragsordning (Klarna)

4

Godkend bestilling

Her har vi samlet alle oplysninger om din ordre.

Ordrenr: 6644

Kunde

tina jakobsen

Att: kim

krogsbøllevej 130

5450 Otterup

22289754

tinajakobsen1@gmail.com

Anden leverings adr.

Drivadan

Att: kim

assersvej 16

9600 aars

Sælger

Wheelshop.dk

Vinten Skovvej 42

DK-8700 Horsens

Tlf.: (+45) 3313 3313

9 - 15 Mandag - Fredag

Mail: mail@autoshoppen.dk

CVR: 16844292

Bank: Saxo Privatbank, Vejle afd.

Reg.nr.: 8147 Konto:

0001115553

IBAN: DK0781470001115553

SWIFT: RRSPPK21

Antal	Varebeskrivelse	Pris pr. stk	Total
4	Centerring Plast 60-57 Velegnet til Aud, Chr. For, Sea, Sko,	39,20 DKK	156,80 DKK
	Frugt:		60,00 DKK
	Betalingsgebyr:		0,00 DKK
	Total ekskl. moms:		216,80 DKK
	Moms:		54,20 DKK
	I alt:		271,00 DKK

Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

Tilmeld nyhedsbrev

Bekræft

Tilbage til kurven

Det siger vores kunder:

★★★★★

Hurtigt og præcist!

Min bestilling blev leveret hurtigt (og præcist). Hvis jeg kunne ville jeg ønske en tracking funktion, så man kunne følge leveringen, men det er kun et beskedent ønske og intet der skal gå udover bedømmingen.

Lene Oj Jensen 5 Nielsen

★★★★★

Super omhyggelig ordrebehandling og -service

Blev kontaklet, da butikken havde bemærket en inkonsistens i min ordre, fik super vejledning og hjælp til at ordre de rigtige ting.

Lars Balte

★★★★★

Supergodt

Tredje gang jeg handler her. Altid god vejledning på telefon hvis man har behov for. Det kan være lidt svært at komme igennem. Til gengæld er det endnu ikke lykkedes at finde dæk og følge billigere andre steder. Meget anbefalesværdigt. Hurtig levering hver gang.

Morten Sølling Mark

4 af 5

TRUSTPILOT

Figure 50 Buying trough company. Without payment options. The shipping being closed.

As it can be seen in figure 49 and 50, the order of the forms is the same (statement 2). To create a more foreseeable structure that would lead the customer through the checkout, it has been organized into frames with numbers, so the customer knows what to complete in which order (statement 3). The button is moved to create more clarity between shipping and billing areas (statement 9). The confirm button has been moved to the bottom to create a better navigation (statement 18). The labels "Fuldenavn/firma" are restructured into navigational choices (statement 7). The forms "By" and "Postnummer" in the shipping and billing area are in same order now (statement 10). Labels and text have been removed to make the structure more simple (statement 4, 14, 15 and 19). Labels have been changed to fit the customer's mental map (statement 5, 8, 12 and 16). Furthermore, labels have been added (statement 11 and 17). A Trustpilot badge has been placed (statement 20). Making all these changes created an overall more monotonous navigation, organization and labeling that was required in statement 1.

6.2. Redesign with payment integrated

In the case of the redesign above, the payment option is constructed by using Epay, meaning the payment would be on another page. If Wheelsshop would want to have a 100% single page checkout with payment integrated on the page, the design could be as seen in figure 51. Here it is shown how the payment would look like on the same page, when built into the structure.

Google Oversæt

incorporating - på Ordbo

wheelshop - tinjakobsen

Autoshoppen

AmalieSzigethy.Com | Ka...

Tid

wheelshop.dev.tigermedia.eu/tigercms/orderv3/collect?

Apps

Gyldendals Røde Or...

AAU Moodle: My ho...

Tina Jakobsen - Out...

Oversigt - Google A...

Heuristic Evaluation...

Bloug: Information ...

Information Archite...

Andre bogmærker

WHEELS SHOP

Forside

Tilbehør

Kundeservice

Betingelser

Galleri

Nyhedsbrev

Login



Seg

Gratis fragt

Finansiering

Hurtig levering

Godkendt af e-handelsfonden

1

2

3

4

5

Faktureringsadresse

Felter med * skal udfyldes.

Privat

Firma

Tlf*:

Fuldenavn*:

Attention:

Adresse*:

Postnummer*:

By*:

E-mail*:

tinjakobsen1@gmail.com

Land*:

Danmark

Anden leverings adresse

Kommentarer

Kommentar til ordren:

Skriv en kommentar...

Kommentar til fragtmanden:

Fragt

Vælg venligst den ønskede fragt

Levering til privat adresse

(+75,00 DKK)

(Ved privat adresse accepterer du at leverancen evt. stilles uden kvittering for egen risiko)

Levering til din arbejdsplads

(+0,00 DKK)

/ Erhvervsadresse

Betaling

Vælg betalingsmetode

Kreditkort

Betal med visa/dankort, mastercard, visa

Bankoverførsel

Afdragsordning (SparXpress)

Afdragsordning (Klarna)

Kortoplysninger

Vælg kort

DKK

VISA

MasterCard

Kortnummer

Kontrolcifre

Udløbsmåned/år

Godkend bestilling

Her har vi samlet alle oplysninger om din ordre.

Ordrenr: 6644

Kunde

tina jakobsen

Att: kim

krogsbøllevej 130

5450 Otterup

2288754

tinjakobsen1@gmail.com

Anden leverings adr.

Drivadan

Att: kim

assersvej 16

9600 aars

Sælger

Wheelshop.dk

Vinten Skovvej 42

DK-8700 Horsens

Tlf: (+45) 3313 3313

9 - 15 Mandag - Fredag

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CVR: 16844292

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0001115553

IBAN: DK0781470001115553

SWIFT: RRCDDK21

Antal	Varebeskrivelse	Pris pr. stk	Total
4	Centerring Plast 60-57 Velegnet til Aud, Chr, For, Sea, Sko,	39,20 DKK	156,80 DKK
		Fragt:	60,00 DKK
		Betalingsgebyr:	0,00 DKK
		Total ekskl. moms:	216,80 DKK
		Moms:	54,20 DKK
		I alt:	271,00 DKK

Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

Tilmeld nyhedsbrev

Bekræft

Tilbage til kurven

Det siger vores kunder:

★★★★★

Hurtigt og præcist!

Min bestilling blev leveret hurtigt (og præcist). Hvis jeg kunne ville jeg ønske en tracking funktion, så man kunne følge leveringen, men det er kun et beskedent ønske og intet der skal gå udover bedømmingen.

Lars Balle

★★★★★

Super omhyggelig ordrebehandling og -service

Blev kontakttet, da butikken havde bemærket en inkonsistens i min ordre, fik super vejledning og hjælp til at ordre de rigtige ting.

Lars Balle

★★★★★

Supergodt

Tredje gang jeg handler her. Altid god vejledning på telefon hvis man har behov for. Det kan være lidt svært at komme igennem. Til gengæld er det endnu ikke lykkedes at finde dæk og fælg billigere andre steder. Meget anbefalelsesværdigt. Hurtig levering hver gang.

Morten Sejling Mark

4 Af 5

TRUSTPILOT

Stocky

Google

Wheels...

Untitled...

wheels...

Pin bo...

Unav...

W analysi...

W ting de...

DAN

01-04-2015

Figure 51 Payment integrated in the single page checkout.

96

Whether Wheelsshop wants to use a design with payment option integrated in the single page checkout or not is something they decides, but this was the redesign of the checkout where the forms of appeal were used as guides for creating a single page checkout. The next section is a discussion, where I will discuss different aspects of the thesis.

7 | Discussion

I will now discuss topics concerning the thesis. I will discuss how the forms of appeal worked as a framework for information architecture, how the methods worked and what problems arose by using case study as research material. In the end there will be a short summary of how the page length worked in the checkout.

7.1. How the forms of appeal worked

The question is, whether the forms of appeal have been a help for designing the information architecture of the checkout? Or was it just an unnecessary element that was superfluous? Information architecture gives an idea of how the structural design could be. Different specialist with different views give their opinion on how information architecture should be. Morville & Rosenfeld (2007) for instance recommend to use the same syntactical approach throughout the label system, whereas Lakoff (1990) argues that categorizing by basic level is a better way. It illustrates how there is no rule for designing the perfect label or label system, there are only guidelines. And this is the case for all kinds of design elements in information architecture, they are only guidelines. What might work in one situation, might not always be the case in another situation. I created a meta layer on the information architecture that forced me as a designer to consider what the purpose for the different elements were by using the forms of appeal as framework for the information architecture and implementing them through persuasive principles. Therefore, the conclusion is that it was useful to involve the forms of appeal. It was a useful way to rethink how the redesign of the checkout could be and helped me to decide what the elements should be and, more importantly, what the reasons were for them to be there. Thereby, they not only become the structure, the meaning behind the structure also was considered.

The results from this thesis are relevant for single page checkout. However, also a multiple page checkout can still benefit from using persuasion as a meta layer for improving the information architecture as it uses the same elements needed. Furthermore, they are relevant for all systems as persuasion is useful in every situation where humans interact.

7.2. Methodological considerations

7.2.1. Contextual inquiry

I had considerations about how it could be possible methodically to research users' perspective of persuasion. Winn & Beck (2002) demonstrated how classical rhetoric can be implemented in the e-commerce web shop through think aloud method. I therefor assumed it to be possible if I could get the users to speak about their feelings concerning the system, which I did through contextual inquiry. It succeed at it was shown that it was possible to investigate the persuasion, however, I discovered getting data from contextual inquiry was harder than expected as several factors came into play. It was not the users' own computers that were used, which affected the users in some degree as for example the mouse-speed was different from their own computer. It would have been better if the software had been installed on the users' own computer. Another problem was the uniqueness of target groups. The target group for Wheelsshop.dk was in general very unobtrusive and taciturn. They could say "it does not work" and I could ask "what do you mean it does not work" and the reply could be "it just does not work", which could give a hard time understanding their thoughts concerning the checkout. Another major problem was the lack of ownership of the checkout. They were not meant for to buy any product and it was not their own card information that was used. Due to this I had a feeling that none of the users felt emotionally linked to the buying process as if it had been a real purchase. I could ask "how would you react if it was a real case?" and they would say "maybe I would double check the product", which were things they did not do in my contextual inquiry.

If the data should have been more realistic, it should have been tested with a real purchase. Maybe it would have been problematic finding users willing to participate in a contextual inquiry doing their purchase, I believe, though, that it could have worked, if Wheelsshop had been willing to advertise and seeking for users on their website. Additionally, the users could have gotten something in return.

7.2.2. User Centered Design - Redesign

As it was informed in the method section (p. 38), the iterative process in the user centered design was not conducted in my thesis, but is still an important element. If an iterative process should have been accomplished, the forms of appeal as frameworks would have been helpful as there would be an intention behind the different elements, and the redesign and retest could examine if these intentions were expressed properly. Instead of only testing, if the information architecture worked well, it could also be tested whether the elements that

had been changed have produced the feelings as they were aimed for, and thereby see if all forms of appeal were expressed.

7.3. Problem when using case studies

There were several problems due to the thesis being a case study, which were discovered through contextual inquiry. The biggest problem was how a software mistake constantly created another structure in the checkout, and that elements disappeared completely (statement 23 and 24, p. 88). I could never be sure, whether the system would change the structure midway in an interview. Other small complications were how it was not possible to provoke typing errors (statement 21 p. 88), that it was not the correct information that was entered in the checkout (statement. 22, p. 88), and that there was an extra global navigation bar in the middle of the checkout (statement 24, p. 88). These problems have evidently impacted the users when testing the checkout. However, this is what occurs when testing a system this early in the design process. I could also have risked that the change of structure in the checkout was something that Wheelsshop had decided to make midway in the design process without informing me. Then I had to consider what I would have done with the competitive benchmarking that was tested on the first design. This is what occurs when it is a case study and not a laboratory experiment. And this is also what can occur for me when I am fully-trained and in work. Then I have to keep working with the knowledge I have, even though the structure can have been changed.

8 | Conclusion

To being able to answer the problem statement, I have now researched the single page checkout on Wheelsshop.dk's test website. The study has had its philosophical origins in the fields of social constructivism and has been based on user centered design. The methods used for the data gathering have been introduced within the framework of information ecology examining context, content and users. I had a research meeting with one owner of Wheelsshop and an employee from the web bureau Tigermedia, who manages the website. I have conducted a competitive benchmarking to get knowledge and compare single page checkouts including Wheelsshop's test checkout. And I have made a contextual inquiry to understand the users' experience of Wheelsshop.dk's checkout.

The data has been gathered and examined for evaluating the existing checkout and to redesign it. I examined how labeling, organization and navigation should be structured when using persuasion as meta layer. Forms of appeal from classical rhetoric have been used as a framework and persuasive principles were used to execute it.

I have found that it is possible to investigate persuasion through users centered design. Also was founded that when forms of appeal are used, it becomes important to check that all forms of appeal are represented to ensure that the customers are persuaded best possible. The forms of appeal were shown through persuasive principles. Depending on the intent the principles can be used in different forms of appeal. However, it has also become clear that the forms of appeal are an approach to ensure that there is an intention for why the elements are in the checkout. They help to make sure to persuade the customers through different forms of appeal, and to understand the reasons why the principles should be implemented in the checkout. Furthermore, they help to find out if other principles would suit better due to the intention of the concerned issue.

I agree with Winn & Beck (2002) how it is useful to optimize a design on e-commerce's through classical rhetoric. Implementing persuasion through the three forms of appeal is useful for redesigning a single page checkout. There were elements that could be optimized in the checkout and that worked very well. However, through persuasion it could be explained why the elements worked, and the intention became clear.

It was found that to create a redesign for Wheelsshop.dk where persuasive principles are used and the forms of appeal are the frame work for improving the information architecture, 20 statements should be followed. These 20 statements are:

1. Design needs to be logical to the user's mental map.
2. Keep the order of the forms.
3. A more foreseeable structure.
4. Page title is not needed.
5. Change billing label.
6. The form "Attention affects the users.
7. Change label "Fuldenavn/firma" to navigational choice.
8. Change abbreviations from "adr." to "adresse".
9. Shipping should be separated more from billing.
10. Reverse order of "By" and "Postnummer".
11. Missing attention button.
12. Change abbreviations from "Evt." To "Eventuelt".
13. Comment area is a good thing.
14. Create identical structure - Hide text.
15. Delete header label.
16. Change payment methods labels.
17. Missing attention in "Godkend bestilling".
18. Move confirm button.
19. Remove sales and delivery terms.
20. Extra element – third party endorsement

The conclusion is that it is helpful to use the forms of appeal as foundation for structuring the information architecture through persuasive principles, and by doing so the intention of placement of elements becomes exposed.

The forms of appeals as framework can also help in an iterative process with a retest. Instead of only testing, whether the information architecture structure is working, it could also examine, whether the intention of the elements is clear and if the targeted feelings is evolved in the customers. Thereby, it is possible to check, if all three forms of appeal are shown to create the best information architecture.

These results are not only relevant for Wheelsshop or other webshops selling tires and rim through single page checkout. It is also relevant for multiple page checkouts that benefit from thinking using persuasion as a meta layer for improving the information architecture as ele-

ments on checkouts are the same, regardless of whether the checkout is single or multiple page. Lastly, to use concepts from classical rhetoric to improve the information architecture through persuasive principles it is not only useful on checkouts, it is relevant for all systems as persuasion is useful in every situation where humans interact.

9 | Further perspective

The use of classical rhetoric as meta layer for information architecture implemented through persuasive principles could also be used in other cases than a single page checkout. It could also help to evolve emotional feelings related to the purpose of a system, or it could be used for evolving a feeling in the users and make sure they get the desired output they seek.

An example is the website <http://www.bornungesorg.dk/>. A website, whose purpose is to help children and young persons whose parent or sibling is seriously ill or has died. Persuasion could help in the mourning process. Information architecture could, just as in Wheelsshop.dk's checkout, be structured using forms of appeal as framework and persuasive principles for implementing them. However, instead of using theories about checkouts, the five emotional stages experienced by survivors of an intimate's death by Kübler-Ross (1997) could be included. Classical rhetoric and persuasive principles should help these different aspects of feelings to be expressed through the information architecture.

Kübler-Ross' (1997) five stages are denial, anger, bargaining, depression and acceptance. They are feelings that a person who experiences a life-threatening or life-altering event may experience.

This could help the users, as their mental map in that context when attending <http://www.bornungesorg.dk/> can be surrounded by these feelings. The starting point would be the same as for Wheelsshop.dk. Instead of the need to have knowledge within checkout design, I would need to have knowledge within grief, the grief process and so on for knowing how children or young people's mind are as I need to know how their mental map looks like under this circumstance. With this knowledge it would be possible to get mental map of the user fit the information architecture and it would then become easier for the user to navigate on <http://www.bornungesorg.dk/>. For instance if grief is the first process then the information architecture should be structured so the user would be lead to something about grief at the beginning, I it was found that most users turn to the website in that stage of the grief process.

There would be different ethical considerations involved for constructing such an emotional system upon persuasion. However, as it was discussed in my theory section about coercion and persuasion – it is all about the intention. The intention in this circumstance would be to

help process the grief by making the system fit the mental map of the users. Thereby the intention would be to help.

This is an extreme case, but it could be helpful in other system designs as well. Systems, where the user is novice it would help to overcome the frustration towards the system they might feel. The conclusion is however using persuasion as a meta layer on information architecture, it can help to improve the design.

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11 | Appendix

A | Interview guide – Tigermedia

- Hvordan ser den nye singlepage check ud process ud
- Alt det med betalingenss problemer, er det noget der påvirker check ud processen, og hvordan
 - (Noget med sverige/norge og betalingen der: Klarnet, går igennem epay, clarnet har noget ip'er der fungerer bedre.
 - Epay kører som kredit kører over epay, så ikke noget i.
 - Norge/sverige kan ikke lide at bruge kreditkort. Clarnet i stedet for.
 - Clarnet er også på den danske hjemmeside, fordi den vej kan man betale på afbetaling.
 - Clarnet er ikke særlig smart fordi det går gennem epay. Vil gerne have bygget det smartere.
 - Spar express, lidt tungt at danse med)
 - En anden afbetalingsform, meget gammeldags. Clarnet er max. 10.000. spar express har et højer kreditloft.
 - Eriks gulerod: hver gang han laver sådan et lån, får han en provision. Aflevere provision af disse lån, kunne betale driften af hjemmeside aflevere.
- Hvad er jeres tanker med eksisterende design og det nye design
 - What er forskellen mellem disse to
 - Han putter alt information ind på en hjemmeside.
 - Han vil gerne undgå det helt.
- Why is the check out design as it is now?
 - Fordi det er gammelt design.
- How can we set up a fictive check out process for researching this area of the website?
 - En test side er allerede sat op.
 - Jeg kunne gå i gang
- How long time would it take to build an fictive check out process?
 - Jeg kan kører hele transaktionen igennem. Fordi epay har en test.
- What technology is being used (the cms, and other things I should know about?)
 - I har jo opbygget jeres eget cms, og ud fra det er der mange forskellige teknologier der er blevet brugt.
- Any future content/service in the check out process planned?
 -
- Forslag til hjemmesider jeg kan bruge til benchmarking? Den engelske erik referede til engang, kan du huske navnet på den?
 - Dækbutikken
 - Den engelsk hjemmeside
 - Billigalue.dk

- Tigermedia har ikke nogle hjemmesider hvor single checkout er blevet brugt.
 - Keratech.dk, danwheels.dk, alueexperten.dk, dækbutikken, landberg.dk(danmarks største sælger af alt tilbehør af dæk og fælge. Fungerer lige som dæk og fælge, med du vælger en bil)
- Er fragten blevet helt gratis? Eller er det stadig kun erhvers adresser?
 - Nej
- Er der nogen order confirmation e-mail når varen er bestilt?
 - De får en ordre bekræftelsesmail
 - De skal hen ad vejen have lavet en leverings mail, hvor der bliver sendt en leverings dato for hvornår kunden præcis for deres vare. Det er for at afhjælpe alt den forspørgelse der er fra kunder der skriver hvornår de får deres vare
- Skal de registrere sig (oprette bruger, nielsen 271) i den nye design?
 - Nej
- Single page bliver også kaldt for Ajax checkouts – ved du hvorfor?
 - Ajax er en teknologi. At den loader når noget andet er blevet brugt. Det er ikke noget der er planlagt til at skal gøres.
 - Men det kunne være en mulighed at noget blev loaded frem, når noget andet var udfyldt.
- Ved du hvad conversion rate er?
 - Konverterings raten. Hvor står en procent del af de besøgende opfylder et mål. F.eks hvor mange melder sig til nyhedsbrevet.
- Teoretisk: hvad er det, hvor at formularer kan blive automatisk udfyldt, er det fra googleplus? Kan det blive sat i den her formular?
 - Det er chromebrowseren der får det frem. Man kunne gøre det med email, men sikkerhedsaspektet gør at det vil være ikke særlig smart for så kommer adresse frem og det er ikke særlig smart. Der er hvertfald ikke nogle der gør det
- Hvordan forgår betalingen nu? Kan det gøres med paypal (nemt)
 - Det ser jeg
- Hvilken dæk/fælge websider er store både udenlandsk/indlandsk (til benchmarking)

Design

- Hvornår bliver shipping prisen vist?

Bodylux.dk

Hjemmeside

Dækbutikken – når folk har søgt på den bil de skal bruge, så skal folk ikke bekymre sig om mere, så skal de nok klare resten.

Testside: wheelsshop.dev.tigermedia.eu

Hjemmeside hvor jeg kan lave små justeringer:

virtuelwebsiteoptimizing

B | Interviewguide – Wheelsshop Owner

- When was wheelshop created?
 - 19 september 2013 (DK), sverige og norge 1 april 2014
- What is the business plan?
 - Ingen forretningsplan,
 - Erik har lavet hjemmesider før, det tekniske
 - Ham den anden havde faglige viden
 - Blev enige om at de kunne sælge dæk og fælg bedre end dem der var på markedet.
 - Importer meget selv dæk og fælg, meget politik i det.
 - Har meget inspiration i deres koncept fra Tyske <http://www.felgenoutlet.de/>
- What is the politics, compared to check out (købsprocess)
 - Erik vil gerne have en ny check ud i stedet for den der er der lige nu. Der ligger en ny check ud process hvor det er singlepage på tegnebrættet lige nu.
 - Da han har hørt at det er det de alle bruger i usa, <http://magento.com/> denne side er kæmpe for små forretninger, den bruger også single page checkout siger han.
 - Onestep checkout, har en på tegnebrættet.

Det handler meget om betalingen, undersøge det med frederik

 - Noget med sverige/norge og betalingen der: Clarnet, går igennem ebay, clarnet har noget ip'er der fungerer bedre.
 - Spar express, lidt tungt at danse med
- Who are the intended audience?
 - Målgruppe – billister, der har købt på internettet før, både som er habile køber men også folk som ikke har købt så meget online.
- Why will people come to the site? Why will they come back?
 - Det bedste udvalg af dæk og fælg
 - den mest simple hjemmeside at finde rundt på
 - One step checkout
 - De er ikke de billigste, og det er heller ikke et mål
- Is there any thoughts on why the check out process is created as it is right now?
 - (I believe there is, as wheelshop owner is very involved in the design of the website)
- Ting på check ud processen, de har fundet ud af hen ad vejen er vigtigt:
 - Trustpilot er vist ved check ud, så kan føle sig trygge ved købet
 - Der er "pasningsgaranti", så wheelsshop garanter for at dæk/fælg passer til købers bil. Hvis det ikke passer er det wheelshops opgave at få rettet problemet (f.eks ved at sende ny dæk/fælg)
 - Det er vigtigt da det kan være kunder der køber for 10.000 – 25.000 dkk
- Strategisk samarbejde, hovedleverandør for deres hovedleverandør.

C | Interviewguide – Wheelsshop Owner

- When was wheelshop created?
- What is the business plan?
- What is the politics, compared to check out (købsprocess)
- Who are the intended audience?
- Why will people come to the site? Why will the come back?
- Is there any thoughts on why the check out process is created as it is right now?
 - (I believe there is, as wheelshop owner is very involed in the design of the website)
- Strategisk samarbejde

D | Interview guide – Tigermedia

- Hvordan ser den nye singlepage check ud process ud
- Alt det med betalingens problemer, er det noget der påvirker check ud processen, og hvordan
 - (Noget med sverige/norge og betalingen der: Clarnet, går igennem ebay, clarnet har noget ip'er der fungerer bedre.
 - Spar express, lidt tungt at danse med)
- Hvad er jerestanker med eksisterende design og det nye design
 - What er forskellen mellem disse to
- Why is the check out design as it is now?
- How can we set up an fictive check out process for researching this area of the website?
- How long time would it take to build an fictive check out process?
- How would this fictive check out process work?
- When was wheelshop created?
- What technology is being used (the cms, and other things I should know about?)
- Any future content/service in the check out process planned?
- Forslag til hjemmesider jeg kan bruge til benchmarking? Den engelske erik referede til engang, kan du huske navnet på den?
- Er fragten blevet helt gratis? Eller er det stadig kun erhvers adresser?
- Er der nogen order confirmation e-mail når varen er bestilt?
- Skal de registrere sig (oprette bruger, nielsen 271) i den nye design?
- Single page bliver også kaldt for Ajax checkouts – ved du hvorfor?
- Ved du hvad conversion rate er?
- Teoretisk: hvad er det, hvor at formularer kan blive automatisk udfyldt, er det fra googleplus? Kan det blive sat i den her formular?
- Hvordan forgår betalingen nu? Kan det gøres med paypal (nemt)
- Hvilken dæk/følge websider er store både udenlandsk/indlandsk (til benchmarking)
- Hvornår bliver shipping prisen vist?

E | Affinity diagram - Overview

An overview of the Affinity diagram, shown without notes.

Green - describe that area of concern within the work practice.

Pink - issues that defines a certain area of concern for the cluster of yellow notes.

Yellow – describes each aspect of the issue for that certain cluster of notes.

Overall structure (overordnet struktur)	Billing/Shipping (fakturering/levering)	Comment boxes (kommentarbokse)	
hvad brugerne overordnet synes om siden/what users generally think of the side	Ting der fungerer eller skal ændres/Things that work or should be changed.	brugerne forstår godt 'anden levering' men det kan gøres bedre/users understand 'shipping' but it can be done better	Kommentarboks / commentbox
førstehåndsindtryk - ser siden som en helhed eller i enkelte dele / first impressions - see the page as a whole or in parts	Der skal stå fakturering/should be named billing	de forstår godt hvad anden levering er/ they understand what 'shipping' is	Sprog virker fint/ language works fine
Singlepage checkout er en god ide/ single page checkout is a good idea	rubrikker der mangler eller skal ændres/ boxes are missing or need to be changed	Anden levering skal adskilles fra 'adresse'/ shipping needs to be separated from 'adresse'	Ændringer til kommentarboksen/ amendments to comment box
Delte meninger om siden er nem eller svær/ shared opinions about the site being easy or difficult	attention påvirker brugerne/attention affects users	Knappen 'anden levering' skal forsvinde når der trykkes på den/ Button 'anden levering' must disappear when pressed	Kommentarboks til fragmanden/ comment box to the carrier
Design skal ændres / design needs to be changed	attention kan være et svært ord/attention can be a difficult word		Nemt at forstå/easy to understand
Grundstruktur kan virke rodet / basic structure can seem cluttered	Attention er en god ting/attention is a good thing		
Design der ikke skal ændres / design that does not need to be changed	to rubrikker med fulde navn/ firmanavn - påvirker brugerne forskelligt/ two boxes with label full name / company name - affects different users		
Sideoverskrift behøves ikke / page headline is not needed	fulde navn/firma skal være mere præcist/ full name / company must be more precise		
	fulde navn/firma forvirrer — full name / company confuses		
	Fulde navn/firma er forståelig — Fulde navn/firma is understandable		

Payment (betaling)		Approve Checkout (godkend bestilling)	Outside context (udenfor kontekst)
strukturen skal ændres for at alle bruger forstår det/the structure must be changed to for alle users to understand it	problemer med sparXpress/ Problems with SparXpress	overordnet godt men der er rettelser/ overall good but there are corrections	overskydende noter/ excess notes
hvordan brugeren oplever betalingsdelen/how the user experience pay part	overskrift ikke præcis nok/Title not precise enough	de synes det er fint men mangler attention/ they think it's fine but lacks attention	noter der ikke passer ind i resten af diagrammet/ notes that do not fit into the rest of the diagram
struktur skal være mere ensformigt/ structure should be more monotonous	tekst skal laves om/ text needs to be changed	varebeskrivelse - placering er korrekt i bunden/product descriptions - location is correct at the bottom	problemer fordi det er en test-side/problems because it is a test page
tekst skal ændres/slettes—text to be changed / deleted	vip lavrente/ vip low-interest	flyt bekræft knap/ move confirm button	software fejl/ software errors
For meget tekst, men fjern ikke alt/Too much text, but do not remove everything /	Problemer med Klarna/ Problems with Klarna	salgs og leveringsbetingelser/sales and delivery terms	
tekst der kan kortes ned/slettes—text that can be shortened / deleted	ved ikke hvad klarna er/ do not know what Klarna is	man læser ikke salgs og leveringsbetingelser/ you do not read the sales and delivery terms	
ændre overskrifter for betalingsmuligheder/ change headers for payment options		står to steder, måske den første skal slettes?/stand two places, perhaps the first to be deleted?	

F | Affinity diagram with notes

The affinity diagram with notes.

Green - describe that area of concern within the work practice.

Pink - issues that defines a certain area of concern for the cluster of yellow notes.

Yellow – describes each aspect of the issue for that certain cluster of notes.

None colored – Notes gathered from contextual inquiry

Overordnet struktur/ overall structure

hvad brugerne overordnet synes om siden/what users generally think of the side

førstehåndsindtryk - ser siden som en helhed eller i enkelte dele / first impressions - see the page as a whole or in parts

26. der bliver spurgt om der er et overblik over hvad der skal udfyldes som helhed bruger2
svarer "ja jeg skal udfylde min adresse" (03:21 – U2)

- serialitisk tankegang igen, strukturen skal være ens

1. Bliver spurgt til om han har et overblik over hvad han skal på siden generelt (strukturen af siden) – "jamen altså der står jo at feltet (Re: tlf.) skal udfyldes" (00:58 – U1)

- Han er serialist i hans tanke gang, hvilket gør det vigtigt med en ens gennemgående opbygning, da han ser helheden i enkelt delene.

49. der bliver spurgt til strukturen på siden som helhed. Her sørger user 3 for at forklare overordnet alle elementerne på siden som han kan se (det øverste af checkout) "jeg har sagt videre til kasse og så før jeg kan betale skal jeg have skrevet hvilken adresse jeg vil have leveret på og hvilken måde jeg vil have leveret på" (02:57 – U3)

- hollistisk tankegang

Singlepage checkout er en god ide/ single page checkout is a good idea

71. irritere sig over at den ekstra global navigations linje står i midten "lidt synd det ikke er en adskillelse så man kan se at siden faktisk skift herfra (fra ekstra global navigationslinje) kunne ligeså godt have været et ekstra fanblad, men det er faktisk rart siden ikke skift, så kan man ændre sine adresse oplysninger uden at skulle trykke tilbage" (16:35 – U3)

- det viser at singlepag er en god ide

23. fordi at der her var et software fejl fra tigermedias side betød det under denne test at 'godkend bestilling' var men en side. Brugerne bliver spurgt om det havde været rart det var sat på den først side så det hele var på en side. – "ja den kunne faktisk godt have været over på den anden side (re singlepage siden" (26:21 – U1)

Delte meninger om siden er nem eller svær/ shared opinions about the site being easy or difficult

84. bliver spurgt til om han synes strukturen overblikket over checkout er nem at forstå, og det synes han – "ja det synes jeg" (06:50 – U4)

-for ham er organisation nem at forstå

86. synes checkout er nemt at forstå – ”Men ellers synes jeg faktisk det(re: checkout) er nemt og overskuelig, det synes jeg faktisk den er ” (07:04 – U4)

- en del af målgruppen forstår godt siden som helhed

27. synes siden er svær ”jeg har været på nemmere sider synes jeg... næste trin, næste trin det står der ikke noget om her” (03:34 – U2)

- organisation skal være mere klar

Design skal ændres / design needs to be changed

Grundstruktur kan virke rodet / basic structure can seem cluttered

87.”det der irritere mig er at jeg skal scrolle ned (for at forstå hvad man må/skal gøre) så bliver jeg forvirret (07:07 – U4)

- Det kan tolkes som at navigation laves om, det skal være så det er naturligt hvornår der skal scrolles ned.

28.snakker om hvad de trin skal være. ”trin 1 du skal udfylde dit navn adresser og hele lortet fordi det skal sende, næste trin kort, hvad for et kort skal du betale med, næste indskriv dine kort” (03:49 – U1)

- han skriver det ikke som at de trin skal være opdele i forskellige sider, det kan også være organisationen der er mere opdelt så det bliver nemmere at navigere rundt.

- Men strukturen skal gøres mere klar

66.forventer ikke det skal være simpel - ”det skal helst være lidt noget rod, når man har med betaling og fragt at gøre” (12:47 – U3)

- men man kan jo godt gøre det overskueligt alligevel

39.efter adresse oplysninger flytter han automatisk fokus på kommentar feltet, hvilket er rigtig række følge. (10:05 – U2)

- organisationen er ok, da han ved han skal gå til siden og ikke scrolle ned, navigationen skal bare være mere klar

a.

Design der ikke skal ændres / design that does not need to be changed

Sideoverskrift behøves ikke / page headline is not needed

92. der bliver spurgt til om en der f.eks havde stået 'betaling', men han har ikke brug for det – "nej, jeg synes det er fint nok det her" (02:17 – U5)

- % pagetitle

50. bliver spurt om en titel ville være godt (f.eks betalings side/checkout) det synes han ikke – "jeg kan ikke komme i gang om noget det skulle hedde, men jeg tænker heller ikke det er nødvendigt" (03:48 – U3)

- det ligger i kortene at de er ved checkud fordi de har online shoppet før
- der % page title

2. han har ikke brug for label hvor der står 'betalings side' - "når jeg så når til den her side så giver det sig selv at betaler" (03:53 – U1)

- teorien fejler, der er ikke brug for en label der siger "betalings side", det kan måske komme sig af at folk har online shoppet før, deres mentale map er instillet på at betalings siden kommer.

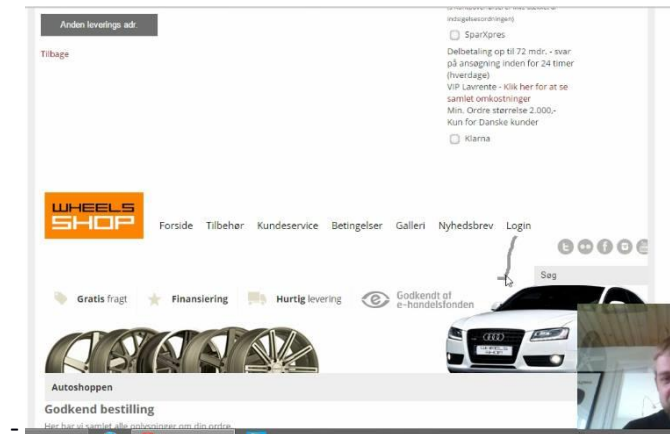
25. der bliver spurgt om det ville være godt hvis der var en label hvor der står "betalingssiden", bruger 2 svare "jeg er ikke tvivl om at jeg er her, men det gjorde da ikke noget den stod der" (03:09)

- på den måde kan man sige det er ikke nødvendigt da brugeren uden den overskrift godt ved han er der.

Problemer pga. testwebsite

67.fordi det er en testwebsite, er der en global navigation linje midt i checkout det gør user 3 ikke ved hvor han skal gå hen efter betaling er udfyldt "nu ved jeg ikke hvor jeg skal gå videre hen for at få lov at betale(13:25 – U3)

- det er igen hvad der sker ved test tidligt i forløbet, men selvfølgelig fortæller det at organisation skal være så man ved man skal scrolle ned af.



Fakturering/levering - Billing/Shipping

Ting der fungere eller skal ændres.

Der skal stå fakturering/should be named billing

52.bliver spurgt hvad billing adresse er til, han tror det er til levering "personlig oplysninger til levering, og jeg har valgt leverings til privat adresse herover (re: over i fragt)" (05:38 – U3)

rubrikker der mangler eller skal ændres/boxes are missing or need to be changed

38.billing adresse og shipping adresse er by/postnummer byttet rundt, så user 2 kommer til udfylde shipping adresse forkert. (09:33 – U2)

- skal have de to rubrik former udformet ens, noget med navigationen vil jeg tro

10.han mangler attention ned i leverings adresse så man kunne se hvem den skulle leveres til, hvis det skulle leveres til en arbejdsplads "der (re: anden leverings adresse) mangler jeg faktisk den der attention" (14:35 – U1)

- attention ned til anden leverings adresse

attention påvirker brugerne/attention affects users

94.forstår ikke hvad 'attention' er – "hvad er det der, det ved jeg sgu ikke hvad er" (04:25 – U5)

- label – ved ikke hvad attention er
- sproget for svært cabre

30. ved ikke hvad rubrikken 'attention' er. "så er jeg lidt i tvivl om hvad de mener med det her (re attention)" (05.01 – U2)

- sproget passer ikke til brugeren
- ingen grund til engelsk
- labelling

Attention er en god ting/attention is a good thing

5. ved godt hvad attention betyder (04:46 – U1)

- her passer sproget også til brugeren

54.attention: "attention hvis jeg sender den til mit firma så kan man sætte en att. Hvis der er 900 i virksomheden så kan den komme hen til den rigtige, det er godt den er med". (06:24 – U3)

- er alle enige om hvordan attention virker?

55.attention hvad user 3

- synes om den " men det er rar den er med for rigtig mange webbutikker har den ikke". (06:38 – U3)
- Struktur der skal være med

to rubrikker med label fulde navn/firmanavn - påvirker brugerne forskellige/two boxes with label full name / company name - affects different users

fulde navn/firma skal være mere præcist/full name / company must be more precise

53. fuldenavn/firmanavn: bliver spurgt hvad forskellen er – "jeg tænker om det forskellen om jeg har valgt levering til privat adresse eller firma adresse" (06:18 – U3)

- han tror det er om levering, hvor andre tror det er om man et er firma eller ej.
- Label mangler klarhed

32.han ved det godt, men det bliver lidt forstyrrende for ham, men spørgsmålet er om det er vigtigt, firmanavn er kun nødvendigt at vide hvis du er et firma

fulde navn/firma forvirrer — full name / company confuses

36.selvom user 2 nu har trykket "anden leverings adresse" forstår han stadig ikke hvad fuldenavn/firma navn hænger sammen, han bliver forvirret og labellen for hvad der skal indskrives for at få sendt korrekt. Ekspert spørger om det virker rodet når der begget sidder står fuldenavn/firmanavn begge steder til det svares der "jo, yes" "(08:30 – U2)

- labellene er rodet, men måske med en hover menu, der forklare vil det være nemmer at forstå.

- Tigermedia kan man lave hover/javascript på det?

33.tror at hvis leveringen skal ske til arbejdsplads så skal der stå firma navn. "hvis jeg skrev mit firma navn på, drivadan, og trykkede på levering så må det være gratis" (05:49 – U2)

- jeg tror ikke det er rigtig, her går shipping/billing galt

The screenshot shows a web form for shipping information. It is divided into three main sections: 'Adresseoplysninger' (Address information), 'Kommentarer' (Comments), and 'Fragt' (Shipping).
- 'Adresseoplysninger' contains fields for 'Fuldenavn/Firmanavn*' (Full name/Company name) with the value 'michael', 'Adresse*', 'Postnummer*', 'By*', 'E-mail*', and 'Land*' (set to 'Danmark'). There is a button 'Anden leverings- adr.' and a 'Tilbage' link.
- 'Kommentarer' has a text area for 'Evt. Kommentar:' and a section for 'Kommentar til fragtmændene' with a checkbox for 'Tilmeld nyhedsbrev' and a note 'jeg har læst og er indforstået med salgs- og leveringsbetingelserne'.
- 'Fragt' shows shipping options: 'Vælg venligst den ønskede fragt', '✓ Levering til privat adresse (+75,00 DKK)', and 'Levering til din arbejdsplads (+0,00 DKK) / Erhvervsadresse'. A note explains that private address delivery involves accepting the risk of non-delivery.

31.bliver i tvivl om rubrikken fuldenavn/firma navn. "det er jeg faktisk i tvivl om, det må være hvis det er et firma der køber det, det ved jeg sgu ikke" (05:18 – U2)

Fulde navn/firma er forståelig — Fulde navn/firma is understandable

93. billing adresse: "fulde navn må være mit navn og firma må være hvis jeg havde et firma"(04:04 – U5)

- label forstår det som billing adresse – korrekt

58.der bliver spurgt hvorfor der står firmanavn igen "fordi det kunne jo også være et firma der havde købt den her oppe (re billing informationer), det er ikke nødvendigvis en privat person, så leveres den til et andet firma et datter selskab f.eks" (07:36 – U3)

72.Udfylde navn i adresse oplysninger. Har ikke noget problem med at regne ud hvad fuldenavn/firma navn er. – "det er hvor varerne skal sendes hen, hvis jeg havde et firma så skulle jeg skrive mit firma navn" (00:27 – U4)

- Han har en fornemmelse for sproget, det er ikke for teknisk for mig. Ergo nogen i målgruppen kan nemt forstå sidens sprog.

brugerne forstår godt 'anden levering' men det kan gøres bedre/users understand 'shipping' but it can be done better

de forstår godt hvad anden levering er/ they understand what 'shipping' is

57. han forstår godt 'anden leverings adresse' - "anden leverings adresse, det er, som køber har jeg skrevet min egen adresse (re: informationerne skrevet ovenfor) men hvis jeg vil have leveret til en anden adresse f.eks til min storebror" (06:55 – U3)

6.forstår godt hvad anden leverings adresse er, og at "adresse" er billing adresse og "anden leverings adresse" er shipping adresse. – "i og med der står anden leveringsadresse kan det være jeg gerne vil have den leveret ind til dk plant(re. Hans arbejdsplads)" (05:20 – U1)

95.shipping adresse - "det er en anden adresse hvis nu det skulle sende til en anden en" (06:37 – U5)

- label er forståelig

77.fragt: ikke et problem at forstå hvad det handler – "hvis det er til min privat adresse er det den her, og hvis det er til min arbejdsplads den her" (03:37 – U4)

- nemt at forstå betydningen for ham

35."angiv leverings adresse, det er så der den skal leveres til" Selvom han læser "angiv" i stedet for "anden" leverings adressen" (07:48 – U2).

- Forstår det er der det skal leveres til

- Læser ikke labelen korrekt

73.knap "anden leverings adr." r egner nem ud at det er til anden leverings adresse. - "ja, det er hvis jeg vil have leveret til en adresse f.eks til min arbejdsadresse hvis jeg ikke er hjemme" (02:12 – U4)

- igen han forstår nemt sproget og strukturen

- han bliver ikke forvirret af at adresse er forkortet til adr

Anden levering skal adskilles fra 'adresse'/ shipping needs to be separated from 'adresse'

7. vælger at udfylde anden leverings adresse, der bliver spurgt ved anden levering hvad firmanavn betyder ved rubrikken 'fuldenavn/firmanavn' han forstår det godt men mangler en label hvor der står "leveringsadresse" - "det er til fragtmanden hvis leveringsadressen er til en firma adresse... men jeg mangler der står leveringsadresse" (10:42 – U1)

- Der skal være en header for labels navigering

37. bliver forvirret over når der trykkes "anden leverings adresse" han tror han skal udfylde igen, har ikke set det er fordi han har trykket "anden leverings adresse" – "hvorfor skal jeg udfylde det (navn adresse osv) to gange, det var da mega irriterende" (08:29 – U2)

- det forvirre at der ikke er noget skel mellem information til anden levreings adresse og de obligatoriske adresse felt (billing)

59. 'anden leverings adresse' - "men det er egentlig meget rart den (re: anden leverings adresse) den bare er lukket for jeg skal ikke bruge den til noget" (23:57 – U3)

- God navigation

Knappen 'anden levering' skal forsvinde når der trykkes på den/ Button 'anden levering' must disappear when pressed

8. snakker om knappen 'leverings adress' ikke forsvinder men blot står neden under, og der kommer en ekstra rubrik frem igen, hvis man trykker på den. – "det undre mig lidt, for det mener jeg at jeg har trykket på engang, den kommer bare igen"(11:15 – U1)

- knappen skal på måde gøres mere klar at der er blevet trykket
 - muligvis ovenover så headeroverskriften bliver til knappen "leveringsadresse"
 - muligvis med et flueben at chekke af

9.snakker om knappen "anden levering" er synlig når man har trykket på den. "når man har trykket anden leverings så måtte den gerne forsvinde" (14:01 – U1)

- belæg for at knappen skal forsvinde måske som en label header

Kommentarbokse/comment boxes

Kommentarboks / commentbox

Sprog virker fint/ language works fine

60.kommentar ingen problemer - "jeg har ikke nogen kommentar" (09:36 – U3)

11.forstår godt hvad boksen 'evt. kommentar er' – "det kunne typisk være om levering at jeg ikke vil have leveret før på onsdag" (17:49 – U1)

- forstår godt hvad

74.kommentar boks. Har en klar forståelse af hvad den kan bruges til – "det er til f.eks specielle ønsker, om de kan give lidt rabat" (02:27 – U4)

- igen han forstår nemt sproget"

Ændringer til kommentarboksen/amendments to comment box

12.boksen 'evt. kommentar"

- % forkortelse pga. labelling teori

40. kommentar forstår han ikke "kommentar jeg ved ikke hvorfor jeg skal skrive kommentar" (10:02 – U2)

- men boksen skal også kun være i øjnefaldende hvis du bruger den slag redskaber når du køber vare

Kommentarboks til fragtmanden/comment box to the carrier

Nemt at forstå/easy to understand

41.kommentar til fragtmanden er nem at forstå. "hvis de skal smide den et eller andet underlig sted" (10:07 – U2)

- nemt at forstå

61.kommentar til fragtmanden ingen problemer – "han må gerne ligge den ude en underskrift" (09:46 – U3)

75.kommentar fragtmanden – forstår nemt betydningen – "det er til fragtmanden, om det skal leveres i min garage" (02:48 – U4)

- igen sproget er nemt at forstå

Betaling/payment

strukturen skal ændres for at alle bruger forstår det/the structure must be changed to for all users to understand it

hvordan brugeren oplever betalings delen/how the user experience pay part

78.Betaling. Han forstår hurtig hvad de forskellige kan gøre. "om jeg vil have mulighed for at betale med kreditkort, bank overførsel eller afdrag" (03:55 – U4)

- Igen forstår hurtig betydning
- Forstår hurtig strukturen

18.bruger synes der er mange betalingsmuligheder "der er så mange muligheder (re. betalingsmuligheder) (23:40 – U1)

- det kan være hvis tekst kom væk, at det så ville minske det uoverskuelig organisation ville være nemme at fornemme så
- med overskrifter som sparxpress og klarna bliver det ekspertsprog, hvilket ikke passer til brugeren, de skal bare vide om det er betalingsordning eller ej, og derefter hvilken form for betalingsordning det er

96. betaling – bankoverførsel, user5 ved ikke hvad det er "det må være, nej det ved jeg ikke engang (hvad er)" (07:59 – U5)

- label for svær – cabre

struktur skal være mere ensformigt/ structure should be more monotonous

65. -at teksten ved betaling ikke behøver være synlig - "jeg behøver ikke vide alt det der, før jeg har trykket på den jeg gerne vil have" (11:53 – U3)

- Navigation - Teksten bliver gemt væk

82.snakker om at betalingsformerne skal stå ens. Enten skal teksterne væk, eller hver fremme, men han synes teksten 'delbetalingen op til 27 mdr.' er meget simpel. "jeg synes faktisk delbetalingen er meget simpel" (05:38 – U4)

- teksten skal væk, men i sparXpress må 'delbetalingen op til 72 mdr.' godt blive.
- Mdr. skal skrives helt ud pga. labeling

tekst skal ændres/slettes—text to be changed / deleted

For meget tekst, men fjern ikke alt/Too much text, but do not remove everything /

45.user 2 bliver spurgt om han på betaling synes der er for meget skrift på, hvilket han synes bør være der "det kommer an på, du bliver nødt til at have det her skrift (re: ved betalingen) hvis de skal hen og låne penge, men det har jeg bare ikke oplevet før at man kunne det" (11:28 – U2)

13.ekspert spørg om det rigtig det virker som meget skrift ved 'betaling' og user 1 at det er rigtig – "ja det gør der (re: virker som om der er meget skrift" (19:47 – U1)

14.snakker om at skriften ved betalings mulighed virker forvirrende men man skal passe på med helt at fjerne teksten "det (re: at fjerne teksten) tror jeg man skal passe på med" (21:49 – U1)

tekst der kan kortes ned/slettes— text that can be shortened / deleted

19.der bliver spurgt om det er nødvendigt at der står "vælg betalingsmulighed" når overskriften hedder "betaling" til det bliver der svaret "nej" (23:49 – U1)

- skal sløjfes



64.spørg om han læser alt teksten ved betaling - "nej jeg læser overskrifterne, hvor er der bokse og så læser jeg udfra der" (11:38 – U3)

- for meget tekst

ændre overskrifter for betalingsmuligheder/ change headers for payment options

44.om han tror klarna hænger sammen med sparxpress er ikke til at tyde, men det er tydeligt han roder tingene sammen, og tror det er til er enhver – "det må være fordi det er sådan noget erhvers noget det her" (11:10 – U2)

- skal mere klar organisation på

15. snakker om at det kunne være andre overskrifter i betalingsformer, ifht. At sparxpress er en adragsordning men det forstod han først da han læste teksten. – "sparxpress er en afdragsordning men det anede jeg ikke før jeg læste teksten" (22:12 – U1)

problemer med sparXpress

overskrift ikke præcis nok/Title not precise enough

43.forstår ikke hvad sparxpress er "hvad er det der sparxpress det er også kredit kort er det ikke" (10:48 – U2)

- sproget passer ikke til brugeren, det er for proffesionelt. Afbetalings ordning som overskrift ville være bedre (cabre)

63.betaling. Han tror sparxpress er noget man skal have (men det jo noget man kan vælge at få) "så skal jeg vælge betaling jeg har ikke nogen af de andre (re: sparxpress og klarna) så jeg vælger bankoverførsel" (11:21 – U3)

- han læser det ikke, det skal gøres mere tydeligt i sproget at sparxpress er et lån alle kan vælge

97. betaling – sparxpress, user 5 kan regne det ud - "det må være man laver et lån... 72 mdr svar inden 24 timer" (08:06 – U5)

- han kan regne det ud, men først ved at læse teksten.
- Han burde kunne regne det ud ved blot at læse header labelen
- Sparxpress skal have andet navn, måske 'hurtig lån' ?

tekst skal laves om/ text needs to be changed

16.spørg om sparxpress kunne hedde 'afdragsordning' som overskrift og der bliver svaret "ja" (22:20 – U1)

- ændre label

46.han peget på sparxpress og snakker om bankoplysninger, ved sparxpress står der ' svar på ansøgning inden for 24 timer' – hvilket betyder de oplysninger sikkert skal gives senere i forløbet. "et eller andet sted skulle de vil også have nogen bankoplysninger om man overhovedet er kredit værdig"(11:43 – U2)

- Der er meget skrift på, det bliver rodet, han får ikke læst det helt. F.eks ' svar på ansøgning inden for 24 timer', betyder det så der skal gives oplysninger, kan det skrives mere klart?
- Sproget passer ikke, labelling/text bliver rodet



vip lavrente/ vip low-interest

83.han synes det forvirre ham med vip lavrente (under spar xpress). Han er i tvivl om det er en anden betalingsform (05:54 – U4)

- skal gøres klar hvad vip lavrente er
- spørg erik, hvad er vip lavrente?

79.undre sig over text i sparXpress. Han forstår delbetalingen, men forstår ikke om texten 'vip lavrente' høre med til sparXpress eller til valgmuligheden klarna - "det der undrede mig, delbetaling er simpel nok, men vip er det med eller uden for (re: delbetalingen) (04:15 – U4)

 SparXpress
 Delbetaling op til 72 mdr. - svar
 på ansøgning inden for 24 timer
 (hverdag)
 VIP Lavrente - Klik her for at se
 samlet omkostninger
 Min. Ordre størrelse 2.000,-
 - Kun for Danske kunder

- Det skal gøres mere tydelig om "vip lavrente" er med til sparxpress, og hvad det er.
- Teksten er misvissende og strukturen gør at man tror den hører med til klarna

Problemer med Klarna/ Problems with Klarna

ved ikke hvad klarna er/ do not know what Klarna is

81.han ved ikke hvad klarna er før han trykker på den – "den der nede (re: klarna) ved jeg slet ikke hvad er, hvad den hører til (trykker) når det er sådan noget faktura noget, der mangler en forklaring til hvad det er) (05:23 – U4)

- teksten: er det nu også om faktura, eller hvad gør klarna?
- Spørg erik

98.betaling – klarna – ved han ikke hvad er "næh det ved jeg ikke hvad det (re: klarna) er" (08:49 – U5)

- der er ikke nogen tekst under, kun hvis han trykker på den
- organisationen/navigationen skal være ens for alle 4 betalings former (så intet vist tekst eller skjult tekst)

80.han ved ikke hvad klarna er før han trykker på den – "den der nede (re: klarna) ved jeg slet ikke hvad er, hvad den hører til (trykker) når det er sådan noget faktura noget, der mangler en forklaring til hvad det er) (05:23 – U4)

- navigation forstyrres ved at man skal trykke for at læse om klarna. Betalings formerne skal stå ens.

17. bruger aner ikke hvad klarna er. Der bliver spurgt ved du hvad klarna er der bliver svaret "aner det ikke" (22:24 – U1)

- der er ingen beskrivelse, så han kan ikke læse det. Han trykker ikke på den, derfor kommer teksten om klarna ikke frem
- obs. Spørgsmål erik, hvad er klarna, behøver den være på den danske side?

godkend bestilling/ approve Checkout

overordnet godt men der er rettelser/ overall good but there are corrections

de synes det er fint men mangler attention/ they think it's fine but lacks attention

47. 'godkend bestilling' – ikke noget han går op i, da han bliver spurgt om han går op i det svare han – "overhovedet ikke" (13:51 – U2)

8. godkend bestilling. Er nem at forstå, ikke noget han går så meget op i. (08:03 – U4)

21. nævner ved kunde information ved godkendbestilling at han gern ville have haft en linje ved anden leverings adresse at der kunne stå erik jensen, så man vidste den var til ham - "her ved leverings adresse ville jeg gerne have haft en linje hvor der stod erik jensen (brugs navn)" (25:08 – U1)

- skal ekstra linje ind

Autoshoppen

Godkend bestilling

Her har vi samlet alle oplysninger om din ordre.

Ordrenr: 6595

Kunde	Sælger
Erik Jensen Bårdesøvej 125 5450 Otterup 30129291 eje1953@gmail.com	Wheelsshop.dk Vinten Skovvej 42 DK-8700 Horsens Tlf.: (+45) 3313 3313 9 - 15 Mandag - Fredag Mail: mail@autoshoppen.dk CVR: 16844292

Anden leverings adr.
DK plantor
Bårtnervej 5
5450 Otterup

Bank: Saxo Privatbank, Vejle afd.
Reg.nr.: 8147 Konto:
0001115553
IBAN: DK0781470001115553
SWIFT: BRSPDK21

-V

varebeskrivelse - placering er korrekt i bunden/product descriptions - location is correct at the bottom

70. "hvis jeg nu selv havde købt fire alufælge til 8000 kr. så havde jeg nok lige kigget efter den (re. Ordren i alt/pris(ordre tingen) (15:55 – U3)

- Det kan konkluderes at det har en effekt der ikke handles med egne penge

68. der bliver spurgt om orden skulle have været længere oppe i checkout – "nej det er sådan set fint nok jeg først ser den nu" (14:39 – U3)

- fordi det er en kompleks ting at gøre dæk og fælge, er der ikke muligt lige at ændre i sidste øjeblik, derfor er det også fint nok det først bliver vist til sidst. Fordi det bør være korrekt på det stadie

☒ Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

Tilbage til kurven

Antal	Varebeskrivelse	Pris pr. stk
4	Centering Alu 79,5-67	39,20 DKK

156,80

Frakt: 60,0

Betalingsgebyr: 0,0

Total ekskl. moms: 216,8

Moms: 40,0

I alt: 256,8

Bekræft

flyt bekræft knap/move confirm button

22.bruger forslår selv at knappen bekræft bliver sat ned under varebeskrivelsen – ” så kunne man måske sige at den der bekræft blev rykket herved (re: under orden)” (25:40 – U1)

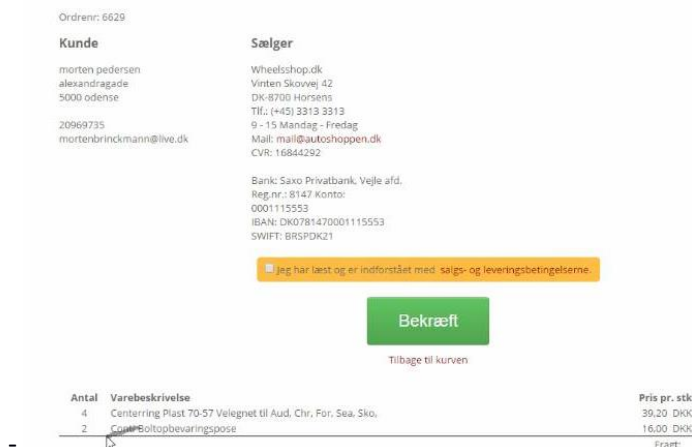


20.tror at han ikke kan finde en oversigt over hvad han har købt ved ”godkend bestilling” hvilket han så mangler, men scroller ned under knappen ”bekræft” og finder den. (24:37 – U1)

- organisation vil give mere menings hvis ’bekræft’ knappen var nederunder vareoversigten.

100.han ser ikke ordrebeskrivelsen (eller hvad det hedder) før eksperten nævner at den hvis også er det, han bliver spurgt om han ville se på den normalt ”ja det ville jeg da” (11:31 – U5)

- organisationen gør at man ikke se den ordre bekræftelsen



89.varebeskrivelsen. Han vil være mere opmærksom på varebeskrivelse end om navn osv. Var skrevet rigtig – ”jeg havde kigget på varebeskrivelsen (end kundenavn/informationer) (07:50 – U4)

- varebeskrivelse, står den ”rigtig” i sturkturen ifht. Benchmark og checkout teori?
- Har noget med organisation/navigationen at gøre.

48.han ser ikke ordebeskrivelsen, fordi bekræft knappen er ovenover. (14:08 – U2)

- organisation: knap nederst

salgs og leveringsbetingelser/sales and delivery terms

man læser ikke salgs og leveringsbetingelser/ you do not read the sales and delivery terms

24.bliver spurgt om user 1 læser salg-ogleverings betingelser. Der bliver svaret "nej det gør jeg ikke"(27:46 – U1)

- checkout teori holder ikke om privacy information fra jakob nielsen

91.salgs og leveringsbetingelser, han læser dem ikke "man sætter hak i, man læser den jo ikke" (08:38 – U4)

- nielsen holder ikke, hvis det er omkring privacy tingene, brugere læser det ikke

62."jeg har læst og er indforstået med salgs og leverings betingelserne', man læser dem stort set aldrig, man acceptere dem bare" (10:06 – U3)

102.salgs og leveringsbetingelser – ikke noget han vil læse. Bliver spurgt om det er noget han normalt ville læse til det svare han "næh" (12:10 – U5)

står to steder, måske den første skal slettes?/stand two places, perhaps the first to be deleted?

42. der bliver klikket på "jeg har læst og er indforstået med salgs-og leveringsbetingelserne" (10:30 – U2). Betaling kommer frem. Han bliver ikke forvirret over at den popper frem.

- Fra benchmarkingen, det er ikke et problem at den kommer frem pludselig.Fra benchmarkingen, det er ikke et problem at den kommer frem pludselig.

85.forstår ikke han skal krydse salgs-og leveringsbetingelserne af to gange. "jeg forstår bare ikke jeg skal krydse den af med salgs og leveringsbetingelser, jeg synes jeg har gjort det engang" (06:55 – U4)

- der skal kun være salgs-og leveringsbetingelser et sted for ikke at forstyrre navigation og minimere tekste



udenfor kontekst/ outside context

overskydende noter/excess notes

noter der ikke passer ind i resten af diagrammet/ notes that do not fit into the rest of the diagram

29.snakker om at user 2 ikke vil give personlig information "det skal hvertfald være et fald om man gider at have deres lort (f.eks nyheds mail)" (04.52 – U2)

101.ordrebeskrivelsen”den bliver vel liggende på min mail hele tiden, hvis det var rigtigt(re: hvis købet var rigtigt” (11:46 – U5)

- At det med bekræftelse e-mail er en selvfølge

Ordrenr: 6629

Kunde	Sælger
morten.pedersen@alexandragade 5000 odense 20969735 mortenbrinckmann@live.dk	Wheelshop.dk Vinten Skovvej 42 DK-8700 Horsens Tlf.: (+45) 3313 3313 9 - 15 Mandag - Fredag Mail: mail@autoshoppen.dk CVR: 16844292 Bank: Saxo Privatbank, Vejle afd. Reg.nr.: 8147 Konto: 0001115553 IBAN: DK0781470001115553 SWIFT: BRSPDK21

☐ Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

Bekræft

Tilbage til kurven

Antal	Varebeskrivelse	Pris pr. stk
4	Centerring Plast 70-57 Velegnet til Audi, Chr, For, Sea, Skio,	39,20 DKK
2	Carboltopbevaringspose	16,00 DKK
		Frugt:

76.boks ”for at kunne sende de rigtige fælg skal vi kende din bil” – en boks der ikke er set hos de andre brugere (03:11 – U4)

- en ekstra boks er poppet op, som jeg slet ikke har haft med i forgående undersøgelse, det er hvad der sker, man opdager nye ting hen ad vejen i undersøgelsen

- jeg kan ikke sige særlig meget om denne boks, da den ikke er med i resten af min undersøgelsen

For at kunne sende de rigtige fælg skal vi kende din bil:

Nummerplade

Eller

Motorstørrelse

problemproblemer fordi det er en testside/problems because it is a test page

software fejl/ software errors

51.han leder efter mere indhold på siden, og tror det kommer frem når han trykker ’jeg har læst og og er indforstået med salgs- og leveringsbetingelserne’ - ”det er fordi når jeg har læst og forstået det hele, så er knapper nogle gange skjulte, før du har krydset af der, fordi så kan man i ikke gå videre uden” (05:06 – U3)

- den burde komme frem ved (06:55) kommer den lige pludselig frem, men fordi det er en test side, kan det være en software fejl der skaber det problem, hvilket er en konsekvens når man laver test tideligt i forløbet af designprocessen.

- Men for at fejlen ikke opstår i real life, er det så ikke bedre at betalingen blot er fremme, men tekst på betalingen er mimimeret?

99. ”nu har jeg glemt at skrive hus nr på” (09:06 – U5)

- Ikke muligt at lave fejl, da testsiden blot skulle have tekst for at godkende. Under normale omstændigheder ville man skulle udfylde korrekt med f.eks husvej+hus nr

Godkend bestilling
Her har vi samlet alle oplysninger om din ordre.

Ordrenr: 6629

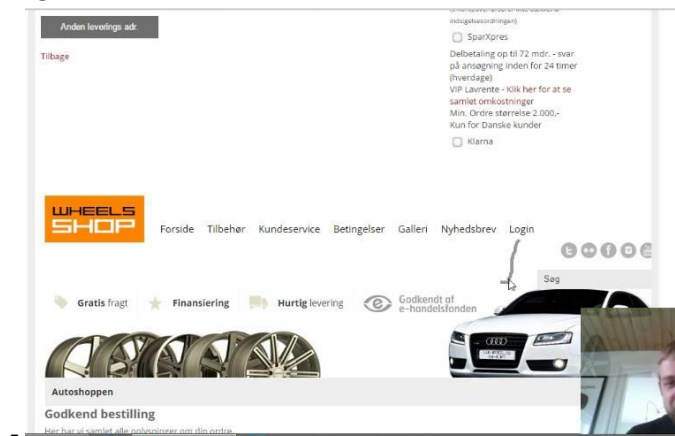
Kunde	Sælger
morten.pedersen@alexandragade 5000 odense	Wheelsshop.dk Vinten Skovvej 42 DK-8700 Horsens Tlf.: (+45) 3313 3313 9 - 15 Mandag - Fredag Mail: mail@autoshoppen.dk CVR: 16844292
20969735 mortenbrinckmann@live.dk	Bank: Saxo Privatbank, Vejle afd. Reg.nr.: 8147 Konto: 0001115553 IBAN: DK0781470001115553

69."fragt 60 kr. der er jeg positivt overrasket, for det er billigere end hvad de skriver deroppe (re. I fragt hvor det er 70) (15:06)

- De er nødt til at have styr på hvad tingene koster
- Credibility bliver tabt ved det her

67.fordi det er en testwebsite, er der en global navigation linje midt i checkout det gør user 3 ikke ved hvor han skal gå hen efter betaling er udfyldt "nu ved jeg ikke hvor jeg skal gå videre hen for at få lov at betale(13:25 – U3)

- det er igen hvad der sker ved test tidligt i forløbet, men selvfølgelig fortæller det at organisation skal være så man ved man skal scrolle ned af.



G | Data processing - noter contextual inquiry

User 1 (erik)

1. Bliver spurgt til om han har et overblik over hvad han skal på siden generelt (strukturen af siden) – ”jamen altså der står jo at feltet (Re: tlf.) skal udfyldes” (00:58 – U1)
 - a. Han er serialist i hans tanke gang, hvilket gør det vigtigt med en ens gennemgående opbygning, da han ser helheden i enkelt delene.
2. han har ikke brug for label hvor der står ’betalings side’ - ”når jeg så når til den her side så giver det sig selv at betaler” (03:53 – U1)
 - a. teorien fejler, der er ikke brug for en label der siger ”betalings side”, det kan måske komme sig af at folk har online shoppet før, deres mentale map er instillet på at betalings siden kommer.
3. synes det er ’følgende med * skal udfyldes’ er skrevet - ”jeg kan se følgende med stjerne skal udfyldes, og det synes jeg er god ting står der” (03:58 – U1)
 - a. den tekst er værdifuld for forståelsen
4. snakker om det er rart han ved hvad han skal udfylde og hvad han ikke behøver. - ”det (re: stjernemarkering) synes jeg er en god ting, for der kunne godt være nogle ting jeg ikke var interesseret i de skulle vide noget om” (04:08 – U1)
 - a. det med ikke for meget person oplysninger
5. ved godt hvad attention betyder (04:46 – U1)
 - a. her passer sproget også til brugeren
6. forstår godt hvad anden leverings adresse er, og at ”adresse” er billing adresse og ”anden leverings adresse” er shipping adresse. – ”i og med der står anden leveringsadresse kan det være jeg gerne vil have den leveret ind til dk plant(re. Hans arbejdsplads)” (05:20 – U1)
7. vælger at udfylde anden leverings adresse, der bliver spurgt ved anden levering hvad firma-navn betyder ved rubrikken ’fuldenavn/firmanavn’ han forstår det godt men mangler en label hvor der står ”leveringsadresse” - ”det er til fragtmanden hvis leveringsadressen er til en firma adresse... men jeg mangler der står leveringsadresse” (10:42 – U1)

Land*: Danmark

E-mail*: eje1953@gmail.com

Fuldenavn/Firmanavn: DK plant


Adresse:

Postnummer:

By:

Anden leverings adr.

- a.
 - b. Der skal være en header for labels navigering
8. snakker om knappen ’leverings adress’ ikke forsvinder men blot står neden under, og der kommer en ekstra rubrik frem igen, hvis man trykker på den. – ”det undre mig lidt, for det mener jeg at jeg har trykket på engang, den kommer bare igen”(11:15 – U1)
 - a. knappen skal på måde gøres mere klar at der er blevet trykket
 - b. muligvis ovenover så headeroverskriften bliver til knappen ”leveringsadresse”

- c. muligvis med et flueben at chekke af
- 9. snakker om knappen "anden levering" er synlig når man har trykket på den. "når man har trykket anden leverings så måtte den gerne forsvinde" (14:01 – U1)
 - a. belæg for at knappen skal forsvinde måske som en label header
- 10. han mangler attention ned i leverings adresse så man kunne se hvem den skulle leveres til, hvis det skulle leveres til en arbejdsplads "der (re: anden leverings adresse) mangler jeg faktisk den der attention" (14:35 – U1)
 - a. attention ned til anden leverings adresse
- 11. forstår godt hvad boksen 'evt. kommentar er' – "det kunne typisk være om levering at jeg ikke vil have leveret før på onsdag" (17:49 – U1)
 - a. forstår godt hvad
- 12. boksen 'evt. kommentar'
 - a. % forkortelse pga. labeleing teori
- 13. ekspert spørg om det rigtig det virker som meget skrift ved 'betaling' og user 1 at det er rigtig – "ja det gør der (re: virker som om der er meget skrift" (19:47 – U1)
- 14. snakker om at skriften ved betalings mulighed virker forvirrende men man skal passe på med helt at fjerne teksten "det (re: at fjerne teksten) tror jeg man skal passe på med" (21:49 – U1)
- 15. snakker om at det kunne være andre overskrifter i betalingsformer, ifht. At sparxpress er en adragsordning men det forstod han først da han læste teksten. – "sparxpress er en afdragsordning men det anede jeg ikke før jeg læste teksten" (22:12 – U1)
- 16. spørg om sparxpress kunne hedde 'afdragsordning' som overskrift og der bliver svaret "ja" (22:20 – U1)
 - a. ændre label
- 17. bruger aner ikke hvad klarna er. Der bliver spurgt ved du hvad klarna er der bliver svaret "aner det ikke" (22:24 – U1)
 - a. der er ingen beskrivelse, så han kan ikke læse det. Han trykker ikke på den, derfor kommer teksten om klarna ikke frem
 - i. obs. Spørgsmål erik, hvad er klarna, behøver den være på den danske side?
- 18. bruger synes der er mange betalingsmuligheder "der er så mange muligheder (re betalingsmuligheder) (23:40 – U1)
 - a. det kan være hvis tekst kom væk, at det så ville minske det uoverskuelig organisation ville være nemme at fornemme så
 - b. med overskrifter som sparxpress og klarna bliver det ekpertsprog, hvilket ikke passer til brugeren, de skal bare vide om det er betalingsordning eller ej, og derefter hvilken form for betalingsordning det er
- 19. der bliver spurgt om det er nødvendigt at der står "vælg betalingsmulighed" når overskriften hedder "betaling" til det bliver der svaret "nej" (23:49 – U1)
 - a. skal sløjfes
- 
 - b.
- 20. tror at han ikke kan finde en oversigt over hvad han har købt ved "godkend bestilling" hvilket han så mangler, men scroller ned under knappen "bekræft" og finder den. (24:37 – U1)
 - a. organisation vil give mere menings hvis 'bekræft' knappen var nedenunder vareoversigten.

21. nævner ved kunde information ved godkendbestilling at han gern ville have haft en linje ved anden leverings adresse at der kunne stå erik jensen, så man vidste den var til ham - "her ved leverings adresse ville jeg gerne have haft en linje hvor der stod erik jensen (brugs navn)" (25:08 – U1)

a. skal ekstra linje ind

b.

22. bruger forslår selv at knappen bekræft bliver sat ned under varebskrivelsen – " så kunne man måske sige at den der bekræft blev rykket herved (re: under orden)" (25:40 – U1)

a.

23. fordi at der her var et software fejl fra tigermedias side betød det under denne test at 'godkend bestilling' var men en side. Brugerne bliver spurgt om det havde været rart det var sat på den først side så det hele var på en side. – "ja den kunne faktisk godt have været over på den anden side (re singlpage siden)" (26:21 – U1)

a.

b.

24. bliver spurgt om user 1 læser salg-ogleverings betingelser. Der bliver svaret "nej det gør jeg ikke"(27:46 – U1)

a. checkout teori holder ikke om privacy information fra jakob nielsen

User 2 (michael)

25. der bliver spurgt om det ville være godt hvis der var en label hvor der står "betalingssiden", bruger 2 svare "jeg er ikke tvivl om at jeg er her, men det gjorde da ikke noget den stod der" (03:09)
- a. på den måde kan man sige det er ikke nødvendigt da brugeren uden den overskrift godt ved han er der.
26. der bliver spurgt om der er et overblik over hvad der skal udfyldes som helhed bruger2 svarer "ja jeg skal udfylde min adresse" (03:21 – U2)
- a. serialitisk tankegang igen, strukturen skal være ens
27. synes siden er svær "jeg har været på nemmere sider synes jeg... næste trin, næste trin det står der ikke noget om her" (03:34 – U2)
- a. organisation skal være mere klar
28. snakker om hvad de trin skal være. "trin 1 du skal udfylde dit navn adressen og hele lortet fordi det skal sende, næste trin kort, hvad for et kort skal du betale med, næste indskriv dine kort" (03:49 – U1)
- a. han skriver det ikke som at de trin skal være opdele i forskellige sider, det kan også være organisationen der er mere opdelt så det bliver nemmere at navigere rundt.
 - b. Men strukturen skal gøres mere klar
29. snakker om at user 2 ikke vil give personlig information "det skal hvertfald være et fald om man gider at have deres lort (f.eks nyheds mail)" (04:52 – U2)
30. ved ikke hvad rubrikken 'attention' er. "så er jeg lidt i tvivl om hvad de mener med det her (re attention)" (05:01 – U2)
- a. sproget passer ikke til brugeren
 - b. ingen grund til engelsk
 - c. labelling
31. bliver i tvivl om rubrikken fuldenavn/firma navn. "det er jeg faktisk i tvivl om, det må være hvis det er et firma der køber det, det ved jeg sgu ikke" (05:18 – U2)
32. han ved det godt, men det bliver lidt forstyrrende for ham, men spørgsmålet er om det er vigtigt, firmanavn er kun nødvendigt at vide hvis du er et firma
33. tror at hvis leveringen skal ske til arbejdsplads så skal der stå firma navn. "hvis jeg skrev mit firma navn på, drivadan, og trykkede på levering så må det være gratis" (05:49 – U2)
- a. jeg tror ikke det er rigtig, her går shipping/billing galt

Adresseoplysninger

Felter med * skal udfyldes.

Titel*
40753426

Fuldenavn/Firmanavn*
michael

Attention*

Adresse*

Postnummer*

By*

E-mail*

Land*
Danmark

Anden leverings- ad*

Tilbage

Kommentarer

Evt. kommentar:

Skov en kommentar

Kommentar til fragtmænd:

☒ Tilmeld nyhedsbrev

☐ Jeg har læst og er indforstået med
salgs- og leveringsbetingelserne.

Fragt

Vælg venligst den ønskede fragt

☒ Levering til privat adresse (+75,00 DKK)

(Ved privat adresse accepterer du at leverancen evt. stilles uden kuttering for egen risiko)

☐ Levering til din arbejdsplads (+0,00 DKK) / Erhvervsadresse

b.

34. selvom han ikke har læst hvad stjerne betyder har han en forudide og den holder stik her.
 "hvad betyder det her, men jeg skal heller ikke udfylde det, det er hvertfald hvad stjernen plejer at betyde" (06:45 – U2)
- a. stjernen er en god ting
 - b. noget med labelling er godt her
35. "angiv lerings adresse, det er så der den skal leveres til" Selvom han læser "angiv" i stedet for "anden" leverings adressen" (07:48 – U2).
- a. Forstår det er der det skal leveres til
 - b. Læser ikke labellen korrekt
36. selvom user 2 nu har trykket "anden leverings adresse" forstår han stadig ikke hvad fulde-
 navn/firma navn hænger sammen, han bliver forvirret og labellen for hvad der skal indskrives
 for at få sendt korrekt. Ekspert spørger om det virker rodet når der begget sidder står fulde-
 navn/firmanavn begge steder til det svares der "jo, yes" "(08:30 – U2)
- a. labellene er rodet, men måske med en hover menu, der forklare vil det være nem-
 mer at forstå.
 - i. Tigermedia kan man lave hover/javascript på det?
37. bliver forvirret over når der trykkes "anden leverings adresse" han tror han skal udfylde igen,
 har ikke set det er fordi han har trykket "anden leverings adresse" – "hvorfor skal jeg udfylde
 det (navn adresse osv) to gange, det var da mega irriterende" (08:29 – U2)
- a. det forvirre at der ikke er noget skel mellem information til anden levreings adresse
 og de obligatoriske adresse felt (billing)

Postnummer*: 5450

By*: Otterup

E-mail*: michael100281@gmail.com

Land*: Danmark

Fuldenavn/Firmanavn:

Adresse:

By:

Postnummer:

Anden leverings adr.

Tilbage

Tilmeld nyhedsbrev

Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

b.

38. billing adresse og shipping adresse er by/postnummer byttet rundt, så user 2 kommer til ud-
 fylde shipping adresse forkert. (09:33 – U2)
- a. skal have de to rubrik former udformet ens, noget med navigationen vil jeg tro

Postnummer*: 5450 ☒ Tilmeld nyhedsbrev

By*: Otterup ☐ Jeg har læst og er indforstået med salgs- og leveringsbetingelse

E-mail*: michael100281@gmail.com

Land*: Danmark ▼

Fuldenavn/Firmanavn: drivadan

Adresse: gørtlervej 6

By: 5654

Postnummer:

Anden leverings adr.

Tilbage

b. 39. efter adresse oplysninger flytter han automatisk fokus på kommentar feltet, hvilket er rigtig række følge. (10:05 – U2)

- a. organisationen er ok, da han ved han skal gå til siden og ikke scrolle ned, navigationen skal bare være mere klar

Adresseoplysninger

Felter med * skal udfyldes.

Tlf*: 40753426

Fuldenavn/Firmanavn*: michael rasmussen

Attention:

Adresse*: lørkevej 12

Postnummer*: 5450

By*: Otterup

E-mail*: michael100281@gmail.com

Land*: Danmark ▼

Fuldenavn/Firmanavn: drivadan

Adresse: gørtlervej 6

Ru

Kommentarer

Evt. Kommentar:

Skiv en kommentar...

Kommentar til fragtmænd:

☒ Tilmeld nyhedsbrev

☐ Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

Frugt

Vælg venligst den ønskede frugt

☒ Levering til privat adresse (+75,00 DKK)

(Ved privat adresse accepterer du at leverancen evt. stiller uden kuttering for egen risiko)

☐ Levering til din arbejdsplads (+0,00 DKK) / Eftersendelse

b. 40. kommentar forstår han ikke "kommentar jeg ved ikke hvorfor jeg skal skrive kommentar" (10:02 – U2)

- a. men boksen skal også kun være i øjnefaldende hvis du bruger den slag redskaber når du køber vare

41. kommentar til fragtmænd er nem at forstå. "hvis de skal smide den et eller andet underlig sted" (10:07 – U2)

- a. nemt at forstå

42. der bliver klikket på "jeg har læst og er indforstået med salgs- og leveringsbetingelserne" (10:30 – U2). Betaling kommer frem. Han bliver ikke forvirret over at den popper frem.

- a. Fra benchmarkingen, det er ikke et problem at den kommer frem pludselig. Fra benchmarkingen, det er ikke et problem at den kommer frem pludselig.

43. forstår ikke hvad sparxpress er "hvad er det der sparxpress det er også kredit kort er det ikke" (10:48 – U2)

- a. sproget passer ikke til brugeren, det er for proffesionelt. Afbetalings ordning som overskrift ville være bedre (cabre)

44. om han tror klarna hænger sammen med sparxpress er ikke til at tyde, men det er tydeligt han roder tingene sammen, og tror det er til er enhver – "det må være fordi det er sådan noget erhvers noget det her" (11:10 – U2)

- a. skal mere klar organisation på

45. user 2 bliver spurgt om han på betaling synes der er for meget skrift på, hvilket han synes bør være der "det kommer an på, du bliver nødt til at have det her skrift (re: ved betalingen) hvis de skal hen og låne penge, men det har jeg bare ikke oplevet før at man kunne det" (11:28 – U2)
46. han peget på sparxpress og snakker om bankoplysninger, ved sparxpress står der ' svar på ansøgning inden for 24 timer' – hvilket betyder de oplysninger sikkert skal gives senere i forløbet. "et eller andet sted skulle de vil også have nogen bankoplysninger om man overhovedet er kredit værdig"(11:43 – U2)
- Der er meget skrift på, det bliver rodet, han får ikke læst det helt. F.eks ' svar på ansøgning inden for 24 timer', betyder det så der skal gives oplysninger, kan det skrives mere klart?
 - Sproget passer ikke, labelling/text bliver rodet



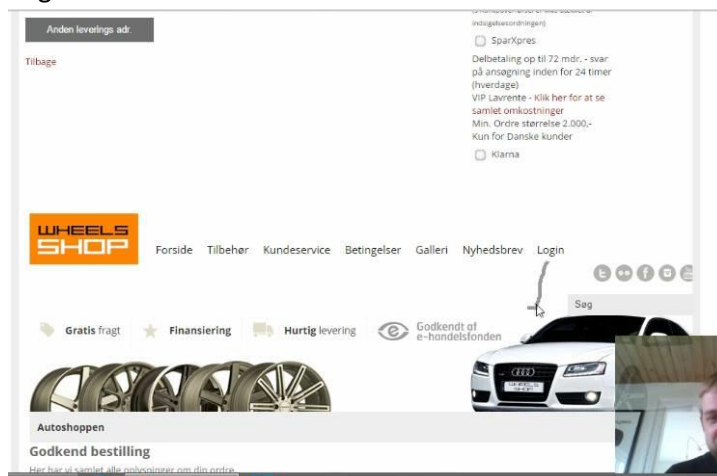
- Konto
47. 'godkend bestilling' – ikke noget han går op i, da han bliver spurgt om han går op i det svare han – "overhovedet ikke" (13:51 – U2)
48. han ser ikke ordebeskrivelsen, fordi bekræft knappen er ovenover. (14:08 – U2)
- organisation: knap nederst

User 3 (kasper)

49. der bliver spurgt til strukturen på siden som helhed. Her sørger user 3 for at forklare overordnet alle elementerne på siden som han kan se (det øverste af checkout) "jeg har sagt videre til kasse og så før jeg kan betale skal jeg have skrevet hvilken adresse jeg vil have leveret på og hvilken måde jeg vil have leveret på" (02:57 – U3)
- hollistisk tankegang

- b.
50. bliver spurgt om en titel ville være godt (f.eks betalings side/checkout) det synes han ikke – ”jeg kan ikke komme i gang om noget det skulle hedde, men jeg tænker heller ikke det er nødvendigt” (03:48 – U3)
- det ligger i kortene at de er ved checkud fordi de har online shoppet før
 - der % page title
51. han leder efter mere indhold på siden, og tror det kommer frem når han trykker ’jeg har læst og og er indforstået med salgs- og leveringsbetingelserne’ - ”det er fordi når jeg har læst og forstået det hele, så er knapper nogle gange skjulte, før du har krydset af der, fordi så kan man i ikke gå videre uden” (05:06 – U3)
- den burde komme frem ved (06:55) kommer den lige pludselig frem, men fordi det er en test side, kan det være en software fejl der skaber det problem, hvilket er en konsekvens når man laver test tidligt i forløbet af designprocessen.
 - Men for at fejlen ikke opstår i real life, er det så ikke bedre at betalingen blot er fremme, men tekst på betalingen er mimimeret?
52. bliver spurgt hvad billing adresse er til, han tror det er til levering ”personlig oplysninger til levering, og jeg har valgt leverings til privat adresse herover (re: over i fragt)” (05:38 – U3)
53. fuldenavn/firmanavn: bliver spurgt hvad forskellen er – ”jeg tænker om det forskellen om jeg har valgt levering til privat adresse eller firma adresse” (06:18 – U3)
- han tror det er om levering, hvor andre tror det er om man et er firma eller ej.
 - Label mangler klarhed
54. atten: ”atten hvis jeg sender den til mit firma så kan man sætte en att. Hvis der er 900 i virksomheden så kan den komme hen til den rigtige, men det er rar den er med”. (06:24 – U3)
- er alle enige om hvordan attention virker?
55. attention hvad user 3
56.)synes om den ” men det er rar den er med for rigtig mange webbutikker har den ikke”. (06:38 – U3)
- Struktur der skal være med
57. han forstår godt ’ anden leverings adresse’ - ”anden leverings adresse, det er, som køber har jeg skrevet min egen adresse (re: informationerne skrevet ovenfor) men hvis jeg vil have leveret til en anden adresse f.eks til min storebror” (06:55 – U3)
58. der bliver spurgt hvorfor der står firmanavn igen ”fordi det kunne jo også være et firma der havde købt den her oppe (re billing informationer), det er ikke nødvendigvis en privat person, så leveres den til et andet firma et datter selskab f.eks” (07:36 – U3)
- kan man gøre det mere klar det med firma/privatperson?

59. 'anden leverings adresse' - "men det er egnlige meget rart den (re: anden leverings adresse) den bare er lukket for jeg skal ikke bruge den til noget" (23:57 – U3)
- a. God navigation
60. kommentar ingen problemer - "jeg har ikke nogen kommentar" (09:36 – U3)
61. kommentar til fragtmændingen ingen problemer – "han må gerne ligge den ude en underskrift" (09:46 – U3)
62. "jeg har læst og er indforstået med salgs og leverings betingelserne, man læser dem stort set aldrig, man acceptere dem bare" (10:06 – U3)
63. betaling. Han tror sparxpress er noget man skal have (men det jo noget man kan vælge at få) "så skal jeg vælge betaling jeg har ikke nogen af de andre (re: sparxpress og klarna) så jeg vælger bankoverførsel" (11:21 – U3)
- a. han læser det ikke, det skal gøres mere tydeligt i sproget at sparxpress er et lån alle kan vælge
64. spørg om han læser alt teksten ved betaling - "nej jeg læser overskrifterne, hvor er der bokse og så læser jeg udfra der" (11:38 – U3)
- a. for meget tekst
65. -at teksten ved betaling ikke behøver være synlig - "jeg behøver ikke vide alt det der, før jeg har trykket på den jeg gerne vil have" (11:53 – U3)
- a. Navigation - Teksten bliver gemt væk
66. forventer ikke det skal være simpel - "det skal helst være lidt noget rod, når man har med betaling og fragt at gøre" (12:47 – U3)
- a. men man kan jo godt gøre det overskueligt alligevel
67. fordi det er en testwebsite, er der en global navigation linje midt i checkout det gør user 3 ikke ved hvor han skal gå hen efter betaling er udfyldt "nu ved jeg ikke hvor jeg skal gå videre hen for at få lov at betale(13:25 – U3)
- a. det er igen hvad der sker ved test tidligt i forløbet, men selvfølgelig fortæller det at organisation skal være så man ved man skal scrolle ned af.



- b.
68. der bliver spurgt om orden skulle have været længere oppe i checkout – "nej det er sådan set fint nok jeg først ser den nu" (14:39 – U3)
- a. fordi det er en kompleks ting at gøre dæk og fælge, er der ikke muligt lige at ændre i sidste øjeblik, derfor er det også fint nok det først bliver vist til sidst. Fordi det bør være korrekt på det stadie
 - b. noget persuasivt. At man lige kan få lov at dobbelttjekke en sidste gang.

69. "fragt 60 kr. der er jeg positivt overrasket, for det er billigere end hvad de skriver deroppe (re. I fragt hvor det er 70) (15:06)

- a. De er nødt til at have styr på hvad tingene koster
- b. Credibility bliver tabt ved det her

70. "hvis jeg nu selv havde købt fire alufælge til 8000 kr. så havde jeg nok lige kigget efter den (re. Ordren i alt/pris(ordre tingen) (15:55 – U3)

- a. Det kan konkluderes at det har en effekt der ikke handles med egne penge

b.



Antal	Varebeskrivelse	Pris pr. stk	
4	Centerring Alu 79,5-67	39,20 DKK	156,80

Fragt: 60,0
 Betalingsgebyr: 0,0
 Total ekskl. moms: 16,8
 Moms:
 I alt:

71. irritere sig over at den ekstra global navigations linje står i midten "lidt synd det ikke er en adskillelse så man kan se at siden faktisk skift herfra (fra ekstra global navigationslinje) kunne ligeså godt have været et ekstra fanblad, men det er faktisk rart siden ikke skift, så kan man ændre sine adresse oplysninger uden at skulle trykke tilbage" (16:35 – U3)

- a. det viser at singlepag er en god ide

User 4 (jens)

72. Udfylde navn i adresse oplysninger. Har ikke noget problem med at regne ud hvad fulde-navn/firma navn er. – "det er hvor varerne skal sendes hen, hvis jeg havde et firma så skulle jeg skrive mit firma navn" (00:27 – U4)

- a. Han har en fornemmelse for sproget, det er ikke for teknisk for mig. Ergo nogen i målgruppen kan nemt forstå sidens sprog.

73. knap "anden leverings adr." r egner nem ud at det er til anden leverings adresse. - "ja, det er hvis jeg vil have leveret til en adresse f.eks til min arbejdsadresse hvis jeg ikke er hjemme" (02:12 – U4)

- a. igen han forstår nemt sproget og strukturen
- b. han bliver ikke forvirret af at adresse er forkortet til adr

74. kommentar boks. Har en klar forståelse af hvad den kan bruges til – "det er til f.eks specielle ønsker, om de kan give lidt rabat" (02:27 – U4)

- a. igen han forstår nemt sproget"

75. kommentar fragtmanden – forstår nemt betydningen – "det er til fragtmanden, om det skal leveres i min garage" (02:48 – U4)

- a. igen sproget er nemt at forstå

76. boks "for at kunne sende de rigtige fælge skal vi kende din bil" – en boks der ikke er set hos de andre brugere (03:11 – U4)

- a. en ekstra boks er poppet op, som jeg slet ikke har haft med i forgående undersøgelse, det er hvad der sker, man opdager nye ting hen ad vejen i undersøgelsen
- b. jeg kan ikke sige særlig meget om denne boks, da den ikke er med i resten af min undersøgelsen


For at kunne sende de rigtige følge skal vi kende din bil:

Nummerplade

Eller

Motorstørrelse

c.



77. fragt: ikke et problem at forstå hvad det handler – ”hvis det er til min privat adresse er det den her, og hvis det er til min arbejdsplads den her” (03:37 – U4)
- nemt at forstå betydningen for ham
78. Betaling. Han forstår hurtig hvad de forskellige kan gøre. ”om jeg vil have mulighed for at betale med kreditkort, bank overførsel eller afdrag” (03:55 – U4)
- Igen forstår hurtig betydning
 - Forstår hurtig strukturen
79. undre sig over text i sparXpress. Han forstår delbetalingen, men forstår ikke om teksten ’vip lavrente’ høre med til sparXpress eller til valgmuligheden klarna - ”det der undrede mig, delbetaling er simpel nok, men vip er det med eller uden for (re: delbetalingen) (04:15 – U4)
-  SparXpress

Delbetaling op til 72 mdr. - svar på ansøgning inden for 24 timer (hverdage)

VIP Lavrente - Klik her for at se samlet omkostninger

Min. Ordre størrelse 2.000,-

Kun for Danske kunder
- - Det skal gøres mere tydelig om ”vip lavrente” er med til sparxpress, og hvad det er.
 - Teksten er misvissende og strukturen gør at man tror den høre med til klarna
80. han ved ikke hvad klarna er før han trykker på den – ”den der nede (re: klarna) ved jeg slet ikke hvad er, hvad den hører til (trykker) når det er sådan noget faktura noget, der mangler en forklaring til hvad det er) (05:23 – U4)
- navigation forstyrres ved at man skal trykke for at læse om klarna. Betalingens formerne skal stå ens.
81. han ved ikke hvad klarna er før han trykker på den – ”den der nede (re: klarna) ved jeg slet ikke hvad er, hvad den hører til (trykker) når det er sådan noget faktura noget, der mangler en forklaring til hvad det er) (05:23 – U4)
- teksten: er det nu også om faktura, eller hvad gør klarna?
 - Spørg erik
82. snakker om at betalingsformerne skal stå ens. Enten skal teksterne væk, eller hver fremme, men han synes teksten ’delbetalingen op til 27 mdr.’ er meget simpel. ”jeg synes faktisk delbetalingen er meget simpel” (05:38 – U4)
- teksten skal væk, men i sparXpress må ’delbetalingen op til 72 mdr.’ godt blive.
 - Mdr. skal skrives helt ud pga. labeling
83. han synes det forvirre ham med vip lavrente (under spar xpress). Han er i tvivl om det er en anden betalingsform (05:54 – U4)
- skal gøres klar hvad vip lavrente er
 - spørg erik, hvad er vip lavrente?
84. bliver spurgt til om han synes strukturen overblikket over checkout er nem at forstå, og det synes han – ”ja det synes jeg” (06:50 – U4)
- for ham er organisation nem at forstå

85. forstår ikke han skal krydse salgs-og leveringsbetingelserne af to gange. "jeg forstår bare ikke jeg skal krydse den af med salgs og leveringsbetingelser, jeg synes jeg har gjort det engang" (06:55 – U4)
- der skal kun være salgs-og leveringsbetingelser et sted for ikke at forstyrre navigation og minimere tekste
- b. 
- c. 
86. synes checkout er nemt at forstå – "Men ellers synes jeg faktisk det(re: checkout) er nemt og overskuelig, det synes jeg faktisk den er " (07:04 – U4)
- en del af målgruppen forstår godt siden som helhed
87. "det der irriterer mig er at jeg skal scrolle ned (for at forstå hvad man må/skal gøre) så bliver jeg forvirret (07:07 – U4)
- Det kan tolkes som at navigation laves om, det skal være så det er naturligt hvornår der skal scrolles ned.
88. godkend bestilling. Er nem at forstå, ikke noget han går så meget op i. (08:03 – U4)
89. varebeskrivelsen. Han vil være mere opmærksom på varebeskrivelse end om navn osv. Var skrevet rigtig – "jeg havde kigget på varebeskrivelsen (end kundenavn/informationer) (07:50 – U4)
- varebeskrivelse, står den "rigtig" i strukturen ifht. Benchmark og checkout teori?
 - Har noget med organisation/navigationen at gøre.
90. bliver spurgt til om det ville give mening at flytte knappen "bekræft" ned under varebeskrivelse, det synes han er en god ide. "ja det burde man i virkeligheden nok gøre".
91. salgs og leveringsbetingelser, han læser dem ikke "man sætter hak i, man læser den jo ikke" (08:38 – U4)
- nielsen holder ikke, hvis det er omkring privacy tingene, brugere læser det ikke

User 5 (morten)

92. der bliver spurgt til om en der f.eks havde stået 'betaling', men han har ikke brug for det – "nej, jeg synes det er fint nok det her" (02:17 – U5)
- % pagetitle
93. billing adresse: "fulde navn må være mit navn og firma må være hvis jeg havde et firma"(04:04 – U5)
- label forstår det som billing adresse – korrekt
94. forstår ikke hvad 'attention' er – "hvad er det der, det ved jeg sgu ikke hvad er" (04:25 – U5)
- label – ved ikke hvad attention er
 - sproget for svært cabre
95. shipping adresse - "det er en anden adresse hvis nu det skulle sende til en anden en" (06:37 – U5)
- label er forståelig
96. betaling – bankoverførsel, user5 ved ikke hvad det er "det må være, nej det ved jeg ikke engang (hvad er)" (07:59 – U5)

- a. label for svær – cabre
97. betaling – sparxpress, user 5 kan regne det ud - ”det må være man laver et lån... 72 mdr svar inden 24 timer” (08:06 – U5)
- a. han kan regne det ud, men først ved at læse teksten.
- b. Han burde kunne regne det ud ved blot at læse header labelen
- c. Sparxpress skal have andet navn, måske ’hurtig lån’ ?
98. betaling – klarna – ved han ikke hvad er ”næh det ved jeg ikke hvad det (re: klarna) er” (08:49 – U5)
- a. der er ikke nogen tekst under, kun hvis han trykker på den
- b. organisationen/navigationen skal være ens for alle 4 betalingsformer (så intet vist tekst eller skjult tekst)
99. . ”nu har jeg glemt at skrive hus nr på” (09:06 – U5)
- a. Ikke muligt at lave fejl, da testsiden blot skulle have tekst for at godkende. Under normale omstændigheder ville man skulle udfylde korrekt med f.eks husvej+hus nr

Godkend bestilling
Her har vi samlet alle oplysninger om din ordre.

Ordrenr: 6629

<p>Kunde</p> <p>morten pedersen alexandragade 5000 odense</p> <p>20969735 mortenbrinckmann@live.dk</p>	<p>Sælger</p> <p>Wheelsshop.dk Vinten Skovvej 42 DK-8700 Horsens Tlf.: (+45) 3313 3313 9 - 15 Mandag - Fredag Mail: mail@autoshoppen.dk CVR: 16844292</p> <p>Bank: Saxo Privatbank, Vejle afd. Reg.nr.: 8147 Konto: 0001115553 IBAN: DK0781470001115553</p>
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- b.
100. han ser ikke ordrebekræftelsen (eller hvad det hedder) før eksperten nævner at den hvis også er det, han bliver spurgt om han ville se på den normalt ”ja det ville jeg da” (11:31 – U5)
- a. organisationen gør at man ikke se den ordre bekræftelsen

Ordrenr: 6629

<p>Kunde</p> <p>morten pedersen alexandragade 5000 odense</p> <p>20969735 mortenbrinckmann@live.dk</p>	<p>Sælger</p> <p>Wheelsshop.dk Vinten Skovvej 42 DK-8700 Horsens Tlf.: (+45) 3313 3313 9 - 15 Mandag - Fredag Mail: mail@autoshoppen.dk CVR: 16844292</p> <p>Bank: Saxo Privatbank, Vejle afd. Reg.nr.: 8147 Konto: 0001115553 IBAN: DK0781470001115553 SWIFT: BRSPDK21</p>
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☐ Jeg har læst og er indforstået med salgs- og leveringsbetingelserne

Bekræft

Tilbage til kurven

Antal	Varebeskrivelse	Pris pr. stk
4	Centerring Plast 70-57 Velegnet til Aud, Chr, For, Sea, Sko,	39,20 DKK
2	Combi Boltopbevaringspose	16,00 DKK
	Frugt:	

- b.
101. ordrebekræftelsen”den bliver vel liggende på min mail hele tiden, hvis det var rigtigt(re: hvis købet var rigtigt” (11:46 – U5)
- a. At det med bekræftelse e-mail er en selvfølge

Ordrenr: 6629

Kunde	Sælger
morten.pedersen@alexandragade.dk 5000 odense	Wheelsshop.dk Vinten Skovvej 42 DK-8700 Horsens Tlf.: (+45) 3313 3313 9 - 15 Mandag - Fredag Mail: mail@autoshoppen.dk CVR: 16844292
20969735 morten.brinckmann@live.dk	Bank: Saxo Privatbank, Vejle afd. Reg.nr.: 8147 Konto: 0001115553 IBAN: DK0781470001115553 SWIFT: BRSPDK21

☐ Jeg har læst og er indforstået med salgs- og leveringsbetingelserne.

Bekræft

[Tilbage til kurven](#)

Antal	Varebeskrivelse	Pris pr. stk
4	Centerring Plast 70-57 Velegnet til Aud, Chv, For, Sea, Sko,	39.20 DKK
2	Com-Boltopbevaringspose	16.00 DKK

Fragt:

- b.
102. salgs og leveringsbetingelser – ikke noget han vil læse. Bliver spurgt om det er noget han normalt ville læse til det svare han "næh" (12:10 – U5)