

Brand-driven UX: Designing workshop guidelines to create brand-driven interactions in digital products

Master's thesis in Computer science and engineering

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to create brand-driven interactions in digital
products**

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Cover: Illustration of workshop guidelines. Source: Author illustration.

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Abstract

With an intense increase in digitalization, many companies' touch-points and products are online. Nowadays, digital products are among the most frequent contact points between consumers and companies, i.e. brand touch-points. Every interaction with digital products contributes to how the user experiences the brand. Therefore, digital products have become essential to the overall customer and brand experience. Consequently, it is critical to design digital products to trigger specific emotions and associations in the user; beyond satisfying user needs, they should express the brand's story and values. However, there is a gap in research paying attention to branding and UX design fields in tandem. Consequently, there are few methods to include both perspectives of UX design and branding in practice. Although still quite ambiguous about what determines a good user experience, researchers agree that attention to detail and the big-picture increase the chances for a "better user experience" [75] [31] [76] [65]. Micro-interactions are often overseen as they can be considered intangible and subtly compared with other functional components. However, micro-interactions influence perceived product quality and brand loyalty, making them central in designing digital brand experiences [65].

This project investigates how UX designers can reinforce brand experiences in digital products by considering micro-interactions by answering: How can UX designers be supported in designing brand experience-driven interactivity in digital products? The project aims to enable a new perspective for UX designers on how digital products can be designed to experiences to affect the brand experience and create brand-driven micro-interactions. The project followed a hypothesis-driven design and research through a design approach. In the early phases of the project, the problem area was explored by conducting interviews, focus groups and benchmarking. The outcome was analyzed in synthesized into three primary insights and workshop requirements. A workshop series of steps was designed, iterated and tested in an evaluative workshop. Finally, the project resulted in a booklet containing workshop guidelines for UX designers and brand strategists.

Keywords: Brand strategy, UX design, Interactions, Branding, Brand manual, Hedonic attributes, Hypothesis driven design

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1

Introduction

Companies' value propositions do not only lie in offering goods and services but in the brand's experience. With an intense increase in digitalisation, many companies' touch-points and products are online. Nowadays, digital products are among the most frequent contact points between consumers and companies [76]. This implies that how consumers perceive brands highly depends on the experience when encountering a brand digitally. Previous research has indicated that the intense global competition in the mobile services industry has resulted in difficulties in maintaining relationships with customers [3] [34].

Every interaction with digital products contributes to how the user experiences the brand and brand loyalty. Therefore, digital products have become essential to the overall customer and brand experience. The shift has raised the interest in User experience (UX) design and interaction design. By definition, interaction design encounters the interaction between a user and a product. Sharp et al. [68] define user experience as the level of satisfaction, pleasure, and feelings evoked when using a product. With current circumstances, UX design as a practice [63] has become vital for industries to bring viable digital products to market. From a brand strategy perspective, UX designers become responsible for designing digital brand experiences. Occasionally, UX designers are referred to as brand reinforcers "to meet customer expectation and strengthen brand meaning"[35].

Users unconsciously read appearance, behaviour, meaning, and story when interacting with digital products - shaping the experience of the brand behind it [78]. This suggests that how users perceive the products is not only about their appearance but how it behaves through interactions. Micro-interactions are functional details that make engaging with products more pleasurable - they determine the "feel" of the products [65]. Similarly, In a study published at the Conference on Human Factors in Computing Systems (CHI) 2016 [57] a set of interactivity attributes potentially impact emotional experiences.

From a brand perspective, it is critical to design digital products to trigger specific emotions and associations in the user; beyond satisfying user needs, they should express the brand's story and values. Norman [54] suggests interface aesthetics are closely related to system acceptability, implying "attractive things work better". Researchers seem to embrace emotion and hedonic quality as one of the critical factors of UX; however, it gets little attention compared to other UX aspects [4]. E.g.

micro-interactions seem to have an impact on the experiences but are frequently overlooked [65]. According to Moran [51] the reason is not lack of interest in interactions, but instead that it is easier to speculate how designers can utilise a specific colour scheme to communicate explicit brand identity.

This thesis will investigate how a co-creation workshop can aid UX designers in creating brand-driven interactive attributes for digital products to enhance digital brand experiences. The thesis is written in collaboration with Ojity, a brand and business strategy agency, which calls for a procedure to reinforce the importance of brand experiences in digital products.

1.1 Research problem

As digital products increasingly constitute the brand experience - there is an emerging need to consider digital experiences from a brand strategy perspective. Today, however, there is little or no collaboration between UX designers and brand strategists responsible for the digital and brand experience, respectively. The lack of overlapping perspective was evident in discussion with Ojity, who highlighted a lack of knowledge of articulating brand identities in high functionality digital products. The problem was further confirmed by interaction designers unfamiliar with the perspective of brand strategy.

This thesis explores how designers can utilise brand strategy in UX design practice; to enable a new perspective on how digital products can be designed to affect the brand experience by creating brand-driven micro-interactions. The aim is twofold. First, the goal is to present a sequence of methods that can be applied to aid the translation of explicit brand identities to interactive attributes in digital products. Moreover, the thesis can be considered a knowledge transfer from brand strategy to interaction design, where the goal is to aid an understanding of digital products from a brand strategy perspective. The thesis aims to answer the main and following sub-questions:

How can UX designers be supported in designing brand experience-driven interactivity in digital products?

-What are the current responsibilities, and motivations for UX designers concerning digital products as brand touch-points?

-What are the shortcomings of brand manuals in designing brand experience (BX) in digital products?

-What can cause a digital product experience to be inconsistent with a brand?

The sub-questions were formulated primarily to aid the author in the proceeding and seek information to answer the main question ultimately. Thus, the sub-questions will be answered with findings from literature- and ethnographic studies from the early phases of the project. The author will answer the main question by designing, comparing and evaluating various methods to aid UX designers in creating brand experience-driven micro-interactions. A similar attempt found in literature is the UXi method, which aims to achieve a consistent perception between brands' digital [76]. To the authors' knowledge, limited research pays attention to UX and brand strategy in tandem. Except for UXi, the theories found can not be transferred to practice. A sequence of methods practitioners can utilise in branding and UX, targeting explicit brand identities and micro-interactions can thus be considered a contribution to the field.

1.2 Stakeholders

The thesis is as a part of M.Sc. Interaction Design and technologies at Chalmers University of technology. The project accounts for 30 credits and will be realised in the spring semester of 2022. Sjoerd Hendriks is the project supervisor and will provide feedback and support. Mohammad Obaid is the co-supervisor and will provide input and guidance throughout the project. Staffan Björk is the examiner for the project and will ultimately grade and approve the thesis. The project collaborates with Ojity, a Gothenburg brand and business design agency. Ojity works with clients worldwide, offering business innovation, brand strategy, and experience design services. With the help of experienced strategists from Ojity, the goal is to achieve a good knowledge exchange between the project and the firm. The primary target group for this thesis is corporate brand strategists and UX designers working with brand strategy and digital product development. However, the findings in this thesis can be of value for others involved in any corporate digital product development without brand strategy experience.

1.3 Hypothesis

Brand strategy and UX design are currently practised in silos to the author's knowledge. From previous research, there is a linkage between UX design and brand strategy [51] [60] [57], highlighting the importance of considering the fields in tandem since digital products largely constitute the brand experience. Apart from a few examples [76], there are currently few methods to aid collaboration between the fields.

Research suggests hedonic and aesthetic aspects to be crucial for user experience [31] [54]. Since pragmatic and hedonic can be separated [31], hedonic aspects could be the lynchpin where an intervention between UX designers and brand strategists is appropriate. The main research questions in section 1.1 addresses the hypothesis by how a sequence of methods can support UX designers in designing brand experience-driven interactivity in digital products.

1.4 Expected result

This project aims to reinforce brand experiences in digital products by providing a sequence of methods for UX design development processes. For example, a toolkit similar to Google Design Spring Methodology [23]. The resulting intervention should underpin a mindset of how digital products are crucial for brand experience. And foremost, the workshop should aid UX designers in designing digital brand experiences by targeting micro-interactions. The project will investigate eventual current pitfalls by interviewing designing UX designers to get first-person impressions from UX development processes. Moreover, the thesis will explore current methods and means to create and articulate brand identities, for example, brand manuals and the

UXi method.

1.5 Delimitations

The thesis will focus mainly on designing procedures to facilitate such intervention and disclaims to verify potential long term implications. The main goal is to answer the research questions by conducting research thought design and ultimately embody the insight in a sequence of methods. Due to the limited time and resources, the thesis should be considered a first step in bringing brand strategy and UX designers closer.

2

Background

2.1 History of branding

People have always needed to mark things; to enable artefact recognition, build trust, and create a sense of shared values [33]. In archaeology, marks found without functional or religious purposes have raised interest for the last decades. Heersmink [33] suggests these marks as a means of transferring collective memories or meaning, either within a generation or across generations. Although different, the essence of adding meaning to entities and artefacts is similar to how we know brands today.

With the emergence of the industrial revolution, the distance between sellers and buyers increased. The sender became more anonymous, and so did the goods. To communicate the origin and quality of the goods, brands became symbols to ensure quality and differentiate products from competitors [42].

From a consumer perspective, brands also became symbols that allowed people to express their social status and belonging. Hence, consumer behaviour was no longer solely about the product and its functionality, but how the products related to people's subconscious desires and need to express identity. Consequently, objects became means to articulate social constructions. The findings indicate materialised cultural identity is a phenomenon as old as humanity itself.

For over a century, brands have become an increasingly noticed phenomenon in business and society. In the world economic forum in Davos, 2004, a survey of CEOs and leaders worldwide concluded corporate brand reputation outranks financial performance as the most crucial measure of success [80]. In 2021 Apple was ranked the second most powerful brand globally. The same year, Apple topped the list as one of the topmost valuable companies globally.

2.2 Brand identity

A brand is the sum of expressions by which an entity is recognized, by stories, visuals, tonality, etc. Every brand has an identity that makes it unique. According to Lélis, Mealha, brand identity is the sum of the perception of emotional and functional aspects related to an entity [46]. Functional aspects are defined by physical assets and attributes of a brand identity, e.g. logotype, colours, fonts, sounds and slogans, which brand makes it unique. Emotional aspects are addressed by the

associations and perceptions of a brand. For example, Prada is associated with a luxury, high-end lifestyle. Similarly, Neumeier [53] emphasizes "[brands] as person's gut feeling about a product, service or a company. It is not what you say it is, it is what [consumers] say you are".

Kornberger [42] describes brands as the sum of functionality and meaning of a company. E.g., "Nike is not just shoes and sports apparel – it is performance". The perceived identity of Nike is defined by what customers and internal members experience from interacting with the brand; its functional assets their emotional meaning. This highlights the consumer's and internal members' power to define brands and concludes that brands only have meaning through people's interpretation. Accordingly, brands can be manipulated by carefully designing functional brand assets, but due to the subjectivity of receivers, designers can only control the brand experience to a limited extent.

Nandan [52] describes brands from a communication perspective, suggesting two distinct concepts to highlight brand as the outcome from communication between firms and consumers. The first, brand identity, originates from the company and refers to how they want to identify themselves, i.e. who they are. The brand identity articulates the brand promise by creating experiences promoting the value customers expect to receive in every touch-point with a company. Brand image is the construction of consumers perception of the brand, based on all notions and touch-points. The brand promise is "packaged" by the firm and "un-packaged" by the consumer, shaping a brand image. Thus, the brand is a sign that only has power through people interpretation of it. Brands can be manipulated by carefully designing touch-points, but due to the subjectivity of the receiver, designers can only control the experience to a limited extent.

2.2.1 Brand leadership strategy

No one can argue the existence and importance of brands. However, there are diverse notions of their influence on business strategy. Some suggest branding still be considered a marketing practice [1]. Others suggest brands be influential in general business practices [42] [32]. The marketing approach to brand strategy approach is more short-term oriented and product-focused. In contrast, the brand leadership model suggested by Kornberger is long-term and focuses on the internal as well as the external environment [42], and influences all touchpoints with customers and stakeholders. As the marketing approach focuses on sales, brand leadership focuses on the brand identity as a key driver in business strategy to ensure organisational alignment and long-term relationships with all stakeholders.

Supporters of brand leadership strategy suggest the brand originates from the company's core purpose and reflect an in-depth understanding of the customer's needs and perceptions. Hence, Keller [39] describe the brand strategy to be the long term process of developing a successful brand to achieve specific goals. From this perspec-

tive, branding is fundamental to an organisation's overall operations [42]. Similarly, [32] argues brands do not evolve from product focus but on corporations' internal processes and identity. Thus the brand is also the key strategic principle that organises companies. The approach of letting all strategic decisions and activities originate from the brand describes the logic of brand leadership.

2.3 Experiences

From a consumer's perspective, the perception of a brand is shaped by experiences from interacting with a company. Brunnstrom et al. [8] define an experience as "an individual's stream of perception and interpretation of one or multiple events". How our experiences are shaped can only be controlled to a limited extent. It depends on what we perceive, what we pay attention to, and the context, previous experiences, and personal traits. Perception can be defined as "the process to interpret and organise information by the sensory system" [29]. By definition, perception is disconnected to the cognitive from the cognitive system [76]. Hence, humans cannot control the process of what to perceive. Attention refers to "the processes of which we select information to what is relevant, and can deselect irrelevant information"[29]. Although the brand promise can be articulated and delivered to result in a certain experience, the perceived image depends on what the consumers pay attention to, the context, previous experiences, personality traits and values. Brands can be considered a cluster of unique functional and emotional values and can provide customers with favourable experiences. Brands' strength can only arise from how consumers perceive it and how the brand experience is shaped over time. Therefore, for this thesis, it is beneficial to clarify how interactions with companies (i.e brand touchpoints) are interlinked to the cumulative experiences of brands.

2.4 A unity of experiences

Lee et al. [45] suggest a dependent relationship between aspects of user experience (UX), customer experience (CX) and brand experience (BX). A person's perceptions and responses resulting from the use or the anticipated use of a product define the user experience, system or service - referred to as the "condition of the experience". Different sub-categories of UX (usability, affect and perceived user value) impact the brand experience different. For example, the study showed usability to have no significant impact on CX or BX. One reason could be users take usability in products for granted. Instead, affect and perceived user value has a more substantial effect on how users experience the brand. Customer experience refers to the subjective response to every interaction with a company and the culmination of a series of brand interactions. BX refers to a brand position that defines the perceived brand value in the consumer's mind. The brand experience is thus the result of cumulative user- and customer experience. To exemplify, if a brand was a person, one could establish UX by "How is it to talk to this person?". CX demonstrates, "How do I feel about being with this person?" and BX ", Who is this person?". Due to their

2. Background

interlinked relation, it is not possible to separate the disciplines of user experience (UX), customer experience (CX), and brand experience (BX) [45].

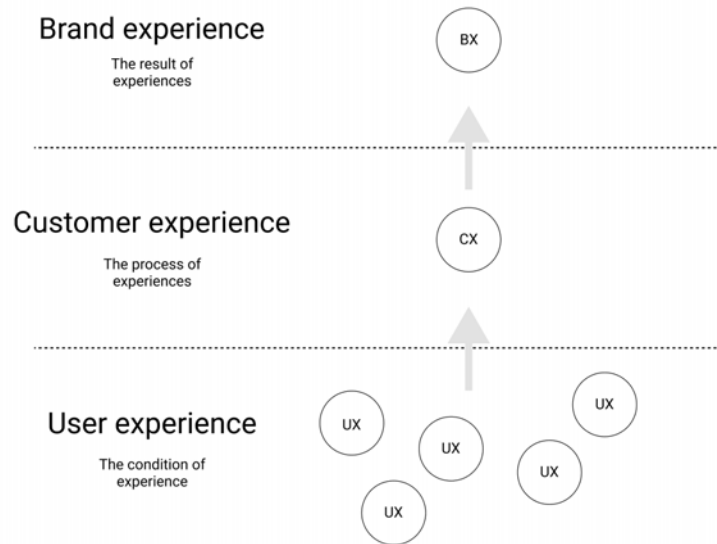


Figure 2.1: Relationship between user experience (UX), customer experience (CX) and brand experience (BX). Source: authors illustration.

Although brand strategy is not solely about designing brand experiences, it is inevitable not to pay attention to it as fundamental when communicating the brand. To increase the chances of positive brand experiences, companies need to unify all touch-points to convey specific brand identity. Despite having different definitions and domains, UX and brand strategy are driven by similar fundamentals in practice; an in-depth understanding of the customer's needs and perceptions to create valuable and meaningful experiences. As UX designers are responsible for designing digital products, from a brand perspective, they are also responsible for developing brand touch-points. Considering the interlinked relationship between UX, CX and BX - it is therefore inevitable not to pay attention to brand strategy and UX design in tandem.

3

Theory

In this chapter, concepts, theories and challenges within the field of brand strategy and interaction design will be addressed. Relevant work, suggesting influences of each in novel concepts, are also presented.

3.1 Hypothesis driven design

Berglund [5] highlight the similarities entrepreneurship with artefact design, arguing both disciplines aim to help design something that does not yet exist. Berglund suggests two broad concepts that describe how project strategy is affected by the organized individuals in the project, the external environment and how to design artefacts and principles that relate to these two. The intention is to clarify the essential aspects of entrepreneurship as a form of artefact design. The described procedure can however be applied in design in any situation where the end state is unknown.

The first one, experimentation, describes how a founder leads subordinates by using artefacts to test explicit hypotheses and learn about the external environment in which the design should be implemented. By continuously confirming or rejecting hypotheses, the entrepreneur gradually adapts the design by analyzing and synthesizing. Thus, experimentation to some extent fits the description of design thinking or research through design. In contrast to experimentation, transformation describes how a group of individuals engage in creative negotiations around an artefact. Since all individuals have different experiences, goals and ambitions, they collectively contribute to creating the venture and its environment. According to Berglund [5], transformation in many ways fits Sarasvathy's [67] description of effectual reasoning. The core pillars of effectual reasoning are the following; the entrepreneur should ask themselves who they are (traits, taste and abilities), what they know (education, expertise and previous experience), and whom they know (social and professional network). Using these means, the entrepreneurs can imagine and implement possible effects that can be created with them by starting with what is closest at hand without elaborate planning. Since many ventures (and design projects) are performed in uncharted territories, deviations from the plan are not an exception but the norm. Elaborate planning and sequential progress is thus rarely the case, and according to Sarasvathy [67], it should not be the goal. Instead, practitioners should utilise available opportunities to execute and revise plans according to the insights gained. Yet, there should always be an articulated goal that keeps the team and activities

together at any given moment.

3.2 Wicked problem

Rittel Webber describe non-defined complex problems in a social context as wicked problems [61]. A wicked problem evolves as new solutions are considered, implying no initial formulation of the problem. For each attempt to create a solution changes the understanding of the problem. Therefore, wicked problems cannot be solved linearly. Instead, the practitioner/designer constantly and simultaneously shifts between defining the problem and forming a solution. Rittel Webber further suggests that no answers to a wicked problem can be right or wrong, but only better, worse, good enough or not good enough[61].

3.3 Differentiating marketing and brand strategy

To some extent, brands are still recognised as the attributes that differentiate goods from those competitors [1]. From a consumers perspective, branding is thus hard to distinguish from marketing. There is, however, a significant difference between the concepts essential to clarify. A rule of thumb is that branding is strategy and concept building, and marketing implements those concepts. Marketing is the promotion of products or services, whereas branding is the process of shaping who you are [81]. Since marketing efforts occasionally originate from brand strategies, it is hard to separate them from an outside perspective. Hence, it is essential to clarify that a brand is not a logo, name, advertisement, or visual identity. It is a central control position in business strategy from a corporate perspective. And from a consumers perspective, it is a set of mental associations which add or deduct the perceived value from interacting with a company [39].

3.4 Brand manuals

Brand manuals are currently used to communicate a company's identity. Essentially, brand manuals are instructions on communicating your brand, articulating all visual details and important notes about the company's voice, tone, and messaging [84]. In concrete terms, brand manuals are documents of reference for everything related to the use of a brand. Thus, brand manuals are a vital tool to articulate and guide internal members to know how to communicate a brand at any touch point.



Figure 3.1: Brand manual template. Shutterstock.

3.5 Design systems

A design system is a set of standards to create a scalable language across digital products and platforms [18]. Generally, design systems consist of components, patterns, and styles that appear as part of the same ecosystem. Well developed design systems can provide multiple benefits, e.g. reducing redundancy, visual consistency and decreasing product to market time due to streamlined design and implementing processes. One of the most well-known design systems is Google Material Design [19], an extensive and adaptable system of components and tools that support UI design best practices. Similarly, Apple’s Human Interface Guideline suggests design solutions compatible with their platforms [83].

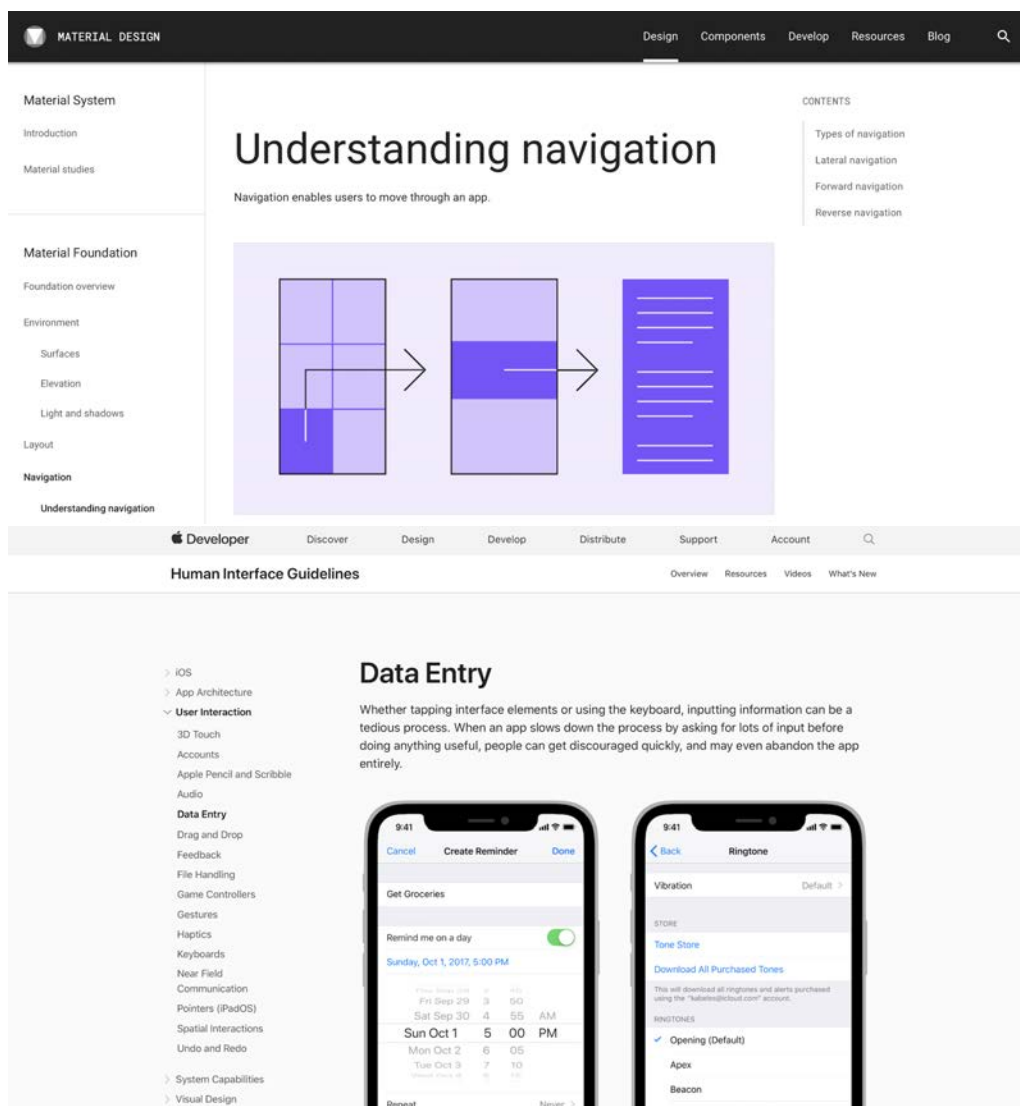


Figure 3.2: Material design guidelines (Source: <https://material.io>). Human interface guidelines (Source: <https://developer.apple.com/design/human-interface-guidelines/>)

3.6 Dimensions of UX design

Following section present relevant UX design theories used in the thesis.

3.6.1 User experience design

User experience design (UX) is a concept with many dimensions and includes sub-disciplines such as user interface design (UI), interaction design, visual design and information architecture. The international standard on ergonomics of human-system interaction, ISO 9241-210 [16], defines UX as: "[User experience is] a person's perceptions and responses that result from the use or anticipated use of a product, system or service". Like brand experience, the definition suggests that UX is driven by the human perception by interacting with a product or service. From a business perspective, the Oxford Journal Interacting with Computer puts that "The goal of UX design in business is to improve customer satisfaction and loyalty through the utility, ease of use, and pleasure provided in the interaction with a product" [75]. Both definitions will be used in this thesis but are limited to digital products only. When referred to in this thesis, UX designers are defined as practitioners responsible for designing digital products considering the definition mentioned above.

3.6.2 Usability

Usability is a subcategory of UX design, related primarily to products ease of use and performance [63]. International Organisation for Standardisation [16] defines usability as the effectiveness, efficiency and satisfaction with which specified users achieve specified goals in particular environments. Rondeau [64] suggests usability to have a positive linkage with perceived quality of products and favourable associations with the brand. More recent research, however, indicates the opposite. Wang and Li [77] and Lee et al. [45] usability to have no significant linkage to customer experience, nor favourable brand associations. With today's range and overall quality of products, one can conclude that usability is essential rather than differential when interacting with digital products and user interfaces. Consequently, usability cannot influence customers to distinguish one digital product from another. However, usability should not be neglected. Digital interfaces not living up to usability standards stand a significant risk of being immediately rejected. Excellent usability should not be the primary goal but an evident requirement when developing digital products.

3.6.3 Hedonic & pragmatic

Hassenzahl [31] proposes a model to define critical elements of user experience. Two universal groups of elements are distinguished; pragmatic and hedonic. Pragmatic product attributes are referred to as required functionality (utility) to manipulate the environment and the way to access them (usability). These attributes fulfil "externally given or internally generated behavioural goals". In contrast, hedonic attributes have no significance for goal fulfilment but emphasize users' psychological

well-being by stimulating self-improvement, expressing identity or provoking memories [31]. Products with high hedonic attributes and weak pragmatism are called "SELF-products". Products with high pragmatic attributes and weak hedonic attributes are called "ACT"-products. The desired combination is products containing both high pragmatic and hedonic attributes.

The hedonic meaning is up to the users' subjective interpretation. Thus, there is no guarantee that users will perceive the product the way designers intended. For example, a product of a particular brand may be hedonic because it expresses an identity for the users. Other products may be hedonic because they stimulate users to do exciting new things, i.e. self-improvement [31]. On the other hand, a product may be seen as pragmatic once it matches externally given goals, such as buying a bus ticket. Thus, the significance of product pragmatism can change according to how internal or external goals change.

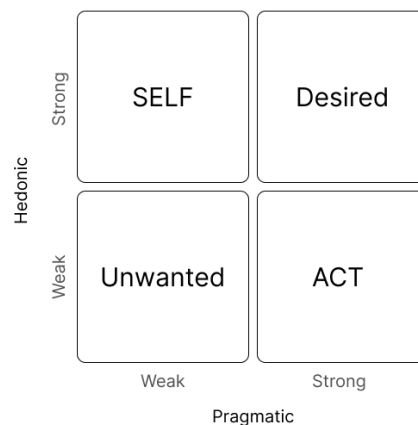


Figure 3.3: ACT/SELF matrix. Source: Hassenzahl, Marc.(2005) [31] Authors illustration.

If each distinguished attribute can be considered weak or strong, it provides the opportunity to explain the product in a two-times-two matrix. The ACT product combines high pragmatism with low hedonism and is mainly linked to the users' goals. On the contrary, SELF products are linked to users' self, e.g., their ideals, memories, and relationships. However, an uncompromising combination of both should be the ultimate design goal [31].

3.6.4 Micro-interactions

Micro-interactions are functional details that make engaging with products more pleasurable - they determine the "feel" of the products. Unlike features (also mentioned as macro-interactions), micro-interactions are not functionalities - but part of the functionality. For example, haptic feedback when switching on the sound of an iPhone or small feedback animations when pressing a button in a UI [65]. According to Saffner [65], micro-interactions are frequently the last part designed

in products and, therefore, sometimes overlooked. However, this is considered a mistake. The combinations of macro and micro-interactions are powerful; paying attention to details and the big-picture increases the chances for a "better user experience". Saffner [65] further suggests micro-interactions are even more important in competitive markets, where slight details highly influence perceived product quality and brand loyalty. Moreover, micro-interactions can aid in attaining consistency between platforms [65]. Although functionalities might differ between a TV, a smartphone and a tablet - the across-platform experience can be glued together by micro-interaction as they enable recognition and cause a similar feel.

3.6.5 UXi Methodology

In "User experience is brand experience", Van de Sand et al. [76] suggest a methodology (UXi) and evaluation methods (UXi Scale) to incorporate brand identities in digital products. The authors argue that to optimise user experience, designers have to go beyond the pragmatic and generally expected aspects of functionality, usability and user performance. To create appealing products, hedonic aspects need to be considered. Hedonism stems from the human desire to seek pleasure and avoid suffering. The hedonic aspects of the interaction should be based on the underlying brand promise of the company. Thus, there is potential to achieve the hedonic identification quality and integrate brand equity in digital products. The UXi method contains three significant phases; semantic mapping, empirical knowledge and digital design codes. The first step concludes a brand briefing where the brand personality is presented or defined. The semantic proximity of words visually maps core brand and secondary values. As defining is the first step, the method thus suggests the procedure applicable on either implicit or explicit brands. The second step suggests that designers transfer the semantic words collected into empirical visual representations. Here, it is essential to consider the cultural context since empirical knowledge relies on people consensus of objects meaning. The last step is to further translate the empirical knowledge representations into digital design codes. For example, Designers can translate a brand value of "energetic" into a volcano, translated into upward striving and orange buttons. Although interactions are mentioned as one of the possible digital design codes to communicate values, visual representation is foremost mentioned.

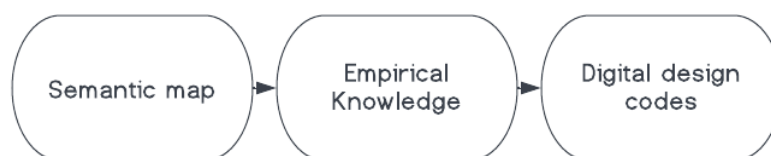


Figure 3.4: UXi method overview: Semantic mapping, empirical knowledge and digital design code. Source: authors illustration.

3. Theory

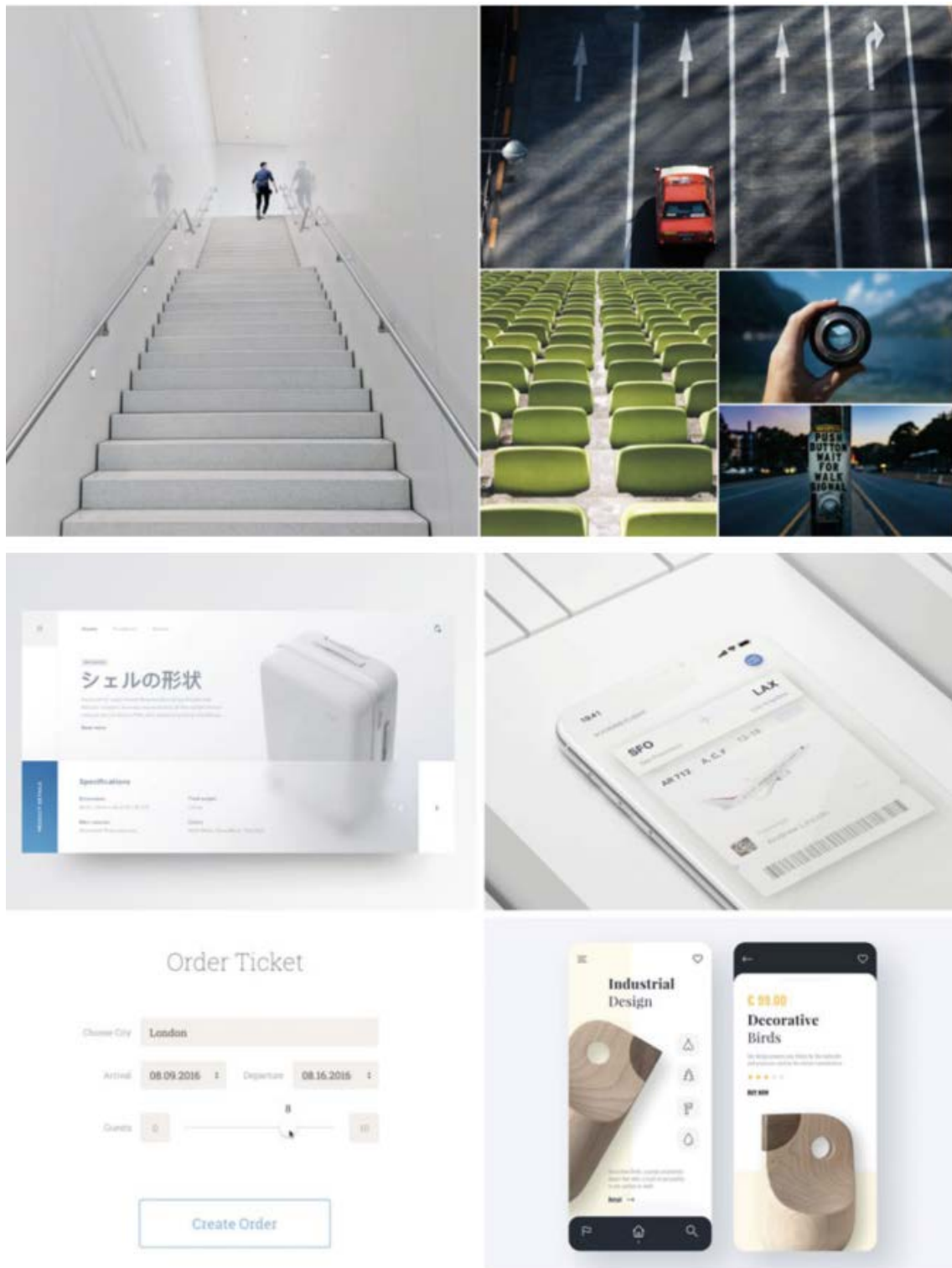


Figure 3.5: Empirical knowledge moodboard and digital design for brand value *Clarity*. Source: Van de Sand, F., Frison, A. K., Zotz, P., Riener, A., and Holl, K. (2020). User experience Is brand experience. Springer International Publishing [76]

3.6.6 Interactions

The identity of a digital interface is determined by several aspects, including visual design and interaction design. How the interface looks and how the interface feels, respectively [51]. As in the method mentioned above (UXi) the visual attributes currently get the most attention when conveying a specific brand identity in digital products. According to Moran [51] the reason is not lack of interest in interactions, but instead that it is easier to speculate how designers can utilise a certain colour scheme to communicate explicit brand identity. Hence, interactions are left aside, or at least less considered.

In a study published at the Conference on Human Factors in Computing Systems (CHI) 2016 [57] a set of interactivity attributes potentially impacting emotional experiences were presented.

Responsiveness: How quick an element responds to user interaction.

Direct or indirect manipulation: Whether a user can manipulate an element with the element itself, or by using a tool.

Precision: How precise a user can interact with a element, i.e. parts of it or the whole.

Pliability: How easy it is for a user to affect change of the element.

Continuous or discrete behaviour: How continuous or discrete the transitions between states are.

Clear labels or no labels: To what extent the element communicates available actions and consequences.

Expected or unexpected behaviour: How much an elements behaviour is aligned with the user expectation.

Consistent or inconsistent behaviour: To what extent do elements behave in established patterns.

Such attributes can be utilised to convey a specific identity of digital interfaces by manipulating how the interface *feels* [51].

3.6.7 Communicative design

Redish [60] suggests similarities between interacting with a digital product and conversation. Thus, designers must set a tone for the site's underlying brand's personality. Along with the visual style, typography, colours and icons, Redish also highlights the importance of using the right words. I.e. if the web page were a person with specific traits, how would she give you the information? There is also a value of providing users with consistency in personality if the digital product is a part of a larger organisation, providing several platforms to interact with customers. To set the right tonality, it is crucial to consider the audience, their motivations, values, experience, and cultural environment [60].

3.6.8 UX strategy

Levy [47] propose an entrepreneurial approach to design in "UX Strategy: How to devise innovative digital products that people want". According to the author, UX designers tend to be involved to a minimum in the strategic processes related to digital products. In turn, this results in UX designers being more involved with user engagement issues rather than customer development and business model design. The lack of holistic perspectives increases the risk of developing products that do not meet product-market fit requirements. Similar to the framework presented by Reis [59], product assumptions should be tested and verified before executing projects. For example, if the product doesn't end up in the hands of users - what is the use of frictionless, well-designed products? The product might meet user needs and requirements and acknowledge the use context. But are the users willing to use, pay or even download the application? In short, a product that works doesn't equal a needed product. Levy suggests a framework that designers can integrate with current UX methods. The tenets of the framework are Validated user research, Business strategy, Value innovation and Killer UX. The aim is to incorporate a business, market and consumer perspective for UX designers and software engineers in general.

4

Methodology

The following chapter presents several processes and methods the thesis may use. The research of processes methods was performed to ensure that previous knowledge from the author was used in best practice for the scope and aim of the thesis. Some methods are selected for the planning presented in Chapter 5.

4.1 Research through design

This project can be considered a research through design project. Research through Design is a process where design activities are applied to contribute to research [72]. Cross [14] suggest designers solve problems through synthesis and analysis simultaneously, by generating multiple solutions, where the ultimate goal is to "change existing situations into preferred ones" [69]. The process originates from product design but can be applied in non-object solutions, as in the scope of this thesis.

Luchs et al. [48] suggest that design thinking is best applied in situations where the problem is not well defined, i.e. a wicked problem. Moreover, Zimmerman [82] argues research through design can easily be transferred from the field of research to the practitioners' community. Since the thesis aims to support UX designers and corporates in general to develop digital products to enhance brand-driven experiences, it is beneficial to increase the chances of the result being adopted in practitioner communities.

Although research through design is an established research method, some argue that the procedure lacks clear expectations and standards for what constitutes good design research which can cause possible pitfalls. According to Forlizzi [21] the research methods would benefit from "some actionable metrics for bringing rigour in critique of design research". Others emphasize that the design community should take pride in its diversity and aim to create practice research on its terms instead of standardized theory [22].

4.1.0.1 The question index

The question index (QI) [44] is an entrepreneurial framework to state learning goals and ensure alignment between purpose and action. When facing a wicked problem, two main challenges are addressed; researchers/entrepreneurs taking action without having a goal and taking the wrong action based on the stated goal [44]. The framework is visualised in a 2x2 matrix, addressing market, product, generative re-

search and evaluative experiment. For each combination, QI suggests corresponding methods. It is notable to say the problem in this framework is not fixed. Kromer [44] refers to the problem as a hypothesis, and each action should correspond to a learning goal related to the problem. The procedure can potentially lead to new insights and new hypotheses/problems. Since the outcome of the thesis is somewhat unpredictable, the QI is applicable to guide the next step to test the hypothesis and verify ideas. The QI can be a complementary guide in design projects to pivot or add new methods when new insights call for new learning goals [44].



Figure 4.1: The question index matrix. Source: Kromer, T. (2019). The question index for real startups. *Journal of Business Venturing Insights*, 11(C), 1-1. [44]

4.2 Double Diamond framework

The double diamond framework, originates from the design problem-solving process [12]. The framework contains four main phases; Discover, Define, Design and Deliver. The first phase, discover, aims to explore the problem space. The second phase, define, seeks to define the problem based on the previous findings. The third phase, design, divergences the solution space to explore possible solutions for the defined problem. The fourth phase evaluates the potential solution(s) that emerged from the previous step. Following methods will be presented in the framework of Double diamond.

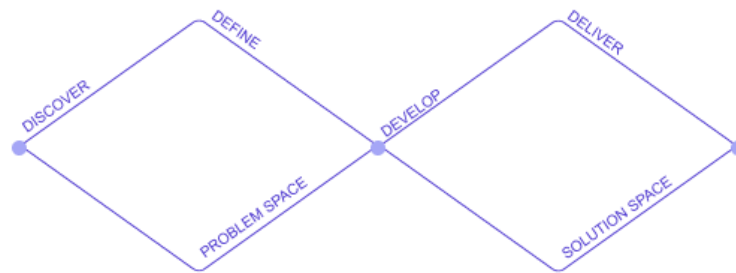


Figure 4.2: Four phases of double diamond; discover, define, create and deliver. Source: authors illustration.

4.2.1 Discovery methods

The discovery phase aims to choose a research problem by studying related fields and domains to deepen the knowledge and identify gaps and potential issues. Following, some methods related to this phase is presented.

4.2.1.1 Interviews

There are mainly two types of interviews; structured and unstructured. A structured interview follows a fixed set of questions and is suitable when the problem is known, and the designer seeks specific information regarding specific things. On the contrary, unstructured interviews have no fixed question. They are best applied in exploratory phases when the problem is unknown, and the designer seeks information to gain an understanding of the domain[56]. Which approach is most appropriate depends on several factors. According to Preece, et al. [56], designers need to consider the interview's goal and the stage of the process the interviews are performed. As mentioned above, if the goal is to gain knowledge of a domain or get first-person impressions, unstructured or open-ended interviews are generally good. A structured approach is usually better if the goal is to get measurable and comparable feedback on a design.

An issue with interviews is that interviewees might not always act as they recall and say[56]. Human tendencies of forgetting and compensating for behaviour they are not either proud or aware of makes it hard to draw accurate conclusions from what they tell. Although it is hard to overcome, it is essential to consider when planning questions and interview procedures[56]. Fitzpatrick suggests practical guidelines to conduct unstructured interviews to avoid biased responses. The method goes under the name "the mom test", inspired by pitching a business idea to your mom and the biased response from that situation. The general idea of "The mom test" is that once an idea is presented by an idea-initiator human tendency to avoid conflict can result in candid feedback as non-committal compliments, defined as "false positives". Therefore the interviewers should talk around the problem and let them lead the conversation [20].

4.2.1.2 Focus Group

Although interviews are usually performed with one interviewer and one interviewee, conducting interviews in a group is also as a typical setup[56]. A focus group usually involves more than three participants and a facilitator steering the conversation. The methods stem from social science to raise issues and get different perspectives on general topics. Although the methods imply that the participants lead the discussion, the facilitators' role is to steer the conversations and make sure that every opinion is heard. It is beneficial to record the discussion to analyze the views and opinions raised [56].

4.2.1.3 Questionnaires

Questionnaires are common to gather statistics about users' opinions and demographics [56]. Its flexibility allows questionnaires to reach a large set of users and is thus efficient when needing large data sets. Since questionnaires are usually online, they can reach users; otherwise hard to meet in person. When developing a questionnaire, it is essential to formulate the questions to analyse the answers. This practice requires skills and effort from the sender [56].

4.2.2 Define methods

Defining aims analyze the gathered data from the previous to understand the domain better and further define the project scope.

4.2.2.1 Thematic analysis

Thematic analysis is a qualitative method to analyze and identify patterns within a data collection. Unlike quantified data analysis methods, qualitative data analysis is highly dependent of the practitioner. Therefore, researchers engaged in the thematic analysis should consider how a data set answers the research question in a meaningful way [43]. Braun and Clarke [7] suggest thematic analysis to be conducted in a six-step iterative process; becoming familiar with the data, generating codes, generating themes, reviewing, defining and naming themes, and locating exemplars. The last step refers to the researcher(s) selecting examples to verify the themes to be related to the research question [43].

4.2.2.2 Affinity diagram

Affinity diagram is a methods that can be used to make sense of a large set of data by organising them based on their relationship. The technique that stems from the KJ diagramming method and is used to organize and analyze research findings and correlations from a large set of qualitative data. Affinity diagramming can also be used to highlight possible interlinked relationships between findings. The method is usually performed in two steps. First, themes and conclusions are written down on notes and second, the notes are structured [55].

4.2.2.3 Semantic Map

A semantic map is a method to review and structure brand values and associations to understand a brand's personality deeper [76]. First, all relevant branding and marketing material is examined to define core values, usually stated in the vision, mission, and brand promise. The next step is to extract secondary values. Unlike core values, secondary values are not always explicitly stated but can be used to clarify the brand further. Primary and secondary values are then sorted on a sheet. The semantic proximity of words is represented by physical proximity; thus, clusters of different meanings appear. The assortment of secondary values aims to define core values and clarify the brand personality in more detail. The method reduces the risk of misinterpretation by shifting and discussing each word of value separately and in combination with others. The clustered island of value words produced can aid a deeper understanding of a brand's personality; beyond first-hand slogans and brand promises [76].

4.2.2.4 Personality slider

Personality sliders can aid decision-making to define the tone of voice, look and feel, and identity in products or brand external communication [26]. The process is simple; differential traits are determined on a continuous slider see fig 4.3. Desired positions are marked and can be used as a reference to guide designs. Personality sliders are occasionally used to evaluate the design and determine if the desired identity is conveyed. For such use, semantic differentials have to be chosen carefully to prevent nudging participants. For example, an equally positive antipole to reliable can be surprising instead of unreliable [76].

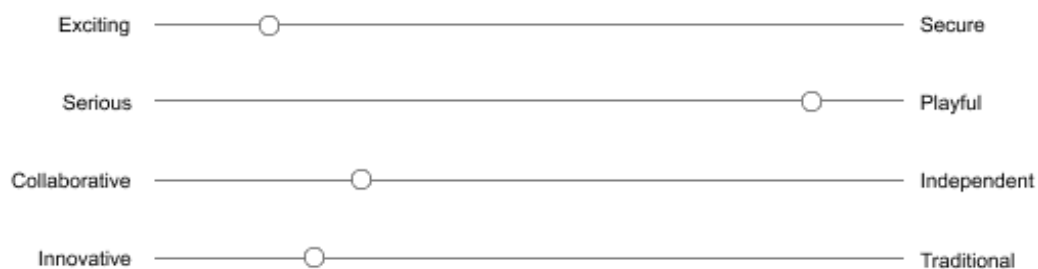


Figure 4.3: Personality sliders. Illustration by the author.

4.2.2.5 Key user journey

Usually, there are multiple valid paths to achieving a goal in any product or artefact. The key user journey is a method to define the ultimate steps to reach a product's intent. The approach aims to determine the ideal default; thus, errors and exceptions should not be considered [25]. The method is usually performed as a group activity, where design teams collaborate to define the path. Usually, the course is characterized by stories. I.e. instead of using wireframes to explain the desired route, a story related to the product's intended use should formalize the path. For example, browse, view products, buy and receive. It is essential to consider the central flow of the product; secondary or alternative routes, such as editing orders or reading reviews, should be left out. The method's goal is to gather a team to understand the primary purpose, focus on the right things and prioritize effort accordingly [25].

4.2.2.6 Gap visualisation

Gap analysis is either a process or a tool to identify gaps and the current and desired situation. When used in organizations, gap analysis results indicate critical areas managers should focus on and manifest the direction to fulfil goals [40]. In general, gap analysis consists of four steps; (1) identifying the current state, (2) determining the ideal situation, (3) highlighting gaps that exist and (4) modifying plans to fill those gaps. Although gap analysis originates from business strategy, the method can be applied to many fields. Accordingly, there are various approaches to gap analysis. The benefit of making a gap analysis is that complex situation can be translated into simplified representations[40]. Although it is not entirely accurate, it can be used to enhance a manageable mental model of the situation; an simplified internal representation to understand an external and rather complex reality[70].

4.2.3 Create

Once the research area and been defined, the following step is to generate solutions. Hence, the phase aims to diverge the solution space to explore possible solutions for the defined problem.

4.2.3.1 Mood board

Mood boards are collages that arrange images, colours, materials, text, and other design elements into a format representing the final design style. Mood boards are standard qualitative research tools used in design communities. Creating a mood board facilitates creativity, and the result can be used to communicate design concepts internally and externally[9]. Mood board as a term usually covers a wide range of board types, each having specific uses. E.g. look and feel of products, interior design or architecture. Cassidy [9] suggests ten best practice recommendations for the process of collectively creating mood boards. Quality of result and level of engagement was considered essential aspects when developing the recommendations. Three of them are:

1. Understand and focus on the purpose of the mood board to be developed
2. Engage with the decisions with continual reflection, thoughts, and reasons for selecting or eliminating visuals throughout the selection process.
3. Be aware of the brief, the assessment criteria, and learning objectives and reflect on the work as it progresses concerning these.

4.2.3.2 HMW-questions

How might we (HMW) questions are used to frame discoveries from problem space and translate them into design challenges. The goal is to a range of ideas that answer the questions. By rephrasing discoveries to design challenges, the design team can ensure that the generated solutions resemble the findings. The questions should be phrased positively and broad to encourage creativity [62].

4.2.3.3 Solution sketching

Solution sketching is a ideation method to generate and expand ideas. Each team member should pick one idea generated from previous methods that they are most interested in. New idea can be combined with existing ones, and concreted in a detailed sketch. The idea is to quickly investigate and develop the an idea thought to be the best [27].

4.2.3.4 Worst possible ideas

In any ideation method the constant goal is to provide good ideas. This can cause a mental obstacle, where people find themselves uncomfortable to say the wrong the things, and not being able to provide useful ideas. Worst possible ideas are taking the opposite approach - instead of ideating on best possible solutions, participants are asked to provide the worst [86]. By analysing what makes the ideas bad - the method can help designers understand what solution that could actually work. The method is best applied in a six step approach:

1. Come up with as many bad ideas possible.
2. List all properties that makes them bad.
3. List what makes the *worst ideas* so bad?
4. Search for the opposite attributes.
5. Substitute other elements of the bad ideas.
6. Combine multiple bad ideas - and analyse collectively.

4.2.3.5 Design studio workshop

Sanders and Stappers [66] take co-creation to refer to any act of collective creativity shared by two or more people. Given the participants get the necessary details of the background, the goal is to generate ideas collectively. Design studio workshops can be conducted at any time during a divergence phase to develop a wide range of ideas from different perspectives [85]. The workshop should be informal and utilise idea-generating activities such as time-constrained sketching to aid creativity and discussion. Additional elements of a design studio workshop are presentations, critique and dot voting.

4.2.3.6 Prototyping

Prototyping is the process of translating ideas into artefacts. Prototypes are representations of design ideas that can be used to generate or evaluate ideas quickly [30]. The ultimate goal of prototyping is thus the entire process of creating, discussing and the insights it provides. Prototypes can be developed in different solutions, each providing specific benefits. Low fidelity (lo-fi) prototypes are early-stage prototypes, far from the end product. Due to their simple nature, designers can easily use them to evaluate concepts with little effort in a short time [30]. High fidelity (hi-fi) prototypes are more detailed representations of an idea closer to an end product. High fidelity prototypes are preferably used when evaluating concepts with users and stakeholders [30].

4.2.3.7 Paper prototyping

Designers can create low-fidelity prototypes with either paper or a user-friendly software tool, depending on the project's scope. A study revealed designers prefer computer-based over paper prototyping [6], as it gives them more freedom to explore without causing "unnecessary" work. However, the authors emphasise some situations when paper prototypes are preferred over computer based:

- When the available prototyping tools do not support the components and ideas you want to implement.
- When you do not wish to exclude members of the design team without sufficient software skills.
- When the tests should lead to a lot of drawings, which then can be discussed inside the design team.

4.2.3.8 Decision Matrix

A decision matrix is a method used to evaluate ideas [28]. Usually, two times two matrix is used, with technical effort (high/low) and user value (high/low) as comparables. These can, however, be adjusted according to the scope. Ideally, the goal is to identify ideas with high user value that are easy to implement. The method is conducted by following steps; first, the team define essential criteria. Secondly,

all ideas are discussed, compared to the requirements and finally positioned in the matrix[28].

4.2.4 Deliver

Deliver aims to evaluate outcomes from the creation phase as well as refining the end concept for final delivery.

4.2.4.1 Critique workshop

The goal of a critique workshop is to quickly evaluate existing content or design to identify room for improvement [85]. The workshop should be conducted in multidisciplinary teams to gain feedback from different expertise areas. Critique workshops are preferred at the beginning of projects to identify shortcomings in existing solutions. However, it can also be applied at the end of the design process as a checkpoint before final delivery, i.e. as a formative experiment.

5

Planning

This chapter describes how the thesis was planned to be conducted. The project will run over 20 weeks, starting in January 2022. A detailed plan of the project is visualised below; see chart X. The thesis was decided to follow an iterative design process and hypothesis-driven design [14] [5]. Essential for this context is that the solution and the project framing will be continuously assessed throughout the project, i.e. solve problems by designing and synthesising simultaneously. As the project proceeds or pivots, the author will document each move's rationale. A time plan was created for each step and is described in detail in the following sections.

5.1 Planning and research

The initial phase of the project should consist of planning and research. The aim is to revise the approved proposal, define the project scope with all stakeholders, and write a planning report. The author initiated this thesis meaning no project description existed initially. This highlights the importance of the author and all stakeholders to discuss goals, execution, and deliverables early in the process.

Since the thesis domain is partly new for the author, the purpose of the planning phase was to ensure that the project was performed on a solid theoretical ground concerning interaction design and brand strategy. Therefore, getting familiar with existing methodologies, definitions, and previous work from both fields is essential. The literature will be gathered from previous courses from M.Sc. Interaction Design technologies, Google Scholar, Chalmers Library and Ojity. The planning report will describe all insights, deliverables, and suggestions of methods.

Although planning and research are a part of the discovery phase, they are separated in this thesis. As the planning and research aim to find insights from existing work, discover aims to generate data from ethnographic studies, market and user research.

5.2 Discover

According to Chaing [11], including users and stakeholders early in the design process results in a better outcome. Therefore, the early discovery phase aims to generate data through ethnographic studies, market and user research. The author planned

three data gathering methods; interviews, a focus group and a survey. The phase will run over four weeks and include planning, execution, and transcribing of collected material.

Interviews will be conducted with corporate UX and interaction designers. The goal is to get a first-person impression and experiences to generate data to help answer the first sub research question; -*What are the current responsibilities and motivations for UX designers concerning digital products as brand touch-points?*. The interviews will be conducted in an explorative and semi-structured manner. According to Preece [56] unstructured interviews with open-ended questions are best applied in exploratory phases when the problem is unknown. Since the designer seeks information to understand the domain, the unstructured manner can be considered applicable.

The interview will partly follow the practical guidelines from Fitzpatrick [20] "The mom test" to avoid biasing and extract valid data. The general idea of "The mom test" is to avoid biased responses from stakeholders by talking around the problem and letting them lead the conversation instead of assuming a solution (or, in this case, the hypothesis). Once an idea is presented, human tendencies to avoid conflict can result in candid feedback to be non-committal compliments, defined as "false positives".

A focus group will be conducted to follow up on the interviews and get different perspectives on the topic. The general goal is to dig deeper into the problem scope, but the insights from interviews will guide and shape the content and focus group procedure.

5.3 Define

This phase will analyze the gathered data to understand the domain better and further define the scope of the thesis.

A thematic analysis was planned as a first analysis method. Due to the qualitative nature of the thesis, a thematic analysis could help with structuring and identifying patterns within a data collection. According [43], it is essential for researchers engaged in the thematic analysis to consider how a data set answers the research question in a meaningful way. Before conducting the thematic analysis, the author will thoroughly review the data from previous collection methods. The research question will guide when deliberating on what quotes and sets of data will be included in the thematic analysis. Affinity diagramming will be applied to analyze potential connections between findings citepernice

A gap visualization is planned to illustrate the primary findings in the analysis. When used in organizations, gap analysis results indicate critical areas managers should focus on and manifest the direction to fulfil goals. The benefit of making a gap analysis is that complex situations can be translated into simplified representations [40]. Although the representation is not entirely accurate, it can enhance a manageable mental model of the situation; a simplified internal representation to understand an external and rather complex reality [70]. The strategy for filling the gaps will be addressed in the next phase by designing workshop guidelines.

5.4 Create

HMW questions were planned to be the first method in the creation phase. By rephrasing discoveries to design challenges, HMW ensures ideas to resemble findings from the previous step. Moreover, the literature suggests HMW questions to encourage creativity [62]. Additional methods such as solution sketching will be applied to proceed and refine ideas. Since the overall scope of the thesis is a knowledge transfer from brand strategy to UX design, it is inevitable not to bring practitioners' views and ideas in the creation phase. Thus, external non-members will be invited to participate in some creative methods.

5.5 Deliver

The last phase evaluates the potential solution(s) designed from the previous steps. First, a formative evaluation with a small group of participants will be conducted, followed by a summative evaluation. The summative evaluation will be conducted in a realistic context with a larger group of participants.

The final evaluation will rely on the subjective response from the workshop participants. According to Constable, [13] it is thus best to define success metrics before running the formative experiment. Otherwise, it is easy to rationalise the outcome by the desired result. Therefore, all methods designed must be supported by theoretical motivations and findings from the project and combined with its desired effect. The comparison of the theoretical hypothesis and evaluation outcome will constitute the result.

5. Planning

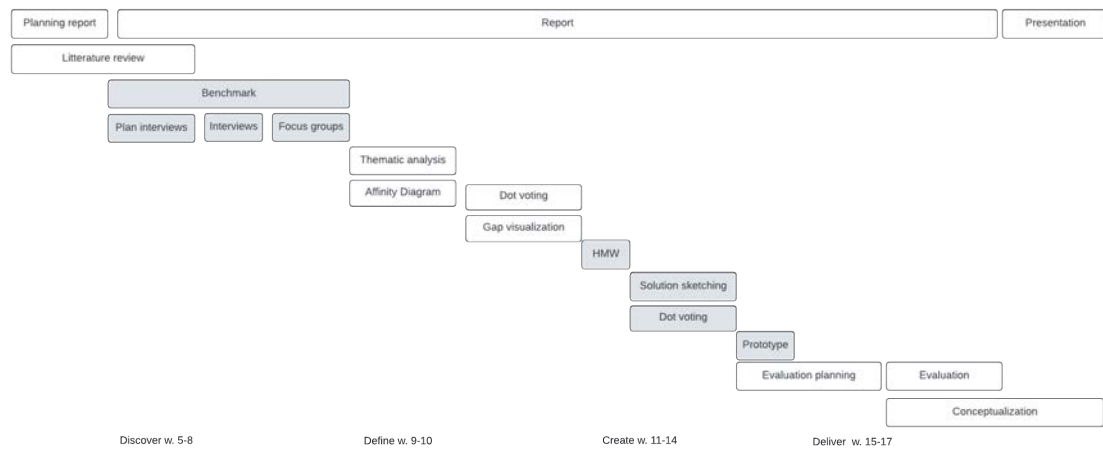


Figure 5.1: Project planning outlines.

5.6 Revised planning

Due to the ambiguity of the scope, the planning was revised by findings and eventual pivots. For example, a thematic analysis was conducted to analyze insights from interviews. The insights guided the scope of the focus group. The QI matrix was used to make the decisions to evaluate brand manuals further as a part of the discovery. All insights from the discovery phase were then analyzed by conducting affinity diagramming.

6

Execution and Process

The following chapter presents the methods and processes used in the procedure of the project. The thesis followed a Research through Design approach to answer the research question and was influenced by entrepreneurship theories of hypothesis-driven design [5]. For all explorative actions learning goals (LG) were defined to steer the process towards answering the research questions. Due to the wickedness of the problem, the plan was revised according to new insights from performed activities. E.g. interviews generated an extensive set of data. The author conducted a thematic analysis to understand and define new learning objectives before conducting the next generative action. Themes from the analysis guided the subsequent actions in the process. See an overview of the process in Fig 6.2.

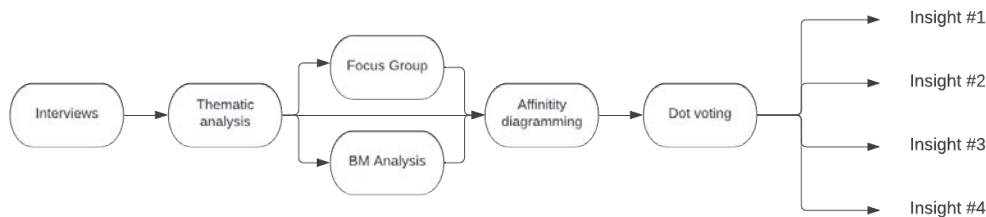


Figure 6.1: Process overview. A thematic analysis of interview data was conducted before subsequent generative actions. All data from Discover was later analyzed through Affinity diagramming.

6.1 Discover

This chapter sections aims to explain how the literature study, interviews, brand manual comparison and focus group was conducted. Each section present setup, execution and findings.

6.1.1 Litterature study

A substantial literature study ensured that the thesis was grounded on solid theoretical grounds. Since the author has limited experience in brand and business strategy, it was crucial to gain knowledge from this domain early in the process to prevent missed perspectives. The sources finding literature were primarily Chalmers library (<https://www.lib.chalmers.se>) and Google Scholar

(<https://scholar.google.com>). The author used keywords such as brand UX, brand experience, and digital brand strategy in various combinations to find related work from both fields. The literature study was complemented with tips from Ojity, primarily advising on good resources to gain knowledge of business and brand strategy.

Some theories included in the thesis were found in books and articles used in courses M.Sc. Interaction Design and Technologies at Chalmers. In addition to publications, information was also found from published conference workshops and talks (<https://digitalsummit.com>).

To structure the literature study, Miro was used as a complementary tool. Significant research was placed on a board and sorted by themes, similar to a mind map or a thematic analysis [43]. The mind-map of the literature helped the author structure the insight, articulate themes for the thesis, and identify potential gaps in research. The board was reviewed by the supervisor as well as a representative from Ojity to make sure no perspectives were missed.

6.1.2 Interviews

Eight semi-structured interviews were conducted to comprehend UX practitioners' processes and motivations. The learning goal was to understand how UX designers with different experiences consider brands when designing and how it reflects their processes. The learning goal was defined to answer the first sub-research question. *-What are the current responsibilities and motivations for UX designers concerning digital products as brand touch-points?*

6.1.2.1 Participants

The participants had various backgrounds but had all experience working with digital products. One was a UX Researcher consultant with experience in marketing and brand strategy. Three were UX designers employed at web agencies. Two were UX designers working at product companies. One worked as a brand UX coordinator at a large automotive company. The last was the CEO of a software company which develops digital products for clients. Some interviews were held in Swedish, and others were held in English.

A consent form was sent to each interviewee beforehand. The participants could thus obtain and consider the information before the meeting. By signing the state, the interviewee agreed to record the interview and the data being used in the report. The recordings were kept until transcribed and then deleted. Contact information to the interviewer was attached in the form if the interviewee had any further questions. The interviewees could also leave contact information if anything had to be clarified afterwards.

6.1.2.2 Setup

The author recorded all interviews to enable transcription and translation. By doing so, the author could make sure that no critical details from the conversation were missed. All interviews were conducted by "The mom test" guidelines. Thus, the aim and early hypothesis (e.g. importance of considering branding and UX in tandem since digital products are critical brand touchpoints) were not mentioned. According to Fitzpatrick, not mentioning the hypothesis of the project reduces the risk of biasing the participants and generating valid data [20]. Instead, the discussions were led by the interviewees' motivations. As the goal was to understand UX designers' motivations and priorities, it was considered a good strategy to let them lead the conversation. What they chose to talk about efficiently highlighted what they felt most important and aided in understanding the current reality. A script was prepared and followed whenever applicable. See Appendix B.

N	Title	Industry	Length (min)	Sampling method
n1	UX Researcher	Consultant	75	Voluntary
n2	UX Designer	Software company	45	Convenience
n3	UX Designer	Software Agency	50	Convenience
n4	UX Designer	Software Agency	45	Convenience
n5	UX Designer	Software Agency	45	Convenience
n6	UX Designer	Software company	45	Convenience
n7	Brand UX Coordinator	Software company	45	Convenience
n8	CEO	Software company	40	Voluntary

Figure 6.2: Summary of interview participants

6.1.2.3 Web agency

Interviews with web agency UX designers were to understand how customers' brands influenced the deliverables. According to the interviewees, to what extent the brand was emphasised varied between projects. If the client requested a site, the brand was highly considered when designing the site's appearance. When the client required specific functionalities, such as a new search function - their brand was rarely considered due to limited budgets.

One interviewee said some customers had stringent brand guidelines that they were urged to follow, usually briefed in a brand manual. One interviewee highlighted it as problematic since the brand manuals guidelines were primarily made for other marketing material, such as posters and business cards. One interviewee highlighted brand guidelines as obstacles to creating viable products when combinations of colours and fonts did not meet readability standards. Both explained they often had to contact the agency responsible for the client's brand identity to discuss potential changes to make them applicable to user interfaces.

6.1.2.4 Product company

The interviews with UX designers working at product companies aimed to understand how their internal brand influenced products to market.

Surprisingly, the interviewees had a limited understanding of their companies' vision and goals. Thus, it was tough to articulate their company's brand. Moreover, the interviewees explained how they had limited influence on the product. According to them, new functionalities were decided by either a product owner or a CTO. The experience of products was mainly left to chance due to streamlined technical processes or access to pre-designed components. However, they called for updating the "look and feel" of their products to attract customers, differentiate from competitors and achieve a coherent experience. All interviewees expressed an interest in design systems. Design systems were used to streamline development processes but also to have a consistency in UIs.

6.1.2.5 UX Brand coordinator

The UX coordinator's mission was to centralize UX design guidelines to achieve a consistent brand experience between corporate digital touchpoints. For example, component library and UX writing guidelines to pinpoint brand tone of voice in products. The interviewee emphasized that it is problematic when unique needs from users completely shape the design of products. The result is that the experience of products within the same ecosystem will be different, causing a diverse digital brand experience. The interviewee highlighted the importance of considering UX as a fundamental part of the customer and brand experience. Thus, UX designers should consider designs from both a user and a corporate perspective. With experience in business and brand strategy, the interviewee underlined its similarities with UX design but expressed how the fields are disconnected in practice.

6.1.2.6 CEO Software company

UX design was not part of the CEO's primary responsibility but had been in the early phase of the venture. In the company's early years, the interviewee was responsible for communicating with customers and designing UIs according to their

requirements. Reflecting on how the clients' brands affected the design, the interviewee mentioned communication and vision involvement as critical components. Although brand manuals sometimes were a part of the communication - the interviewee had a similar experience as web agency designers; brand manuals lacked guidelines for UI design and were hard to interpret. Instead, the whole team must have a shared understanding of the client's vision to meet their expectations of digital products.

6.1.2.7 Expert interview

Unlike the other interviewees, the UX researcher had experience working with branding and UX design in tandem. With many years experience of working in both fields, the interviewee was considered an expert.

The interviewee highlighted how UX and branding are usually siloed in organisations and how old preconceptions of UX and branding flourished to the disadvantage of firms. The interviewee highlighted how much the fields could gain from each other. For example, by utilising UX processes in branding projects to enable understanding of customers and evaluating concepts. Or how UX could become a more prominent part of businesses by incorporating brand vision in designs. Moreover, the interviewee highlighted how the "feel" of digital products is usually neglected or forgotten. Feel was explained as if the digital product was a person; how would it respond to the users' input through interaction patterns and animations. According to the interviewee, the reason was that few designers understood how much details of animations and interactions affected the experience of a product. And that experience was hard to measure compared to usability metrics.

6.1.3 Focusgroup

The aim of the focus group was twofold; to further explore the problem area and investigate relevant findings from interviews. The aim of the focus group was articulated in three learning goals (LG):

LG1 Understand implications when digital products are designed by brand manual guidelines.

LG1 Understand what constitute the experience of digital products.

LG2 Understand how UX designers evaluate digital products from a brand strategic point of view.

The first two goals emerged from the interviews, which implied the brand manual has shortcomings for designing digital products and confusion about what determines the experience of digital products. Both learning goals were related to the third sub-research question; What can cause a digital product experience to be inconsistent with a brand? The third goal was added to investigate if benefits could be obtained if the product was evaluated from a brand strategy perspective. The two focus

groups were conducted online and lasted for one hour each. See focus group outlines in detail in Appendix C.

6.1.3.1 Participants

For each focus group, four participants were invited, three males and four females. All participants were second-year students at Interaction design and technologies at Chalmers. Information was given to the participants beforehand, and they were asked to download a news app to use during the focus group. A consent form was sent out to participants to approve the session to be recorded and the data used in the report.

6.1.3.2 Case background

The focus group narrative was a true story with some fictive elements. A couple of years ago, a local newspaper went through a strategic change. Due to a broader supply of news and information than ever at that time, the newspaper struggled to maintain its business idea of selling information and journalism. Instead of buying the local newspaper, their customers could easily obtain news from any newspaper worldwide or for free via social media.

With help from external business and brand strategists, the newspaper redefined its role and brand. In a complex world of endless information, the newspaper wanted to build a strong brand associated with credibility and a reliable source of information. Their new brand should be characterized by high-quality content, consistent packaging and experience in all formats. They launched a new digitalized offer and designed a new visual identity, inspired by "old print newspapers", to communicate their heritage as the first newspaper in the city and thus obtain credibility. The guidelines for the visual identity were summarised in a brand manual and should premier all touchpoints with customers, e.g. print, commercial, web page and merchandise.

As a part of the digitalized offer, the newspaper completely redesigned its app. Like the rest of the touchpoints, the app's user experience should be associated with credibility and high-quality content. The redesign was conducted by the newspaper's internal IT department. Brand-manual guidelines were fully applied when developing the app but with no UX designers involved.

6.1.3.3 Setup

The focus group was divided into three different phases. First, the facilitator presented mentioned above information about the newspaper's history and strategic changes. The visual identity in different context was presented, see fig 6.3. The slogan capturing the brand promise was presented in a movie. The participants got a few minutes to familiarise themselves with the app. As a warm-up, they were asked to share their first impressions of the application.

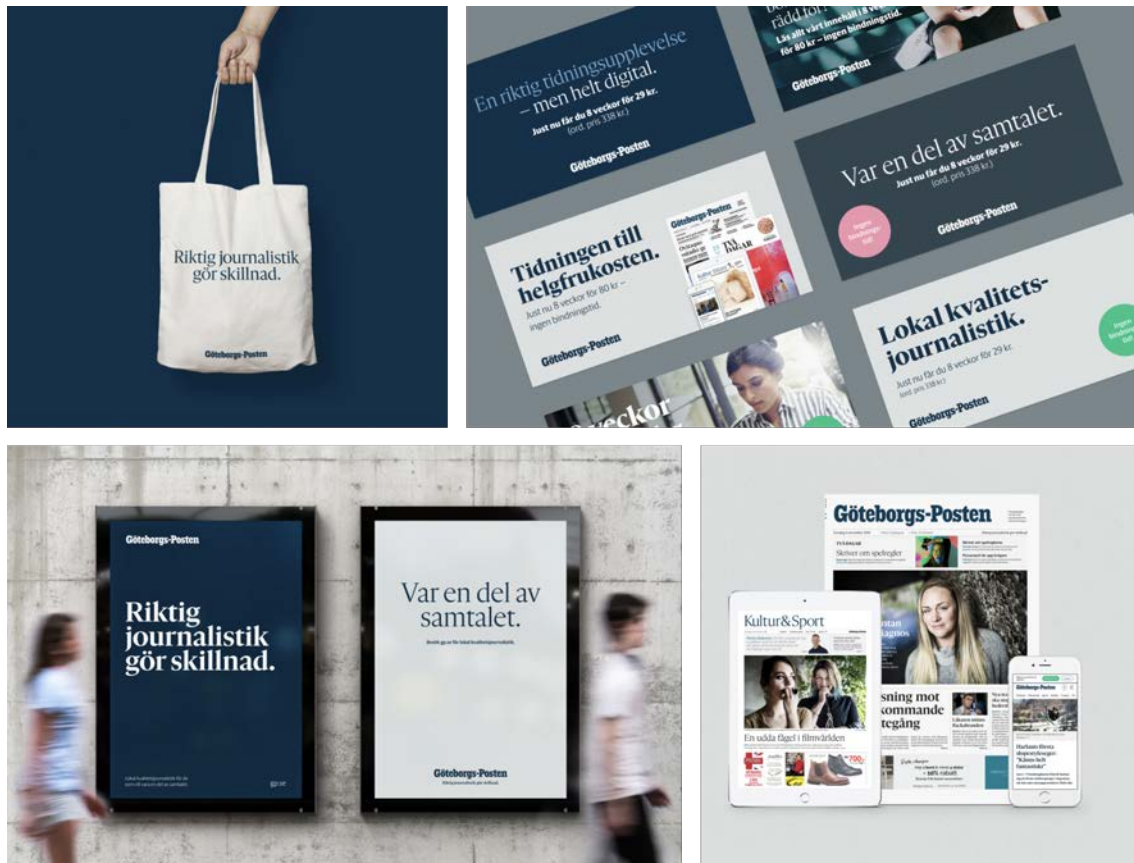


Figure 6.3: Visual identity in different settings. Source: Ojity.

In the second part, the participants were given a task framed in a fictive story. Before launching, the IT department at the newspaper needed help evaluating the app. The participants were asked to provide advice and feedback to the fictive developer before the app went live. At the end of the session, the facilitator asked the participant to discuss what they thought the goal of the strategic change was and how the app could contribute to it.

6.1.3.4 Outcome

When asked about first impressions, all participants said they liked how the app looked. They expressed they liked the appearance, and it looked similar to the material they had seen from the brand, e.g. the newspaper in print, commercials and merchandise. One said, "I like that it looks like a paper newspaper. It looks serious. It is so clear that it is [the newspaper], which is nice." Another said, "I like the visual impression of the app; it looks seamless compared to other things they do."

6. Execution and Process

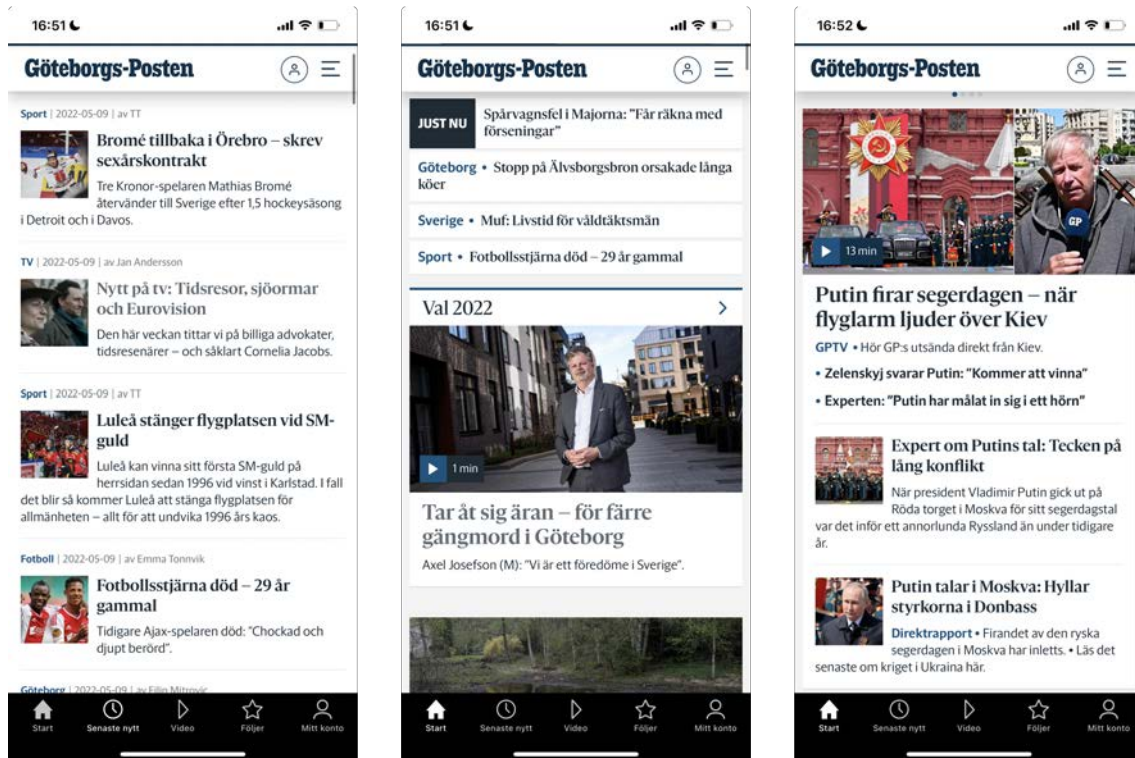


Figure 6.4: The user interface of newspapers app.

After using with the app, some participants changed their mind. Some said they experienced the app as messy, inconsistent and unpredictable. One said, "I would say it's pretty messy. It jumps from left-right. Or somewhat up and down." Another said, "I'm a little unsure. At first glance, font choices and colours convey a sense of [the newspaper]. But there is quite a lot still to work with. But I cannot say exactly what it is.." A takeaway from the focus groups was that the app's look was in line with the desired brand experience. Still, their product experience was negatively affected by unpredictable interaction patterns and behaviour, e.g. inconsistent scroll speed, change of colours when transitioning between pages, and non-existent model-less feedback. This made the participant doubt if the app would contribute to the brand's strategic vision and goal of becoming a reliable and credible source of information. The finding correlates with theories of interactions, suggesting inconsistent or unexpected components behaviour impacts users' emotional experience [57].

Some participants suggested how features and interactive elements could be modified so that the app could behave in line with the presented vision of the brand. For example, some participants suggested tweaking the ad's appearance to separate them from articles. One said this would "improve the app's credibility" and make it feel less than an "average fake news homepage" where ads override and are hard to differentiate from the articles. Others suggested changing the loading mechanism of content to achieve a more seamless flow when scrolling the feed, which would make the app feel more predictable and thus reliable and credible.

6.1.4 Brand manuals comparison

An analysis was made to understand the content of brand manuals and possible shortcomings for support for designing interactive products. Two learning goals were articulated based on the insights from the interview, which highlighted dissatisfaction among UX designers with brand manual guidelines as support when designing digital products. The learning goals were defined to ultimately answer the second research question: What are the shortcomings of brand manuals in designing brand experience (BX) in digital products?

LG1: What type of information is most common in brand manuals?

LG2: What guidelines are applicable for digital products?

6.1.5 Setup

In total, 30 manuals were analysed. Two manuals were given from Ojity, and the rest was randomly sampled online. The brand manuals ranged from different businesses—e.g. automotive, furniture, software applications, cafe, regions, fashion and foods. Some of the brands were unknown to the author; others were familiar. All were compared by content and how manuals communicated the guidelines. To visualise content comparison, a chart was made. See full chart in appendix A.

6.1.5.1 Outcome

As described in the theory chapter, there are some core elements in brand manuals. This resembled the brand book comparison.

All investigated manuals contained details of how to use the logotype in different contexts. Colour schemes were presented with HEX and RGB codes. Text styles and when to use them were exemplified. Photography guidelines were defined by explaining what the images should express. In those identities containing icons and illustrations, it was described how and how not to use them. In some, but not all, tone of voice and vocabulary was defined. I.e. guidelines for capturing brands' personality by using certain words and phrases. In general, most examples of applying guidelines were communicated with printed examples. E.g. how to use logotypes on business cards, merchandise and commercial posters.

	Logo	Colors	Illustration/ Icons	Photography	Core Values	Mission/Vision	Tone of voice	Typography	Video	Interface guidelines	Interactions
Starbucks											
Walmart											
CEVT											
Skype											
Urban Outfitters											
Allenware											
IKEA											
Audi											
Twitter											
Aurobay											
Uber											
Youtube											
Dropbox											
Zendesck											
SEB											
SLU											
Almi											
Uppsala											
Berkeley											
BMC											
Cloud access											
Hotell premien											
APEC											
Telge											
Granberg											
Switcher											
Asana											
Attivo											
Slack											
Snapchat											
n=30	30	30	19	17	13	11	18	24	7	8	3

Figure 6.5: Brand manual comparison chart.

6.1.5.2 Exceptions

In some brand manuals, digital guidelines were presented. Unlike all others, Audi provided an extensive section of digital brand guidelines, referred to as *UX paradigms*. The following quote introduced the section of digital guidelines;

"The Audi brand is not only defined by its visual appearance. When it comes to interactive channels the question also has to be asked: what defines interaction with the brand across all applications and devices? ... We set ourselves the goal of making interaction as simple and as positive as possible for our customers so that the experience is associated with the brand, thereby supporting lasting loyalty" [2].

The digital brand section contained a range of guidelines. Except from UI colors, grids and text sizes, Audi provided also interaction design guidelines. For example, in between tab transitions, components responsiveness and animation curves. All guidelines stemmed from how Audi wanted the brand to be experienced digitally, implying the Audi brand not to be a static structure but a living interface [2].

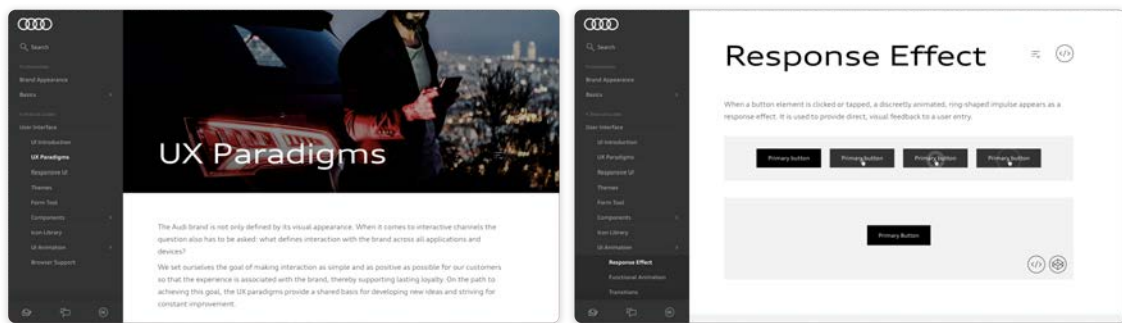


Figure 6.6: Audi digital brand guidelines.

6.1.5.3 Reflection

Few brand manuals contained digital guidelines that could be applied directly to digital products. Since the majority of the examples of how to use visual guidelines were non-digital, this may indicate that the digital brand experience is not always as considered as other brand touchpoints. This is problematic, given digital products are among the most frequent contact points between consumers and companies [76]. It is worth mentioning that the brand manual is not the only point of reference. Digital guidelines are likely addressed in the brands' potential design systems. However, this cannot be confirmed in the comparison. The insights from previous studies suggest that brand manuals are frequently used when designing digital products. Given this, the brand manual analysis result still indicates a gap in instructions on creating digital brand experiences.

6.2 Define

This chapter section explains how the thematic analysis and affinity diagram were conducted and how it resulted in primary insights and requirements. Each section presents setup, execution and findings.

6.2.1 Thematic analysis

A thematic analysis was conducted to analyse data gathered from interviews. At first, interview recordings were transcribed and printed out. The author read through the material, highlighting interesting quotes with a marker. The colour of the marker represented the interviewee's background, e.g. UX designers working at agencies were marked with pink, product companies with green etc. To further distinguish each interviewee, the number of each interview was written on each quote. This was done to see potential patterns between the participants' backgrounds and avoid creating patterns based on a single interviewee's response. The quotes were cut out to separate units.

First, all quotes were reviewed and sorted into potential themes. In the second step, the author invited a non-member of the project team to participate in the analysis. By inviting a non-member when analysing, the author could validate the data without potential preconceived notions gained during the project procedure. The non-member had previous experience conducting qualitative analysis and was familiar with thematic analysis. The author informed the thesis scope and the procedure of the interviews. However, the early findings were not mentioned to avoid bias. The non-member was encouraged to take the lead when sorting the quotes, and the author facilitated the procedure by asking probing questions. The process was iterated until a set of new themes emerged.



Figure 6.7: First versus last iteration of thematic analysis.

6.2.2 Themes and subthemes from thematic analysis

Following sections describe all themes and sub-themes found during the thematic analysis.

6.2.2.1 Digital experience

The appearance of products is considered important

Good visual impression of products was considered necessary. Colours, fonts, and layout were mentioned to express and resemble digital products' corporate image and brands. This attitude recurred among both UX designers working at product companies and agencies.

"Look and feel .. it's not my favorite area in UX. But for me, it means that our company image is resembled in our product. Everything from colours to fonts to how the layout is composed." i2

"We get a picture of what something should look like. But there is rarely any responsiveness included. How does this button react when you hover over it? It is a lot of work for designers to fix all these steps. So we rarely consider it." i7

"A lot of customers have a strong vision of what the product should look like." i5

"Look and feel is so heavily used, both in UX and marketing. And we all know what feel is. And I was wondering myself what that actually means. So I asked around: what does look and feel mean to you? And no-one had a clue. Everyone knew what look what, but no one knew what feel was." i1

Design systems restrict freedom of design

Design systems were used by all interviewees working at product companies. Decreased development time and consistent looks of products were emphasized as primary benefits. However, the interviewees also highlighted the disadvantages of design systems sometimes restricting freedom of design, e.g. designers had to compromise ideas due to components at hand. One also mentioned their design system to be visually generic, which made their product look dull.

"We have a set of components that the developers must use as a starting point." i3

"You can change some things. But there is always this considerations if it worth it or not. Should they spend time on creating a new component? Or can the designers solve the problem with something we already have?" i3

"When I first started, we did not have a design system. So my colleague and I created one as soon as a started here. It makes things so much easier." i5

“We use material design for android, and the corresponding guidelines for iOS. You get a lot for free then. But to be honest, it is quite generic.” i2

Subjective opinions lead to diverse experience of products

Five interviewees expressed concern regarding the inconsistency of their digital products. Subjective opinions and diverse development procedure was mentioned as primary causes. One participant expressed that diversity occurs due to UX designers’ primarily responsibility to meet user needs. Since the requirements differ between views - the overall impression of the system gets diverse.

“There are hundreds of different touchpoints. Customers, stakeholders, suppliers use them. And the user experience on all these touchpoints is different since they have been developed differently.” i4

“We are quite unsure about how the product should look like. And we dont always agree of how things should look.” i5

“We have a range of different products on the market. But most of them look different. Mostly since they have been developed in different times, by different people.” i4

“So the experiences of the different systems are entirely different. Honestly, you can compare 130 other digital products from [company], and you would not be able to spot one single common denominator except the logo. They are all driven by different needs. And this is something we need to assure centrally, to create some red thread throughout the various departments.” i4

6.2.2.2 Brand communication

Brand manual guidelines are hard to apply

All four interviewees who had experience working with brand manuals expressed they were problematic or hard to use as guidance when designing digital products.

“The short answer is damn hard. Here is the feeling we want to convey. And then I sit and look at a picture with some colours, photos and fonts. And then I’ll make an app that is experienced the same. I thought that was very difficult.” i8

“The brand team put together a brand document, and they have colors schemes and fonts and stuff. And that document is wrapped in gold and sealed with a bow. And then it is given to UX. “Your welcome UX” And then UX take up that book, and they open it up for the first time, haha, ever. And they are like “okey” - and make the buttons with those colors and those fonts. And there is no, or very little collaboration.” i1

“Brand guidelines are interesting.. They are rarely designed for digital experiences. Those we have gotten, they are usually designed for ads, prints, product tags videos and such. So we usually have to complement with fonts etc. that works for interactive products.” i6

“I just don’t know how to translate them. Maybe some bureaus are doing that, but it has not reached us yet.” i7

6.2.2.3 Technical depth

Streamlined development processes

All participants working at product companies explained they sometimes compromised their work to improve developers’ prerequisites. For example, they tweaked designs to match existing components in code libraries or handed over sketches with comments instead of building interactive prototypes.

“I usually hand over sketches to the developers. Since we are using already existing components, it easier for them that way.” i5

“The design process is not followed as I did in school. There is a lot of going back and forth. And at the end of the day, I just need to create what the product owner wants.” i5

“I hand over a pile of sketches, with some comments of how things should work.” i2

Design- and developer teams operate independently

Three participants worked exclusively with developers and tech-lead in RD teams. In those cases, the RD teams were the only ones participating in the development process and reviewed the design from sketch to launched product.

“In my team, I work with front-end and back-end developers. And app developers. And the product owner.” i5

“Im in the RD team. Currently Im the only UX designers among with a lot of developers.” i2

“I show progress on the demos, but then people from the RD team attend.” i5

“I am in the design team. And I work most of my time with the rest of the developers.” i2

Technical hierarchy in design teams

Four participants expressed that colleagues with higher technical skills significantly influenced the teams. Two said they sometimes felt insecure due to not having the same technical experience. This sometimes hindered them from sharing ideas since they were unsure what could and could not be implemented.

“I understand that it turns out in this way. I mean, they have once built the product. They know what is best for it. And then it becomes very awkward if I come and say something different.” i3

“I get projects to me. So I guess it is the product owner, or the board members, who decides what we should do and how we should prioritise.” i5

“Sometimes, I’m afraid of missing something since I don’t have the technical education as the others.” i6

“It is the product owner who have decided. We need this function, design and develop it!” i2

6.2.2.4 Corporate vision

Important to be involved in corporate vision

Five participants explained it is essential to be involved in business visions to create good designs. For agencies, it was essential for long-term collaboration with large deliveries. A similar pattern was found in UX designers employed by a product company, suggesting vision involvement was important to know how to prioritize designs.

“If it is a long term collaboration, it is crucial to know who they are, their visions.” i7

“It is so hard to know how to prioritise, if I don’t know where we are heading. I miss that clarity. I think a vision would help to feel motivation in what I do.” i2

“So extremely important. It is so common for companies to come to us and say that we want this. This is the problem and we want exactly this solution. And it is so often that you understand after such a five or six meetings that it is not at all the solution they want.” i8

“We often you miss that part, with the brand and the vision. And instead just - develop this product. It will never be good in the end. So I think being involved vision and the brand is an important component for a successful project.” i8

Lack of business vision involvement among designers

Surprisingly, none of the UX designers working at product companies could articulate their corporate vision or core values. One said the company's strategy and future goals were under development but were involved in the work.

"I guess our vision is to grow. Simply put. Expand to other businesses areas." i3

"I dont know really.. I guess it is an always ongoing work. But right now, I dont have any idea where we are heading, and where we want to be in say two or five years. I think that everyone has their own vision. Decisions are taken here and now."
" i2

"I cant say where we are heading. We want to create a more useful product." i5

"How many times have you heard a UX talk about "I'm an advocate for the USER!" And all they want to do is to look at the user. And it is extremely important, and the right thing to do. But that is only half of the story. You need to embed yourself in the organization processes. And be part of your organization's processes." i1

6.2.2.5 UX perceptions

Desired user-centered strategy

A common theme was that interviewees aspired to become more user-centric in their work. Knowing and meeting the customers' needs and desires was considered a key element in bringing valuable products to market. Therefore, some wanted more direct contact with users and customers.

"We need to get to know our customers, so that all initiatives can come from us. So that the ownership is transferred from the CTO to the UX team. It is us that should have that competence." i2

"We want more contact with our users." i5

"Interview existing customers, but also potential ones. How they use the product and what they need from it. We want to make the product more usable." i5

"Identify the needs from our customers. To find out what functionalities they are willing to pay for." i2

Perceived contradictions between UX and brand strategy

Three interviewees expressed there to be a contradiction between branding and UX.

There was confusion about how to pay equal attention to both simultaneously - suggesting a divergence. One interviewee phrased branding to focus on conversion and persuasion and UX design to focus on the needs and motivations of the users. Two designers expressed that branding efforts were thought to potentially harm the pragmatic quality of products. The theme correlates with statements from the literature, suggesting confusion about what branding is [1]. The diverse notions might cause why there is very little or no collaboration between UX design branding.

“I have had conversations like that so many times. You cant do that! It is to weird, it will destroy the functionality and usability.” i6

“How are you suppose to combine good [UX] with branding? Or maybe you can. But then you have to take away a lot of fun things.” i3

“UX don’t have that motivation, we try to understand the customers. We are not trying to persuade people.” i1

Perceived similarities between UX and brand strategy

Two participants had previous experience with brand strategy. Those two were the only ones highlighting the similarities between branding, UX and business strategy, implying both cores are to create value for users and customers by design. The findings correlate with the thesis hypothesis; theoretically, branding and UX are driven by similar motivations but diverse in practice.

“So much. And that’s what I realized when I started doing it. How closely related they are. It feels like it correlates very much, even if there are two completely different fields then.” i8

“In theory, it is a clear connection. You strive for the same things, value creation. But in practice it is not really the same thing.” i4

6.2.3 Affinity diagramming

Affinity diagramming was conducted to analyze all insights from explore methods. All findings from the focus group, brand manual comparison and interviews were written on post-it notes and placed on a whiteboard. Additional notes of findings from the literature study were used. The procedure allowed the author to visualise connections, compare finding and write comments and ideas. The procedure was iterated, and each version was tested with findings from the literature study.

For example, desired user-centred approach among designers explained UX designers' motivations but was deemed not to aid in answering the main research question; How can UX designers be supported in designing brand experience-driven interactivity in digital products? Similarly, technical depth and streamlined development processes could explain why aspects of experience design are neglected, negatively influencing brand experiences in digital products, but could not be addressed in a workshop. Therefore, it was decided to only prioritize some of the findings for the upcoming creation phase. The green dot defined some insights as "interesting for the next phase". Although dot-voting is recommended in groups, this exercise was done by the author alone. However, the result was reviewed and discussed with the supervisor and Ojity employees to ensure the prioritization matched their expectations. In this way, the scope for the next creation phase was defined.

6.2.5 Summarized findings

The summarised findings are the outcome of the dot voting. The following insights are prioritized to address in the creation phase.

Interactive design language affects the brand experience of digital products. In line with notions of digital products' response to user interaction determine the "feel" of products from literature[51], the qualitative findings from focus groups suggest interactions and component behaviour largely affect experiences of digital products. The look of the digital product used in the focus group was considered on-brand among participants. However, inconsistent interaction patterns negatively affected the experience. This was considered a cause why the digital product experience deviated from the brand's strategic vision. From the interviews, it was evident that most UX designers focused on digital products' visual appearance to convey brand identity in terms of colours, shapes and fonts. Well-thought-out brand-driven interaction patterns can thus be the missing piece for creating strong brand experiences digitally.

Investigated brand manuals rarely contained digital attributes, implying them to be insufficient guidelines for designing digital brand experiences. The brand manual analysis revealed that brand manuals rarely contain digital guidelines, less so interaction principles. The majority of guidelines instead focused on non-digital touch-points, which can be considered problematic, given digital products are among the most frequent contact points between consumers and companies [76]. The shortcomings of brand manuals were confirmed from the qualitative analysis, emphasising that UX designers found brand manuals inadequate or complex to apply to digital products. In the same vein, findings from focus group analysis suggest that the brand manual guidelines can only be transferred visually to digital products. Thus, other aspects affecting the experience of the products, such as interaction patterns, are up to UX designers' interpretation of the brand.

Brand involvement seem critical for designing digital brand touch points

The interview findings suggest that brand involvement for designers is crucial. Given the current gap in explicit digital brand guidelines further emphasizes the importance of awareness of the brand's vision to prevent misinterpreting the desired expression, causing conflicting digital brand experiences. The study suggests that this may be difficult in practice due to misconceptions about branding in UX communities. Similarly, some UX designers expressed that branding efforts were thought to potentially harm the pragmatic quality of products. The qualitative research further implies no or little collaboration between UX designers and brand strategists.

6.2.6 Requirements

The following list present requirement for the workshop, based on the critical findings mentioned above. The list of requirements replaced gap visualization, which was initially planned to summarize findings.

R1: The workshop should target interactions and responsive components behaviour, as interactions was found to have a significant impact experience of digital products. A brand specific interactive design language can thus enable digital brand recognition and increase brand experience of digital products.

R2: The workshop should educate similarities of branding and UX, to address disadvantageous misconceptions between fields. By highlighting similarities from theory, it could promote more collaborations between the fields.

R3: The workshop enable insights in brand strategy processes, as vision involvement was found to be crucial for designing brand consistent digital experiences.

R4: Brand manuals should be a part of the workshop. As brand manuals convey identity in terms of tonality and visual expression, brand manuals can be the starting point of designing a brand specific interactive design language.

6.3 Create

This section aims to explain how the creation phase was conducted. Each section presents the setup, execution and outcome for each step of the process. As the main research question suggests 1.1, the goal is to design a process that can aid designers in designing brand-driven interactivity in digital products. Before entering the creation phase, it was decided to design co-creation workshop guidelines. Some of the insights suggests a distance between brand strategy and UX design. Given the benefits of co-creativity activities from literature, a co-creation workshop would be a potential approach to meet problems found from the insights.

6.3.1 HMW questions

The ideation session started with rewriting the prioritised findings from the analysis into four How Might We questions.

HMW emphasize the similarities between UX design and branding?

HMW encourage collaboration between brand strategist and UX designers?

HMW mediate a shared understanding for a brand strategy and corresponding visual brand identity?

HMW aid designers in translating brand manual guidelines to an interactive design language?

Each query was written on a digital post-it note in Figma. A session followed to ideate possible solutions with help from existing methods from the literature for each query. The method generated a wide range of ideas, targeting different aspects of the problem. Although the ideas were in a very early phase, the HMWs led to the idea of three separate phases of the workshop; discover, define and design.

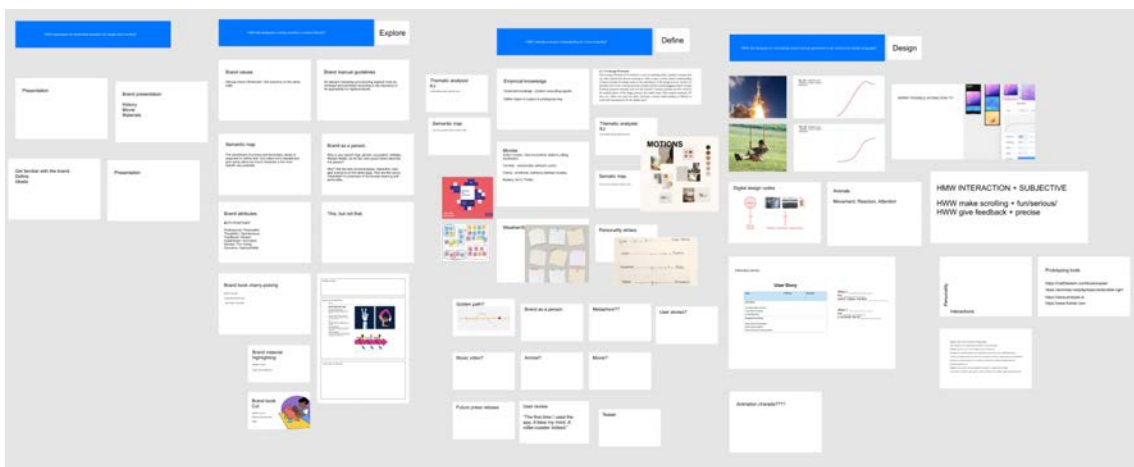


Figure 6.10: Result from HMW-question.

6.3.2 Solution sketching

A solution sketch session was conducted to explore further ideas generated from the HMW-question. First, all ideas were revised. A complementary explanation of how the exercise would be implemented in a workshop environment was articulated with sketches, images, and texts for each interesting idea. Some methods were combined, and others were modified to better fit the context and problem formulation. For example, an idea of describing a brand with a movie and brand collage was combined into a motion mood board. The method resulted in several ideas, fleshed out in a descriptive sketch. See some of them in the fig below.

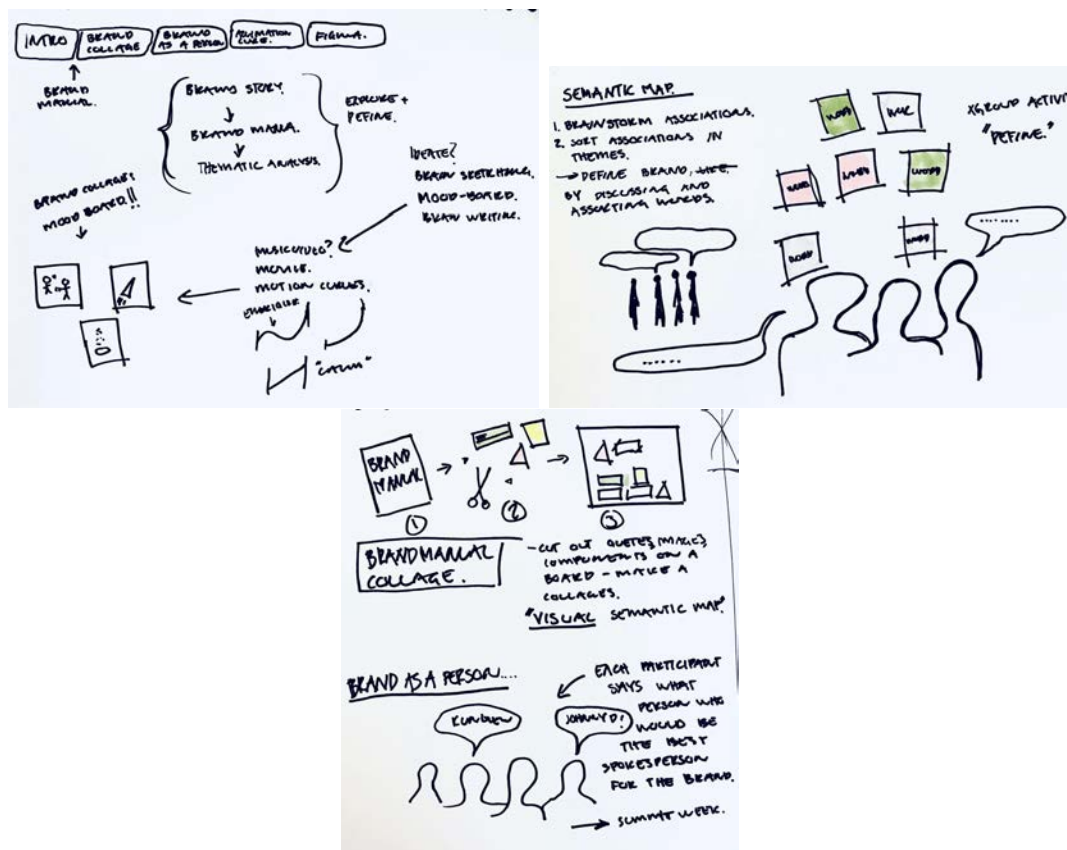


Figure 6.11: Some sketches from produced in solutions sketching.

6.3.3 Decision matrix

With a range of possible methods to implement in the workshop, the next step was to select the most feasible and valuable ideas. The selection was made with a decision matrix, comparing user value and implementation effort. Previous research has demonstrated some methods to be advantageous for the specific context of branding and UX, which was added as another layer for the decision-making. All ideas were complemented with sources to remind the author of its implied benefits and potential risks. The matrix resulted in following methods for the workshop.

Discover: Brand presentation and brand manual review.

Define: Semantic mapping, Personality sliders and Creativity game.

Design: Motion mood board and digital/physical prototyping.

6.3.4 Workshop outlines

This section describes the sequence of the workshop and the rationale for each exercise. The sequence of methods was decided by following a design thinking process: explore, define, and design. Although different from other design artefacts, the following instructions are considered the first iteration of the workshop guidelines generated from the methods mentioned above.

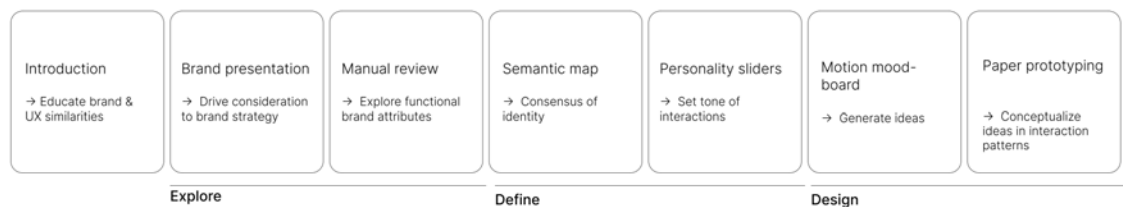


Figure 6.12: First iteration of the affinity diagram.

6.3.5 Workshop goal

The workshop goal is to aid designers in designing brand experience-driven interactivity in digital products by translating explicit brand identity into a brand-consistent interactive design language consisting of interaction, animation, or transitions. Moreover, it aims to enable a new perspective of how digital product experiences affect the brand experience. The outcome can be used as a reference for achieving a more meaningful hedonic quality of products to increase the digital brand experience. The workshop is designed to address the main research question 1.1.

6.3.6 Workshop methods rationale

The methods included in the first iteration are inspired by processes presented in the theory chapter 3. For example, communicative design [60], the UXi method [76] and UX strategy [47]. The strategic approach to UX design, suggested by Levy [47], urges designers to be involved in the strategic processes related to digital products. According to Levy, a lack of holistic business perspectives increases the risk of developing products that do not meet product-market fit requirements. The same rationale was used in this workshop, but with focus of brand strategy and brand-product fit.

Sand [76] suggests a framework (UXi) to translate brand values into digital design codes as an attempt to incorporate brand strategy in UX. However, UXi contains

a range of aspects not applicable to the project's scope. For example, UXi covers how an implicit brand value can be articulated and translated to visual UIs components. Although the project has a similar goal - this workshop solely focuses on explicit brand identities and interactions. Thus, methods presented by Sand [76] are re-designed to answer the need of this project better.

6.3.6.1 Introduction

The goal of the introduction is twofold. First, it aims to explain the outlines of the workshop proceedings. Second, it aims to describe fundamental concepts of branding and brand strategy. Thus, the introduction was designed to fulfil the second requirement (R2) in section 6.2.6. To understand the purpose of the workshop, it is considered crucial to bringing every participant to a certain level of understanding of basic branding concepts. By explaining the history of branding, and how it stems from a user need - the goal is to introduce a new perspective and uncover the similarities between brand strategy and UX design. Except from providing good conditions for the workshop, this can also encourage future cross-functional collaborations.

6.3.6.2 Brand story

The second step of the workshop is to present the brand in question. At this point, the focus should be on core brand purpose - not functional attributes. By sharing information about core values, history, future vision and corresponding strategy, the participants can form an initial perception of the brand - at first, disconnected from the functional attributes. Focusing first on the strategy and its goals, and at a later stage, adding the functional attribute to some extent resembles the brand strategist's process, i.e. the participants are invited to an accelerated variant of a brand's development process. Thus, it will aid the participants in better understanding the brand as a whole and the rationale of how the functional attributes are designed. This turned out to be a good way in the focus group, which had a similar approach.

The brand presentation setup is designed to meet the third requirement (R3) in section 6.2.6. Starting with the "why" enables an understanding of the brand's core purpose among participants. Thus, it might reduce the risk of the common misconception that brand solely constitutes functional attributes [1]. Moreover, the exercise is motivated by Kornbergers motion of brands to be "branding is fundamental to an organisation's overall operations" [42]. Thus, UX design activities should be performed on a solid ground of understanding for the brand to be consistent with the brand's overall vision. The brand presentation aims to raise awareness about the brand's core among the participants. The goal is for them to reflect and apply brand information in the following steps of the workshop.

Expected outcome: Participant are familiar with the brand strategy and brand core values.

6.3.6.3 Brand manual review

The brand review is an extension of the brand presentation. In this exercise, the layer of functional attributes is added to participants' perception of the brand. The exercise should be performed as the following procedure. First, participants are given a copy of the brand manual. They go through the content individually and are asked to note what emotional associations arise. The goal is to let participants explore functional attributes (e.g. colours, logos, and components) and reflect on what emotional associations arise given the information from the brand presentation. The reflections and associations are written down on post-its and used in the upcoming exercise.

A similar method was a part of a co-creation workshop for marketers and UX designers facilitated by the Aten design group at the Summitweek conference [71]. Then, all relevant marketing and branding material was reviewed in the group to form a perception of the brand. In this workshop, however, the brand review is conducted individually to avoid bias and encourage everyone to reflect individually.

Expected outcome: Notes of associations on post-it notes and in brand manuals

6.3.6.4 Semantic map

Collaborative creation of a semantic map is the entrance to the defining phase of the workshop. The procedure has similarities to thematic analysis, which ultimate goal is to make sense of a large set of data [7]. The semantic map aims to bring all participants to a consensus on the brand identity, with help from previous information given in the presentation and individual associations from the brand manual review.

Semantic mapping is conducted in two steps. First, the participants place all their share notes from the brand manual review. Secondly, the participant is asked to look for patterns and themes from the notes they just shared. The purpose is to visually display everyone's brand associations and ultimately define themes to reach a consensus on the identity. The themes on the whiteboard should be a point of reference for upcoming exercises to ensure the brand values have been incorporated into the following steps of the workshop. Therefore, the whiteboard must always be visible during the workshop. If this is not possible, the themes from the semantic map should be noted and brought to the next exercises. Semantic mapping is the initial step in the UXi process [76], to start a discussion to approve a shared understanding of the brand collaboratively. However, UXi utilizes predefined brand values instead of participants' evoked brand associations. Due to the similar setting of the UXi method, the tweaked version of semantic mapping was thought to be applicable for this workshop.

Expected outcome: Notes from previous exercise organised in themes.

6.3.6.5 Personality slider

Personality sliders can aid decision-making to define the tone of voice, look and feel, and identity in products or brand external communication [26]. Thus, it was considered beneficial to further synthesise themes generated from the semantic mapping. The process is simple; differential traits are collectively determined on continuous sliders. By deeply discussing different aspects of the brand perceived from previous exercises, the group should ultimately select a suitable position on the scale. Semantic differentials should be prepared beforehand by the facilitators. Those have to be chosen carefully to prevent nudging participants [76]. For example, negations or value-laden words should be avoided since it might bias the participant to selecting a more positive word over a negative one even though it is not in line with the brand [26].

Expected outcome: Desired positions on scales are discussed and marked.

6.3.6.6 Creativity game

The procedure of the creativity game is following: Each participant is provided with a card. The card contains an open-ended question, "If [brand] were a [object/subject], what do you think it would be?". One at a time, participants read out the question to the rest of the group, who should answer by writing down whatever comes to mind on a post-it note. The object and subject on each card should be selected to be applicable to the brand in the workshop .

The aim of the creativity game is to boost creativity among participants and encourage them to connect previous associations and themes to physical artefacts and motion. The physical artefact is a gateway to make them reflect motion patterns that can ultimately be used as inspiration to ideate interaction patterns.

In UXi-method, empirical knowledge aims to answer what attributes people connect to specific brand values: Which associations do people have with a word or value? Which emotions arise? And what images, colours, and situations, can communicate those? The method is a more detailed attempt to find a common language for the iterative discussion of a design - and ultimately transform terms of values into digital design codes. Although essential, authors disclaim empirical knowledge to the most abstract part of the process [76]. With few constraints, the step largely relies on the participants' creativity. Thus, the creativity game of this workshop is a re-designed version of empirical knowledge to facilitate participants' creativity - with more support.

Expected outcome: For each question, each participant shared an idea.

6.3.6.7 Motion mood-board

The motion mood board is the entry point of the design phase of the workshop. Mood boards are a common tool to visualise concepts to gain a shared understand-

ing of an idea by making collages. The idea of a motion mood board emerged from the workshop's purpose - to generate brand-driven interactions. Instead of using still images - videos, GIFs, and other motion elements should be used - to enable ideas of interaction patterns for the upcoming exercise.

The exercise should be performed on a shared board to encourage participants to be inspired by each other. The goal is to gather a range of content and synthesise previous reflections by visualising motion patterns.

Expected outcome: A large number of images, videos and GIFs that visualise different movement patterns.

6.3.6.8 Design interactions

The last exercise aims to let the participants design micro-interactions. The goal of this method was to bring ideas from previous steps and transform them into interaction patterns of components by creating digital and/or physical low-fidelity prototypes. Low-fidelity prototyping enables designing and evaluating with little effort in a short time [30]; therefore, it was considered a promising approach in this context.

Figma and Framer are computer-based prototyping tools supporting interactions and animation, both considered suitable tools for the workshop. Mocking interactions in an easy-to-use prototyping tool will give participants the freedom to explore realistic interaction patterns with little effort [6]. To not exclude any participants without sufficient software skills, it was decided to have paper prototyping as an option. Paper prototyping is also beneficial in cases when the goal is to generate a lot of ideas, which then can be discussed inside the design team [6].

Other ideas of how to approach this step are presented in the literature. Aten design suggests a matrix where each interaction should correspond to a certain personality by describing the interaction in phrases [71]. UXi describes a procedure to translate empirical knowledge to digital design codes presented in interaction curves [76].

To the author's knowledge, it was perceived as complex to articulate interactions in words, curves, or strings of code. Although the literature provided structured procedures, the outcome of the methods mentioned above was considered vague. According to Moran [51], it is hard for designers to speculate on how interaction patterns contribute to specific experiences. Therefore, this exercise was designed to be easy to understand and that the outcome was visual and tangible.

Expected outcome: A range of interaction patterns visualised and described.

6.4 Deliver

This chapter section explains how the workshop guidelines were evaluated and refined. First, the design was pre-tested with a formative evaluation followed by a summative evaluation.

6.4.1 Pilot evaluation

The initial workshop outlines were tested with two external members of the project. Although not performed accurately to guidelines, the evaluation generated insight, which led to some changes in the design.

The creativity game requested participants to formalize ideas individually and share them with others. Observations showed this made participants uncomfortable. Thus, it did not lead to a discussion as intended nor resulted in the expected outcome, i.e. For each question, each participant shared an idea. To use empirical knowledge as a transition from words to interactions was considered crucial for the workshop. According to Sand et al. [76] empirical knowledge was a successful approach to translating brand values to digital design codes. A discovery made during the pilot evaluation was that the motion mood board resulted in similar outcomes as the creativity game first intended. Participants placed pictures of physical artefacts and motions on the board. Therefore, the "creativity game" was removed from the sequence.

Secondly, paper prototyping was added to the interaction ideation method to allow participants to ideate interaction digitally or physically. Although ideating in Figma or Framer would result in more realistic interactions - the technical constraints hindered creativity, which was evident during the formative evaluation. Paper prototyping requires no skills and allows designers to explore ideas without getting stuck down in details.

6.4.2 Evaluative workshop

To test the sequence of methods final evaluative workshop was conducted. By using an authentic brand identity, in a real setting, the goal was to understand how well the series of methods could aid designers in designing a brand-driven interactive design language. CEVT, a current client of Ojity, was the brand used in the workshop.

UX designers with various experiences were invited to the workshop. The author facilitated the group with help from a brand strategist who had developed the brand identity in question. The setup and division of participants aimed to mimic a typical situation found in the analysis where UX designers become brand interpretations responsible for translating brand guidelines into interactions in digital products. According to Constable [13] it is best to define success metrics before running the formative experiment. The following requirements were defined as success metrics for each method:

1. **SM1: Method generates expected outcome.** The sequence of methods builds on each other. One method's outcome is designed to guide participants in the next. Therefore, each method generating the expected outcome was considered an essential success metric for the workshop proceeding. If the method generates the predicted outcome, it can also indicate the method per se was successfully implemented. The metric will be assessed by comparing the expected outcome with the actual result for each method.

2. **SM2: Majority of the participants are engaged in the method.** As the workshop will only be fully tested once in this thesis, it was essential to get the many participant's first-person impressions of the methods to validate the workshop. The fewer engaged (i.e. discussing, sharing ideas, adding elements) participants in the activities, the fewer responses for evaluating the method would be available. Moreover, the workshop is of a co-creation nature. If most participants are not engaged in the methods, it can indicate difficulties implementing them in groups, which is undesirable in this context.

3. **SM3: Method indicates similar effects and value as suggested from literature.** All methods included in the sequence are re-designed versions found from previous work. The methods were selected due to their suggested benefits and effects. Therefore, it was essential to assess each method and compare it to literature statements. The metric will be addressed by facilitator observations and analysing annotations from the workshop end-discussion.

6.4.2.1 CEVT

CEVT is an innovation and technology company within Geely Group, developing mobility solutions. CEVT was founded in 2013 and has grown rapidly ever since. In 2021, CEVT partnered with Ojity to create a new brand, a new identity and a great brand experience in digital channels. The identity premiered by the strength of being a fast-tracked innovation group with a wide range of people worldwide. With a history and connection as a classic tech company, CEVT wanted to show a new side as an innovative, accessible and creative place for a variety of people, not just those who identify themselves as a classic, tech-savvy engineer.

6.4.2.2 Setup

The workshop was held at Chalmers Lindholmen and lasted for three hours. A majority of participants were familiar with the premises at Lindholmen - thus, the facilitator chose the place to be as neutral as possible. To emphasize each method's start and end, separate workstations were prepared, which the participants moved around during the session. The workshop followed the guidelines described in the previous section and was thus divided into three phases; explore, define and ideate. During the workshop, facilitator observations were written down, and photos were

taken to gather data. The workshop ended with a discussion which was recorded and transcribed afterwards.

6.4.2.3 Participants

Six participants were invited to the workshop. Three of the participants were master's degree students from Interaction design and technologies at Chalmers. One was a student in the master's program in Industrial design engineering at Chalmers. One worked as a UX designer at a product company, and one of them worked as a front-end developer and UX designer consultant part-time. The participants were sampled conveniently due to their background and various experience with UX design. An employee from Ojity co-facilitated the workshop. The primary role of the co-facilitator was to (1) educate some fundamental branding concepts, (2) give the background to the brand strategy work and (3) introduce the brand identity.

A consent form was sent to each participant beforehand. The participants could thus obtain and consider the information before the workshop. By signing, the participants agreed that some workshop parts were recorded. Contact information to the facilitator was attached in the form if the participants had any further questions.

6.4.2.4 Facilitators

The author facilitated the workshop together with a brand strategist from Ojity. The author primarily led the workshop by introducing and giving instructions for each method. The brand strategists were responsible for presenting fundamental brand concepts as a part of the introduction and presenting the brand in the second exercise. None of the facilitators should participate in the activities but could ask probing questions.

6.4.2.5 Execution

Introduction. The brand strategist presented fundamental brand concepts and branding history. The introduction lasted for approximately ten minutes. During and after the introduction, the participants were encouraged to ask questions.

Brand presentation. The introduction was followed by a presentation about CEVT and the background of the brand strategy work. The participants were encouraged to take notes and write down ideas during the presentation. If they had any questions, they could to ask them straight out.

Brand manual review Ten minutes were spent analyzing CEVT:s brand manual. The participants took notes and wrote down associations on post-its and the brand manual. A mix of words was used to describe associations; see below.

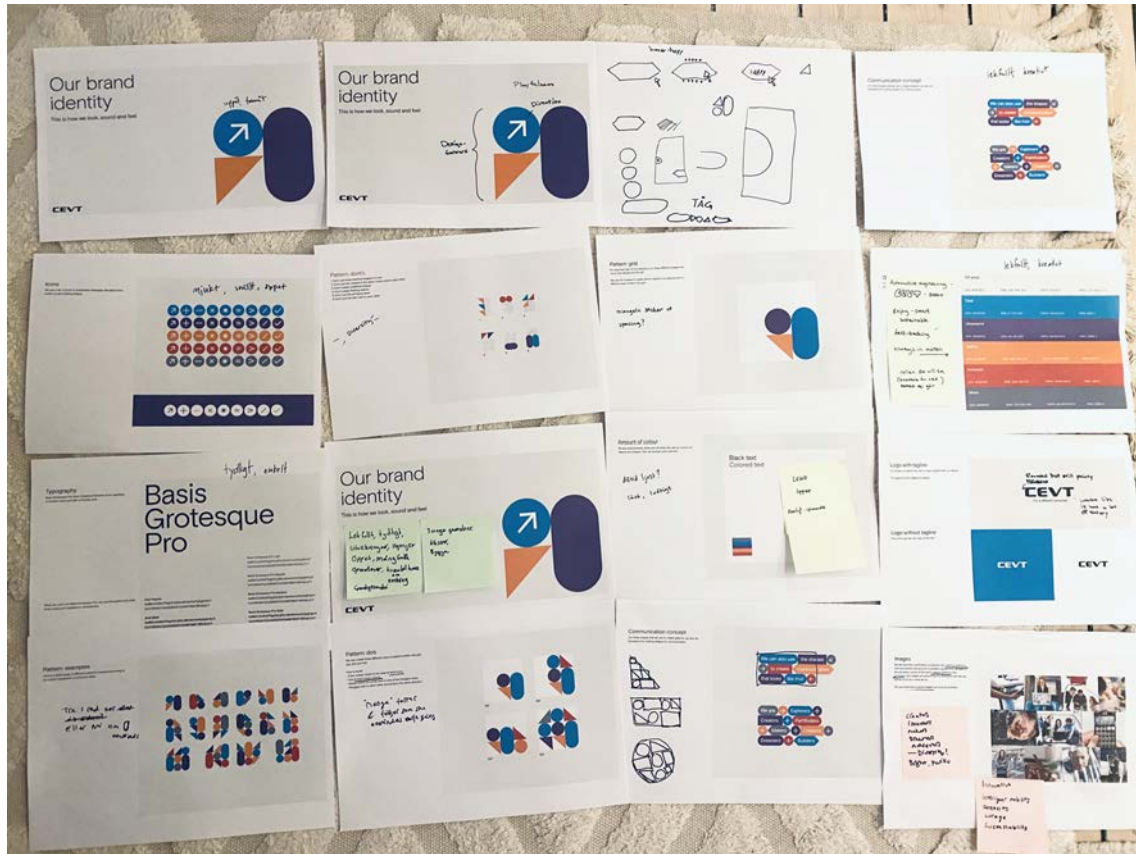


Figure 6.13: Expert from brand manual and notes.

Upwards, Forward (2), Soft, Kind, Open (2), Clear (2), Simple, Noughts and crosses, Stroller, Diversity (3), Playful (4), Calculations, Engineer, Operator, Creative(4), Geometry, Heavy, Building, Direction, Light(2), Secret, Bright, Innovation, Motion, Gravity.

Semantic map The semantic map was conducted on a whiteboard. The participants were asked to share what they had written and place the notes on the whiteboard. Once all ideas and impressions were shared and discussed, the facilitator asked the group to organise the post-its in semantic themes. The exercise led to a discussion, where words were compared and explained. The discussion resulted in four semantic themes in total; *Diversity*, *Creativity*, *Structured engineering* and *Openness*. The playful and colourful components were captured with Creativity and Diversity. The structured grid of components was captured with structured engineering. A discussion followed on how creativity and structured engineering were related.



Figure 6.14: Procedure and outcome from semantic mapping.

Personality sliders. The facilitator handed out a pen to the participants, and were asked to place a dot on the scale where they thought CEVT belonged. The semantic scale was visible during this exercise, so that previous themes and rationale could be used as inspiration.

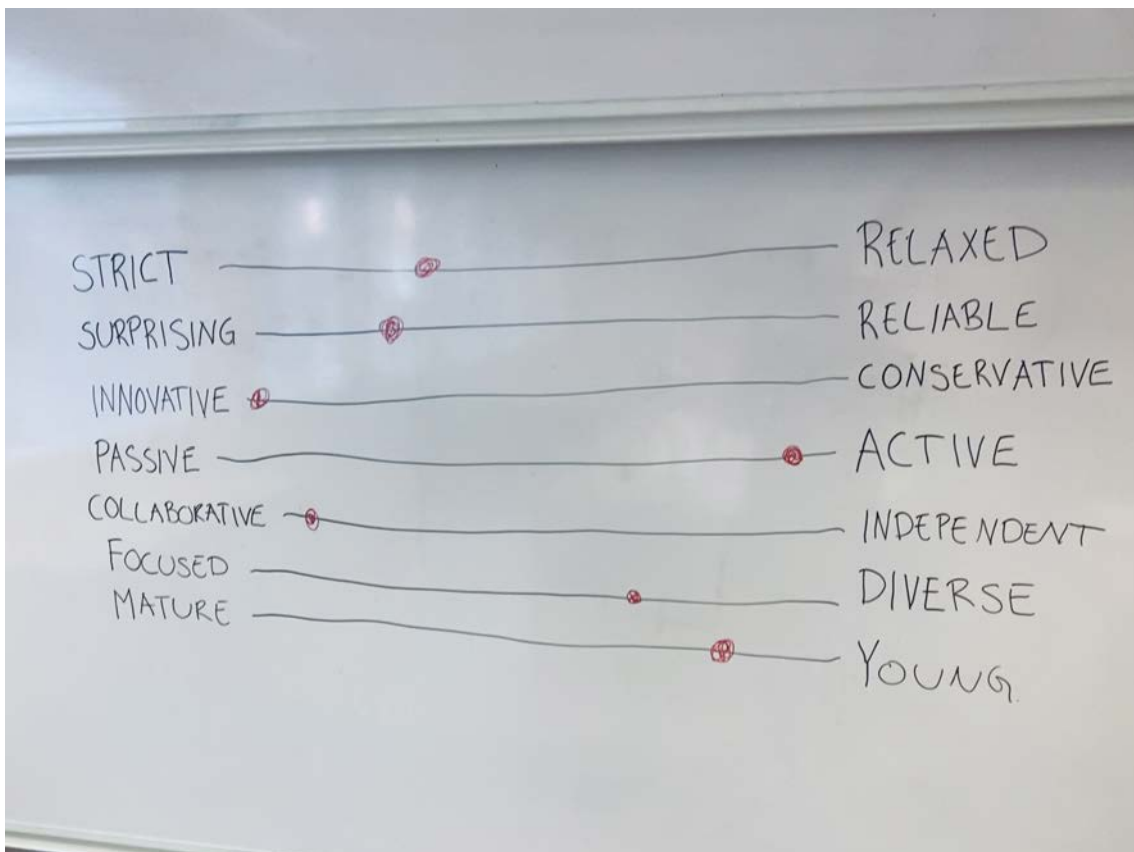


Figure 6.15: Outcome personality sliders.

The exercise resulted in long discussion, where participants compared the words on the scales with previous discussion and themes from semantic mapping. For some

of the scales, all participants were in consensus. For example, all agreed that CEVT was associated with being innovative and collaborative rather than conservative and independent. Some of the scales were more challenging. A similar pattern from the discussion from the semantic analysis was observed; the opposition in the strict and creative, which essentially summarised the participants' perception of the brand as a whole.

According to participants, depending on what parts of the brand were considered, both strict and relaxed could be associated with CEVT. Strict, since they were in the engineering and automotive industry. Some made associations with "relaxed" due to the open and easy-going tonality of words and playful, almost childish and colourful components. Similar discussion led to the mark being placed almost in the middle of some scales.

Motion moodboard. At the end of the defining phase, the participants collectively created a motion mood board. Everyone had been invited to the Milanote document beforehand. The document contained instructions of how to add content to the board, as well as a link to the board to use in the workshop. See result of motion mood-board in the figure below.

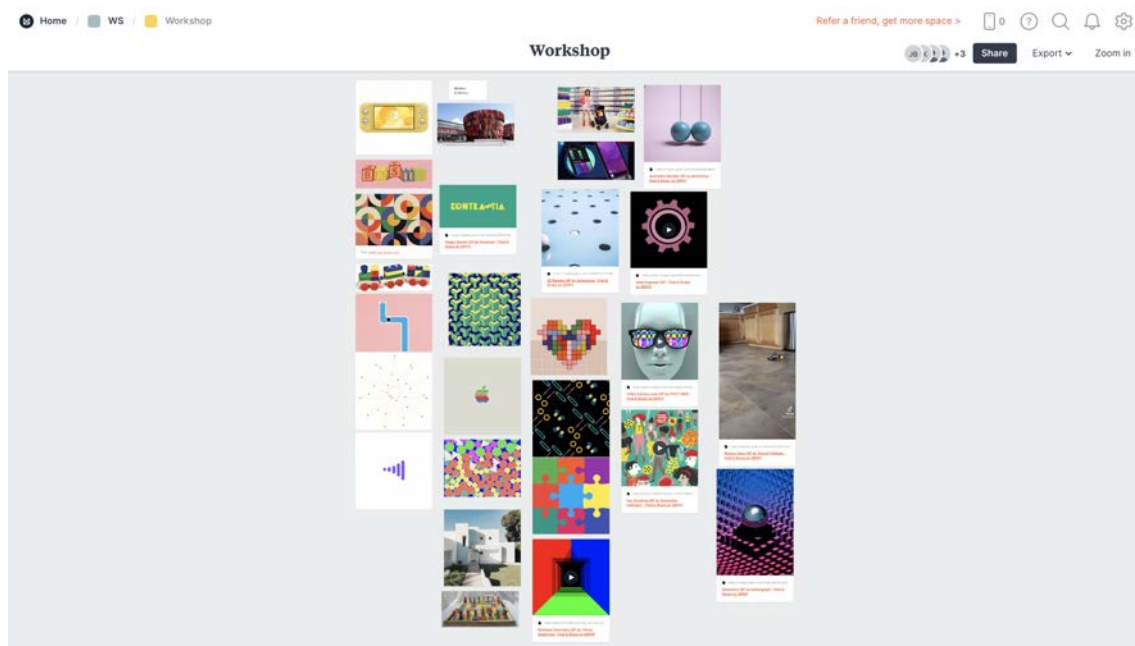


Figure 6.16: Outcome motion moodboard.

Ideate The group moved to the creation area of the room, which had been prepared with paper components, colored paper sheets, scissors, sharpies, glue sticks and squared A0 paper sheets. A Figma document had been sent out beforehand, containing all components from the brand manual.

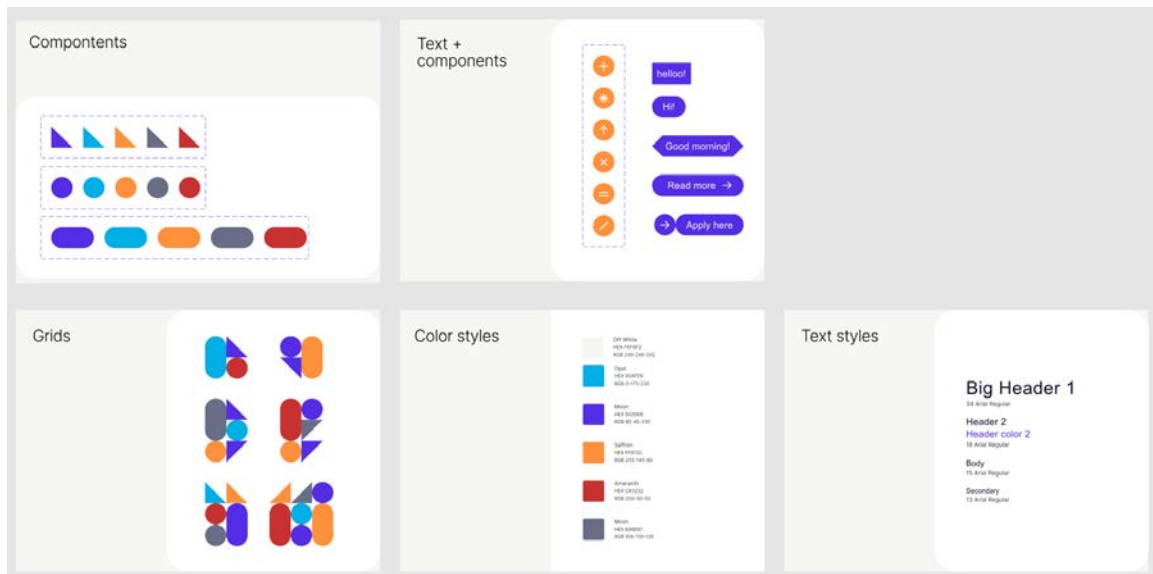


Figure 6.17: Components prepared in shared Figma document.

With given instructions to design interaction patterns and component behaviour, participants got approximately twenty minutes. For example, a transition from one component to another could be visualized by a three step figure, using arrows describing movement or by notes. If Figma, interaction could be design using the prototyping tool. During the session, the facilitators walk around and asked question - however, did not participate in the creation process. Some worked in pair, others worked individually.

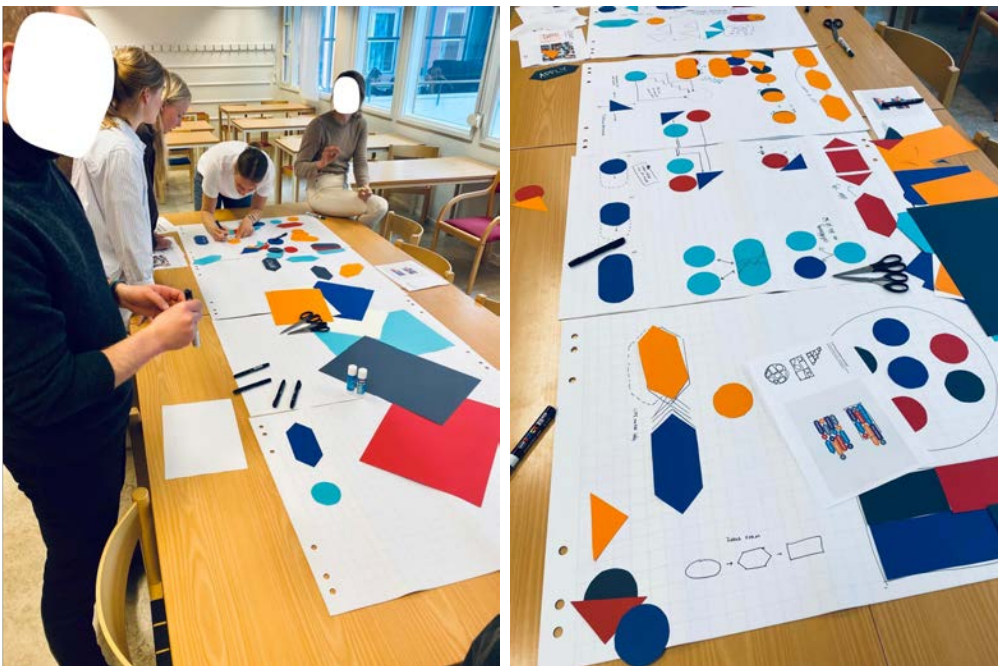


Figure 6.18: Participants designing interactions with paper prototyping.

Once twenty minutes had passed, the facilitator asked the participants to share the ideas. Some probing questions were prepared beforehand. The workshop finished with a semi-structured group discussion. The facilitator asked questions, and probed the participants to share what they had experienced during the workshop. First, the methods were discussed one by one, followed by the sequence of them and the workshop as whole.

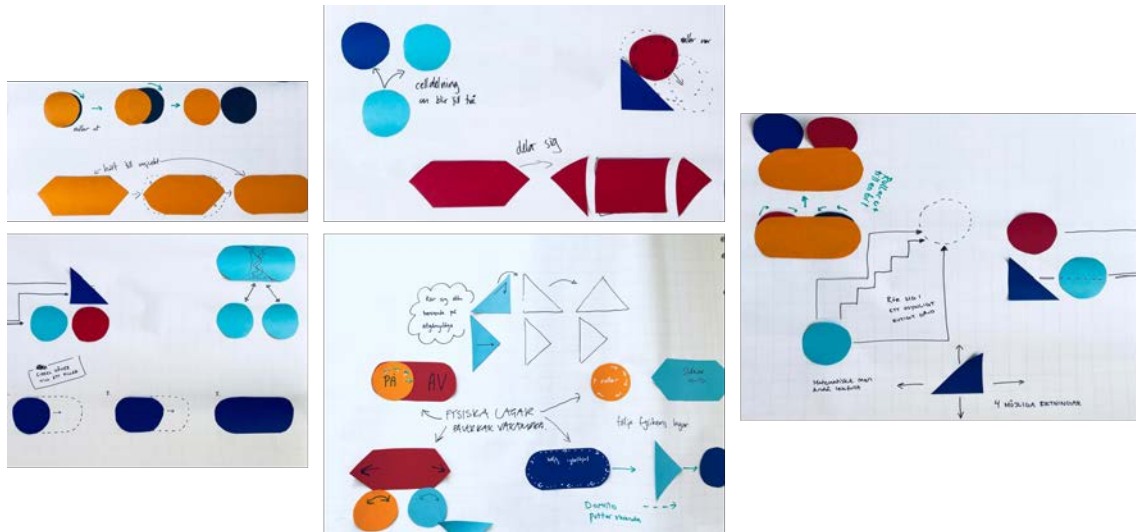


Figure 6.19: Result of paper prototyping.

6.4.3 Workshop analysis

Discussion recordings were transcribed and analyzed together with results, observations and comments from the workshop. All data were analyzed by affinity diagramming to seek patterns and potential themes. First, each method was analyzed individually by comparing data with the metrics of success, presented in 6.4.2: the method generates the expected outcome (SM1), the majority of the participants are engaged in the method (SM2), and the method indicates similar effects and value as suggested by literature (SM3). Secondly, the sequence was studied. The procedure was open-mindedly performed to capture observations beyond success metrics parameters.

As the workshop is a sequence of methods, it should be highlighted that each implementation and outcome can impact the following one. This should be taken into account for the analysis of the sequence of methods. All data were reviewed together with the co-facilitator and discussed with the supervisor.

In the following sections, the result from the analysis is presented. First, success metrics are assessed. For some methods, other observations are highlighted.

6.4.3.1 Brand story

Expected outcome: Participants are familiar with the brand strategy and core brand values.

The analysis indicated that the brand story exercise was successful. All participants were engaged in the activity by listening or asking questions, which implies the second success metric (SM2) was met. Although the first success metric, the method generates the expected outcome (SM1), was hard to assess, observations indicated participants were familiar with the underlying strategy and core values. Information presented during the brand story was used to rationalise the actions in two methods. When conducting personality sliders, two participants referred to CEVT's history and heritage as influential aspects of where to plot CEVT on the Mature- to-Young range. One other participant dismissed one idea as being too "square" during the paper prototyping, referring to CEVT's desire to no longer be perceived as an "old way engineering company".

6.4.3.2 Brand manual review

Expected outcome: Reflective associations on post-it notes and in brand manuals

The analysis indicated that the brand manual review exercise was successful. The exercise generated the expected outcome; thoughtful comments on post-its and in the manuals, suggesting the first success metric (SM1) to be met. Since all participants left comments, it can be concluded that everyone was engaged in the method. Thus the second success metric was met too. The analysis of discussions revealed that the participants found the brand manual review efficient for forming a perception of the brand, which was the foremost benefit highlighted in Summitweek [71]. Thus the brand manual review met the third success metric (SM3): the method indicating similar effects and value as suggested by the literature.

The analysis revealed that two participants found the combination of brand presentation and brand manual review beneficial. The division of first listening to the brand presentation and then analysing manuals individually helped them process and get a more in-depth understanding of the brand and motives of visual brand identity.

"I thought it was very good to go through the manuals after the presentation. It helped a lot. I think you would have been very lost, if you had only had the presentation. Or just the manual. Both together made you understand. That you could see it in front of you."

6.4.3.3 Semantic map

Expected outcome: Themes formed by brand associations.

The semantic map did generate the expected outcome, thus the first success metric (SM1) was met. At the end of the session, all associations was formed in four themes. Although some more than other, everyone was engaged with discussing and structuring the notes on the whiteboard (SM2). All agreed that semantic mapping was a good way to get a consensus on the identity - since they previously had reflected individually. The observation suggest the method to have similar benefits as original version of Semantic mapping in UXi [76].

"I think the discussions helped more than what we created. To discuss it back and forth, it helped to understand what everyone else had thought about."

"It made it easy to collaborate later on, because we had discussed and reached some consensus."

Although the method generated the expected outcome, it was not performed as planned. The idea was to let participants share their associations and thoughts that emerged during the brand review by placing post-it notes on the whiteboard. As soon as they were given the instructions, the facilitator observed some hesitation among participants. Everyone had prepared notes, but no one wanted to be first in placing them on the whiteboard. To aid the method proceed, the facilitator had to ask for associations, rewrite notes and put them on the whiteboard for them.

This event was quite surprising since all participants had experience with similar analysing methods. A possible explanation for the hesitation could be the unusual scope of the workshop. Another explanation could be the presence of the brand strategists. Since the strategist provided information about the brand and was involved in developing the identity, the participants could fear misinterpreting the identity differently than the strategist intended. This hypothesis was, however, not confirmed during the discussion. Instead, the participants solely highlighted the exercise to be challenging since it was the first group activity. Since the group did not know each other before the workshop, a joint warm-up exercise would have been appropriate.

6.4.3.4 Personality sliders

Expected outcome: Desired positions on scales are discussed and marked.

Personality sliders met the expected outcome and thus the first success metric. At the end of the session, a plot of choice was placed on each range. Although one was responsible for plotting the ranges, all participants joined the discussion of where they should place them and why. Observations of everyone actively participating suggested the second success (SM2) metric was met. The benefits of personality sliders were to aid decision-making to define the tone of voice, look and feel, and identity in products [26]. According to the discussion analysis, the opposite set of

attributes aided a more nuanced discussion. One participant expressed the personality sliders enabled an understanding of what the "experience" should be, which is consistent with the claimed advantages of the original method [26].

"When we talked about the words, for example. Should it be more in one direction? Or to the other? It was a good way to get a little more nuance and challenge what we previously discussed."

"I was more influenced by the outcome in the personality sliders than in the semantic word map. The attributes somehow made it easier to define what the experience would be like, compared to themes from the semantic map."

Compared to the previous exercise, participants took more command during the personality sliders. When the facilitator explained the activity, all participants immediately discussed potential plots on the range and why. One possible cause could be that this was the second exercise they conducted collaboratively, and they were thus more comfortable sharing thoughts. Another explanation could be that personality sliders had more constraints and instructions and thus were easier to conduct. These speculations could, however, not be verified in the analysis.

6.4.3.5 Motion mood-board

Expected outcome: A large number of images, videos and GIFs visualise different movement patterns.

The method generated the expected outcome. All participants placed images, GIFs and explanations on the shared mood board. Therefore, the two first success metrics, the method generates the expected outcome (SM1), and the majority of the participants engaged in the method (SM2) were considered met. As this method was a merge of mood-board and Empirical knowledge [76], it is hard to conclude if it had similar benefits as presented in the literature. However, the stated use of empirical knowledge was to aid the process of gathering a shared design language to design digital design codes. Comparing the outcome from the motion mood-board and the result from "design interaction", some similar patterns were found. The similarities could indicate the motion mood-board aided participants in the process, as ideas of interaction patterns emerged during the exercise. Although the analysis could not fully confirm the linkage, the participants expressed the motion mood board to be a good preparatory exercise for designing interactions.

The motion mood board was the most appreciated exercise in the workshop, which was emphasised in the discussion. One expressed motion mood-board as "a familiar method with a twist and clear purpose".

"I liked the motion moodboard! I thought it was great fun. I could sit with that exercise for a long, long time. It was inspiring to see what we discussed was articu-

lated in motions. That was new to me."

"The motion mood board was helpful! It was good to use videos and GIFS to show movement and interaction."

"It was an excellent warm-up to make things mobile already there, instead of regular mood boards where there are only pictures."

"It was both fun and good inspiration to move on to the next exercise."

6.4.3.6 Design interaction

Expected outcome: A range of interaction patterns visualised and described.

The method generated the expected result and the first success metric (SM1). Interaction patterns were visualised and described with paper cut-outs, descriptive texts and arrows. Further, all participants were engaged in the exercise by designing interactions in pairs or individually (SM2).

An observation made during the workshop was that none of the participants used the digital components in Figma. Instead, everyone gathered around the table of prepared paper components. The ideation exercise offered both digital and analogue tools, as they had different benefits in generating authentic interactions versus easy and fast prototyping [6]. However, all participants appreciated the exercise to be analogue. This event can possibly be explained by the appeal of the colourful components prepared for paper prototyping. Another explanation could be that as soon as some participants chose paper prototyping, the rest followed, concerned about deviating from the group. The analysis confirmed none of these reflections. According to the discussion, paper-prototyping simply lowered the threshold to test ideas with no technical constraints. The outcome aligns with the benefits of paper prototyping mentioned in literature as an easy way to explore ideas in the early phases [6].

Observations showed when ideas were discussed and designed; participants took inspiration from what had been produced in previous exercises. Although everyone had different ideas of interaction patterns, they were all described with words such as "balanced vs chaos", "free-motion vs fixed paths", and "playful vs strict". The participant used similar wording to describe the brand identity, and some were similar to the movement patterns in the motion mood.

Although the analysis indicated the method to be successful, some participants expressed the exercise was challenging. Since it was open-ended, some said it was very different from the ideation exercises they were used to. A potential improvement would be to pre-define interactions that should be designed or define design goals.

"I would say that the last one is the most difficult. I am most creative when I have clear limitations and goals. That made it difficult in the last exercise."

6.4.3.7 Sequence analysis considerations

When analysing the sequence of the exercises, some areas of improvement was defined and summarised:

1. Bring each exercise outcome to the next. The workshop consists of a set of methods arranged in a logical sequence. The outcome from one exercise leads and aid participants in the next. Therefore, it was found to be crucial to transfer one exercise result to the next. The need was evident by analyzing discussion regarding semantic mapping and motion mood-board. The participant called for a need to be reminded of what they had discussed.

2. Consider different levels of creativity. The workshop, in general, was considered to require design experience. A core element of the workshop was to let participants define and express emotions and associations and further articulate them through design. According to the discussion, this was considered to be challenging, even though the participant were designers. Thus, the workshop is not suited for non-design environments.

3. Formulize goals and give clear instrucionis Semantic map, motion-mood board, and paper prototyping are all open-ended exercises, e.g. the direction of outcome relied on the participants' ability and creativity. The analysis revealed that clear instructions and goals were essential for these exercises in specific.

4. Joint warm-up exercise. During the workshop, participants were encouraged to share first-person impressions and associations. Some participants found this inconvenient at first, as evidenced by Semantic mapping outcomes. To create a safe environment and make the participants comfortable, an ice-breaking exercise at the beginning of the workshop can be beneficial.

5. Mom test the identity. In the workshop, it was clear that the brand strategist was the creator behind the brand identity. According to [20] once an idea is presented by an idea-initiator human tendency to avoid conflict can result in candid feedback as compliments, defined as "false positives". Although difficult to conclude, the set-up could have influenced how participants reflected on the brand during the workshop. Clarifying that the brand representative has not personally designed the identity may be a better approach. I.e. "mom test" the identity.

6. A new perspective of interactions was insipiring The concept of brand-driven interactive design language was entirely new for the participants, but according to the discussion, they found the workshop inspirational for future work. One

expressed an aspiration to conduct a similar workshop at his workplace to highlight the importance of interactions in designing the feel of products. Interactions and responsiveness of components were not something they had previously considered.

Another participant confirmed that interactions and the feel of products had a connection. The participant explained how he had been involved in designing two different apps with almost identical looks and functionalities. Due to interactive design patterns, they were experienced differently, but the team lacked skills in how to configure the interaction patterns to achieve the feel they wanted. As the workshop indicated to be a beneficial process to translate brand identities to interaction patterns, it could be implemented to address such issues.

"Their differences have a lot to do with interaction and animations. But, it's hard to pinpoint what it is. You are used to the graphic. But how do you work with emotion? And how do you get it into UX work? A workshop like this might the answer."

7. Value of evaluating the identity Worth highlighting is that the workshop was proven to be valuable for the strategist too. Testing designs externally was not part of their current work processes. Participating in discussions on how non-members of the brand team interpreted the identity indicated how well they managed to capture the brand's story in the visual identity.

7

Results

A research through design approach was applied to answer the research question of the thesis. First, a literature study was conducted. Secondly, eight interviews and two focus groups were executed. The creation process consisted of HMW-questions, solution sketching and dot-voting. Finally, the workshop guidelines was practised in an evaluative workshop. The steps were undertaken to find the answers to the research question(s).

How can UX designers be supported in designing brand experience-driven interactivity in digital products?

And related sub-questions:

-What are the current responsibilities, and motivations for UX designers concerning digital products as brand touch-points?

-What can cause a digital product to be inconsistent with desired brand experience?

-What are the shortcomings of brand manuals in designing brand experience (BX) in digital products?

The results presented in this chapter are the primary insights from the study and the final suggestion of workshop guidelines in a booklet format. The primary insights from the project's earlier phases (discover and define) are to answer the related sub-questions. The author used the primary insights to aid project procedure and rationalise suggestions of workshop guidelines presented in the booklet. The booklet contains a proposal for workshop guidelines to assist UX designers in creating brand-driven micro-interactions in digital products. The evaluation of the workshop procedure indicated the guidelines to be viable approaches. Therefore, the booklet and rationale for each method is an answer to the main research question.

7.1 Primary insights

Interactive design language affects the brand experience of digital products. In line with notions of digital products' response to user interaction determine the "feel" of products from literature [51] [65], the findings from focus groups suggest micro-interactions and component behaviour primarily affect experiences of digital products. The participants considered the appearance of the digital product used in the focus groups on-brand among participants. It was considered visually coherent to other brand touchpoints by using the brand's colour schemes and fonts in the app. However, inconsistent interaction patterns negatively affected the overall experience and "feel" of the app. Varying scroll speed, changing colours when transitioning between tabs, and unpredictable responses were some micro-interactions that negatively affected the experience. According to the participants, this was considered a cause why the digital product experience deviated from the brand's strategic vision and other brand touch points. The findings support Saffer's [65] notion of micro-interactions to influence consistency between platforms and possible connection to brand loyalty. From the interviews, it was evident that most UX designers focused on digital products' visual appearance to convey brand identity in terms of colours, shapes and fonts. This is in line with notions of how interactivity and micro-interactions usually are overlooked in design processes. The notion as mentioned above suggests that designing brand-driven micro-interaction patterns can thus be an opportunity for creating intense brand experiences digitally.

Investigated brand manuals rarely contained digital attributes, implying they were insufficient guidelines for designing digital brand experiences. The brand manual analysis revealed that brand manuals rarely have digital guidelines, less so interaction principles. 7 out of 30 conveyed brief digital guidelines, and only three included interaction principles. I.e. most manuals focused on guidelines applicable to non-digital touch-points - even though all brands could be encountered digitally. Given digital products are among the most frequent contact points between consumers and companies [76], the result can be considered problematic. The finding from the brand manual analysis could also be a cause to all interviewees who had experience with brand manuals, emphasised them to be inadequate or complex to apply to digital products. In the same vein, findings from focus group analysis suggest that the brand manual guidelines can only be transferred visually to digital products. Thus, other aspects affecting the experience of the products, such as interaction patterns, are left to the UX designers' interpretation of the brand.

Brand involvement seems critical for designing digital brand touch points In line with Levy's [47] notion of the importance of UX designers to be involved in strategic business processes, the interview findings suggest that brand involvement for designers is crucial. The lack of holistic perspectives increases the risk of developing products that do not meet product-market fit requirements [?]. Similarly, the current gap in explicit digital brand guidelines further emphasizes the importance of awareness of the brand's vision to prevent misinterpreting the desired expression, causing conflicting digital brand touchpoints. This study revealed some miscon-

ceptions about branding in UX communities. For example, branding was said to be governed by conflicting motivations compared to UX, "persuading" vs "understanding" the users and target group. Similarly, some UX designers expressed that branding efforts were thought to potentially harm the pragmatic quality of products, leading to a perceived tradeoff between making a product "useful" or "branded". The insight emphasizes a need to encourage collaborations between UX designers and brand strategists to achieve a joint digital brand vision.

7.2 Workshop guidelines

The following booklet provides instructions to design brand-driven micro-interactions in digital products [65]. Sanders Stappers [66] take co-creation to refer to any act of collective creativity shared by two or more people, hence the workshop presented can be considered a co-creation workshop. The instructions are designed to meet insights found in this thesis, based on methods found in the theory [76] [47] [31]. Given the participants get the necessary details of the background, the goal is to generate ideas collectively. The following pages describe each method's goal, procedure, and the materials needed. The booklet can be found in full-size A4 in the appendix for print, see Appendix 4.



Figure 7.1: Front page and workshop foreword.

Why this workshop?

Every interaction with a digital product has the potential to create an emotional relationship between a product, its user, and the brand behind it. This workshop is to design an interactive brand-driven design language for digital products - to reinforce the brand experience of digital products. The procedure is divided into three phases;

- **Explore** where the goal is to get familiar with the brand, its strategy and functional attributes.
- **Define** where the participants are to define the brand and associations.
- **Design** where the participants are to translate the brand identity into interactions and animations that can be implemented in any digital product stemming from the brand.

The workshop can be conducted at the beginning of a design project when new digital products or services are developed. Starting from the brand and defining interaction patterns from a brand perspective increases the chances of the product becoming consistent with the brand and can strengthen the overall brand experience.

This is a co-creation workshop primarily designed for UX designers. Although there is no limitation of participants, it is essential that everyone can work as one team. The workshop requires at least two facilitators. It is desirable that at least one is a brand strategist or designer who can mediate the brand perspective. The total length (including breaks) is three hours. However, if desired, the steps can be spread over a more extended period.

Explore			Define		Design	
Introduction	Brand presentation	Manual review	Semantic mapping	Personality sliders	Motion moodboard	Design interactions

Figure 7.2: Front page and workshop foreword.

The workshop is designed to follow the three first phases of the double diamond [12]. The first phase, discover, aims to explore the problem space. In this context, the problem space is the background to the brand strategy, the history and functional brand attributes. The second phase seeks to define the brand by organising findings from the discover phase. The third phase, design, divergences the solution space to explore possible solutions. Here the goal is to synthesize the insights and ideas to design a brand-driven interactive design language.

1/7

In group ~ 10-15 min

Present workshop agenda by presenting each method briefly. The introduction should convey fundamental brand strategy concepts if the participants are new to branding. This will aid the participants in understanding the aim of the workshop and how UX design is essential from a brand experience perspective. The following topics are encouraged to cover:

- Humans need to mark items to enable recognition and build trust.
- Brand definition.
- How brand strategy is different from marketing.
- How a brand experience is shaped
- Digital products' as brand touch points.

To prepare: introduction slides. Post-it notes. Sharpies.

Introduction

The slide features a vertical title 'Introduction' on the right side. Below the text, there are several diagrams: a stack of four overlapping rectangles on the left, and a set of three boxes with horizontal lines and a vertical line on the right, resembling a simple UI or branding diagram. An inset photograph on the right shows four people (three women and one man) gathered around a table, looking at documents and a laptop, engaged in a collaborative meeting.

Figure 7.3: Instructions to the workshop introduction.

The introduction is designed to give the participants an introduction to the workshop by briefly going through the methods and providing a brief understanding of the scope of brand strategy. The opening is designed to meet the third insight, *brand involvement seems critical for creating digital brand touch points*. By explaining digital brand touch points' importance for the overall brand experience, [76], the goal is to highlight brand strategy and UX collaborative benefits. Moreover, the introduction highlights Neumeiner [53], and Kornberger [42] notions of how brand experiences are dependent on customer perception, highlighting similarities to how UX is determined [16].



Figure 7.4: Brand presentation instructions.

The presentation aims to introduce the brand by explaining its history, future vision and possible challenges. The brand presentation setup is designed on the insight of *brand involvement seems critical for creating digital brand touch points*. Starting with the "why" should enable an understanding of the brand's core purpose among participants [42]. Thus, it should reduce the risk of the common misconception that a brand solely constitutes functional attributes [1]. The method is motivated by Kornberg's motion of brands to be "branding is fundamental to an organisation's overall operations" [42]. Thus, participants should also perform UX design activities in this context on a solid ground of understanding for the brand to be consistent with the brand's overall vision. The presentation aims to raise awareness about the brand's core values among the participants to guide the following steps in the workshop.

3/7

Individually

~ 15 min

Brand manual review is a method to explore and reflect on functional brand attributes by going through the brand manual. Each participant individually explores the brand manual and writes down the association made its content on post-it notes. The notes will be used in the next exercise.

- Each participants is provided with a brand manual copy.
- Hand out post-it notes and sharpies.
- Set timer.
- Participants go through manual and write down associations.

To prepare: Brand manual. Markers. Sharpies.

Manual review

Figure 7.5: Brand manual review instructions.

The brand manual review is designed to introduce functional brand attributes, such as logotype, colours, fonts, tone of voice and images. The brand manual analysis, described in 7.1 and 6.1.4, implied they were insufficient guidelines for designing digital brand experiences. Moreover, in this study, all interviewees who had experience working with brand manuals expressed they were problematic or hard to use as guidance when designing digital products. Still, brand manuals are the central point of communicating a brand identity [84]. This method provides a more structured approach to investigating brand manuals and reflects on what emotional associations arise given the information from the brand presentation. Instead of simply applying the content of the brand manual, the participants are to explore the meaning of the attributes. In doing so, the goal is to maintain the connection to the brand identity without restricting design freedom among UX designers.

4/7 In group ~ 20-25 min

Semantic mapping is an exercise to go through each participant's associations and sort them into semantic themes. All noted associations from brand manual review and brand presentation are used in this exercise. The emerging clusters of words represent different areas of meaning. The semantic proximity will determine where each association will be placed. The participants get an overview to reach a consensus on the brand.

- Participants put all notes from previous exercises on a whiteboard.
- Sort notes into themes.
- Label themes.

To prepare: Whiteboard, Sharpies, Post-it notes.

Semantic mapping

Figure 7.6: Semantic mapping instructions.

The semantic map is to review and structure brand values and associations to understand a brand's personality deeper [76]. The semantic proximity of words is represented by physical proximity; thus, clusters of different meanings appear. The method should reduce the risk of misinterpretation by shifting and discussing each word of value separately and in combination with others. The clustered island of value words produced should aid the participants with a deeper understanding of a brand's personality; beyond first-hand slogans and brand promises [76]. The method is designed with inspiration from Semantic mapping by Sand [76], and further motivated by the insights of *Brand involvement seems critical for creating digital brand touch points*. In this context, the semantic map is to collectively define and reflect on insights gathered from *brand presentation* and *brand manual review*.

5/7

In group ~ 15-20 min

During this exercise, differential traits are collectively determined on continuous sliders. Personality sliders aid participants in defining identity and set the tone of interactive design language. With differential traits at hand, the method can also aid participants in a deeper discussion of what the brand experience should be. The procedure is simple.

- Draw a diagram on a whiteboard with 5 ranges.
- Add trait extremes at each end.
- Hand out sticker dots to participants.
- Participants collectively plot their choice on each range.

To prepare: Whiteboard. Whiteboard pen.

Personality sliders

RESILIENT SYSTEMS
SECURE
KEEP SERVICES
SAFE
AESTHETICS
LIKE
HYDRATION
MAINTAIN
NAV

Figure 7.7: Personality sliders instructions.

The personality sliders are to synthesise themes generated from the semantic mapping, by collectively plotting positions between differential words. The semantic differentials must be chosen carefully to prevent nudging participants [76]. For example, negations or value-laden words should be avoided since it might bias the participant to selecting a more positive word over a negative one even though it is not in line with the brand [26]. The method is the last step of the define phase. Its outcome and the result from the semantic mapping should guide and inspire the participants when creating micro-interactions in the next stage.

The method is performed as following; differential traits are collectively determined on continuous sliders. By deeply discussing different aspects of the brand perceived from previous exercises, the group should ultimately select a suitable position on the scale.

6/7

Individually / In group ~ 20 min

Motion mood-board is a collage that arranges GIF:s, videos, and music into a format representing the final design style. The goal of creating a motion mood board collectively is to seek inspiration to translate a brand identity into motions. The procedure of creating and the resulting mood board should inspire and lead participants in the last exercise of designing interactions and animation.

- Prepare a board in a tool that allow to freely add GIF:s and videos.
- Invite participants.
- Explain purpose of the mood board to be developed.
- Let participant freely add elements to the board.

To prepare: Milanote (<https://milanote.com>) is a free online tool suitable for this exercise.

Motion moodboard

The slide features a diagram of a moodboard layout with a circle, several squares, and a wavy line. On the right, a photograph shows two people, a man and a woman, sitting at a wooden table with a laptop, looking at the screen. The man is leaning over the table, and the woman is sitting in a chair, looking at the laptop. The background is a bright, modern interior with large windows.

Figure 7.8: Motion mood-board instructions.

As motions and animations were found not to be a part of the brand manual, see 7.1 and 6.1.4, the motion mood board was designed to investigate motions thought to be in line with the brand. As suggested in theory, the identity of a digital interface is determined by several aspects, including interaction design and components behaviour [51]. Thus, the motion mood board is the first step in opening up the solution space for creating brand-driven animations and interactions to increase the hedonic quality of the brand's digital product.

7/7 In group ~ 20 min

The last step of the workshop is prototyping. Now, the participant will work together to create interaction patterns inspired by the brand and the outcomes from the previous exercise. The type of prototyping can be chosen based on what is most appropriate for the workshop. Paper prototyping is the preferred option if the goal is to generate many interaction ideas. If the goal is to design realistic animations and interactions, it is preferred to prototype digitally.

- Prepare brand components, fonts, and colours.
- All components can be prepared in a Figma library to make them accessible for participants if conducted digitally.
- Cut out elements found in the brand manual from coloured paper sheets when on paper. Make the component big enough to be easily seen and modified.
- Let participants freely design interaction patterns. For example, an animation can be visualized by a three-step figure and short explanatory texts.

To prepare: Colored paper, Scissors, Glue, Sharpies, A0 sheets, post its or Figma library of components

Design interactions

Figure 7.9: Design interactions instructions.

The last exercise aims to let the participants design micro-interactions. The method is designed to meet the the insight *interactive design language affects the brand experience of digital products*. The goal of this method was to bring ideas from previous steps and transform them into interaction patterns of components by creating digital and/or physical low-fidelity prototypes. Low-fidelity prototyping enables designing and evaluating with little effort in a short time [30]; therefore, it was considered a suitable approach in this context.

According to Saffner [65] micro-interactions can make engaging with products more pleasurable - as they determine the "feel" of the products. Moreover, micro-interactions can influence perceived product quality and brand loyalty [65]. Found in the focus group, see 6.1.3, component behaviour effected the app experience to contradict the brand vision. The result support previous notions of how interactions determine the "feel" of products [51], and how hedonic attributes has an impact of the overall user experience.

Recommendations

1. Bring each exercise outcome to the next. The workshop consists of a set of methods arranged in a logical sequence. The output from one exercise leads and aid participants in the next. Therefore, the outcome mustn't be forgotten. For example, have the motion mood board visible for participants when designing interactions.

2. Consider different levels of creativity. A core element of the workshop is to let participants define and express emotions and associations and further articulate them through design. The workshop is considered to require design experience - but make sure to facilitate those new or reserved to the field by probing, giving clear instructions or encouragement.

3. Formulize goals and give clear instructions. Semantic map, motion-mood board, and paper prototyping are all open-ended exercises, e.g. the direction of outcome relies on the participants' ability and creativity. For every activity, give clear instructions and remind participants of the goal.

4. Joint warm-up exercise. During the workshop, participants are encouraged to share first-person impressions and associations. To create a safe environment and make the participants comfortable, an ice-breaking exercise at the beginning of the workshop can be beneficial.

Figure 7.10: Workshop recommendations.

The recommendations highlight critical aspects of the workshop found in the evaluation. *Bring each exercise outcome to the next* emphasises the importance of intertwining the outcome from one method into the next so that the emerging ideas resemble results from previous methods. As described, the methods are arranged logically to aid the process from exploring the brand to designing brand-driven micro-interactions. Therefore, no results of earlier methods must be forgotten or disregarded to utilise the sequence benefits.

Consider different levels of creativity highlights the importance of involving all participants concerning different levels of creativity and design experience. The evaluation suggested the workshop to be challenging for some - even though all participants had experience in similar workshops. The scope of brand strategy and novel workshop setting was thought to cause this. Hence, the facilitator must be vigilant, so everyone is involved in the process. *Formulize goals and give clear instructions* builds up on the recommendation mentioned above.

The last recommendation is to consider a joint warm-up exercise to ease collective creativity further. The warm-up exercise is not a part of the instructions so that it can be chosen and performed in a way that suits the group of people involved in the workshop.

8

Discussion

This section aims to reflect on the work that has been performed in this thesis. The goal of the thesis was to answer the research question *How can UX designers be supported in designing brand experience-driven interactivity in digital products?*. The research question emerged from the hypothesis suggesting an unfavourable gap between UX designers and brand strategists. Moreover, that digital brand experience could be enhanced by considering the hedonic aspects of digital products.

The process involved 22 designers and five contributing non-members. The project's discovery and defining phases resulted in several insights, uncovering unfavourable aspects and potential opportunities of the problem area. Three of them were prioritised to focus on in the creation phase and translated into four workshop requirements. The prioritised insights and requirements guided the creation phase, which aimed to design workshop guidelines to facilitate UX designers to create brand-driven interactivity in digital products.

At the latter stage of the project, the workshop guidelines were evaluated. First, a pilot evaluation was conducted with two participants. The design was revised and then tested in a natural environment, conducted with six participants and one brand strategist as co-facilitator. The following section will discuss the results, the process and future work in detail.

8.1 Result

The result consisted of a sequence of methods designed to aid UX designers in designing brand-driven interactivity in digital products and thus promote collaboration between UX design and brand strategy.

The final result was evaluated by reviewing outcomes from each method, observation, and discussion transcriptions. The evaluation results suggest the guidelines to be a promising tool to bring hedonic aspects in terms of brand-driven interactions in digital products. Thus, the sequence of methods is an answer to the primary research question *How can UX designers be supported in designing brand experience-driven interactivity in digital products?*. Due to the phrasing of the research question, the author highly emphasises that this thesis's result can be considered one of many potential solutions to the problem. I.e. different methods and possibly other sequences of exercises are likely to aid designers similarly to this thesis workshop.

The result can be replicated and conducted by other brand strategists and UX designers with help from the booklet. This was considered necessary as the overall goal of the thesis was to be inspirational for UX practitioners and brand strategists in an attempt to bring the fields closer in practice. Although it was hard to evaluate the workshops successfully, this thesis result should be considered a stepping stone for a new perspective on how to combine UX design and brand strategy. The designers involved in the evaluation found the workshop inspirational for future work. One expressed an aspiration to conduct a similar workshop at his workplace to highlight the importance of interactions in designing the feel of products. According to the participant, designers paid too little attention to interactions, but after the workshop, he understood how much it affects the experience of products. Another participant confirmed the statement, explaining they had two apps with similar looks and functionality on two different platforms. However, they were experienced differently due to interactive design patterns.

The result can be considered a contribution to the field due to the novelty of considering UX design and brand strategy in tandem and targeting the feel of digital products by designing a brand-driven interactive design language. Moreover, the result can be used in practice, unlike most theories from previous work.

Three sub-questions were addressed to guide the design process. The first one was, *-What are the current responsibilities and motivations for UX designers concerning digital products as brand touchpoints?*. Found in interviews (n=8), a consistent look of products was critical and accommodated with design systems. Another motivation was to ensure user perspectives were incorporated into the design process and reflected in the products. Few designers were familiar with branding concepts and thus did not consider digital products as brand touchpoints but instruments to meet users' needs. Some designers even expressed that UX design and brand strategy contradict, as UX tries to understand them and branding to persuade. The finding is not significantly surprising concerning previous UX and interaction design notions and how it stems from human-computer interaction (HCI). The result very much correlates with earlier theories of UX designers being more involved with user engagement issues rather than customer development and business model design [47].

The second sub-question *What are the shortcomings of brand manuals in designing brand experience (BX) in digital products?*. Based on the qualitative research (n=16), brand manuals were insufficient guidance for developing the look and feel of digital products; the guidelines are not primarily produced for digital interfaces and sometimes deviate from general usability principles such as readability. Found in the brand manual comparison, only 3 out of 30 manuals consisted of digital guidelines, which support the findings from the qualitative research. The result can be considered problematic, given digital products are among the most frequent contact points between consumers and companies [76]. An explanation of the limited content in brand manuals can be the rapid shift from physical to digital touchpoints. Given

the importance of brands' digital experiences, this will likely be more reflected in the content of manuals in the future.

What can cause a digital product experience to be inconsistent with a brand? The result from the focus groups (n=8) showed that deviating interaction patterns contradicted the visual design and affected the experience of digital products negatively. This result supports theories that the identity of a digital interface is determined by interaction design, i.e. how the products *feels*.

8.2 Methods

The thesis took research through a design approach to find the answer to the research question(s). The process was led by hypothesis-driven design, where insights resulted in new learning goals and actions. Due to the ambiguity of the scope, the process was revised according to findings and pivots. The hypothesis-driven approach was beneficial in the early phases of the project. The scope and process of the thesis were shaped by continuously confirming or rejecting hypotheses based on insight from the external environment. Brand manuals' interactive shortcomings and interactions' impact on the experience of products were two core pillars of the project discovered during this phase. It is, however, worth mentioning that a hypothesis-driven design approach can be prone to confirmation bias. For each action, learning goals were defined with current hypotheses in mind. The outcome of each activity was used to either reject or confirm hypotheses to proceed with the project. But due to the qualitative nature of the study, it is hard to conclude what counts as a deviating or affirmative result. It is very much up to the author's interpretation of the result. To be as objective as possible, non-members of the project unfamiliar with the early findings were occasionally invited to review the result, e.g. during the thematic analysis. Moreover, the research question was used as an anchor to steer the process in the right direction.

8.2.1 Sampling method

In total, 16 participants were included in the qualitative research. Participants were invited due to their different experiences in UX design and sampled for convenience. As a result, the participant group is relatively homogeneous. Although having different experiences in UX design, the majority (n=12) had design engineering backgrounds from either Chalmers University of technology or KTH. A different sampling method would likely result in different insights.

The initial interviews (n=8) were conducted by following the mom test. By not mentioning the hypothesis or the goal of the thesis, the risk of biasing the participants was reduced. During the interviews, patterns in answers became reoccurring indicating saturation. Interviewees shared similar experiences and described similar

scenarios - even without knowing the goal of the interview.

8.3 Ethical considerations

The thesis can be considered a knowledge transfer from brand strategy to UX design. However, it should be emphasised that it is just an additional perspective of how the fields can collaborate. The different views presented in the thesis do not claim anyone wrong. The author believes that both fields are driven by similar incentives and can benefit from collaboration.

Participants were encouraged to share first-person impressions and experiences in the qualitative study. With a relatively low number of participants, their responses highly influenced the scope of the thesis. It should be noted that conclusions can not be drawn about UX design as a whole but only from the group that participated in the study. Recordings from interviews focus groups, and workshops were transcribed to ensure the author missed no critical details. Before joining the study, participants were provided with a consent form to either accept or decline the terms of the condition. All data from the qualitative research was kept but deleted as the thesis was finalised.

8.3.1 Validation of evaluation & future work

Important to highlight that the evaluation result depends on the group of people involved in the evaluation. UX designers with different experiences were invited to represent a varying range of designers. E.g. interaction design students and UX design employees. However, it is impossible to conclude the workshop guideline's sufficiency fully. The evaluation took place in a safe environment, without any requirements of delivering feasible solutions. Moreover, the participants knew the workshop was an evaluation of the workshop proceeding, which could have affected their feedback in the end discussion. To fully conclude the workshop utility, the guidelines require further evaluations in real work cases and various settings. Moreover, the author encourages future researchers to investigate how brand experiences in digital products can be evaluated, e.g. how did the interactions contribute to users' experience of interacting with the product? This would further help confirm the efficiency of the methods presented in this thesis.

8.4 End note

Nowadays, digital products are some of the most frequent contact points between consumers and companies. Although it might not be evident in UX communities currently, UX designers have the responsibility and power to create the spaces where brands meet customers and stakeholders daily. Up until now, brand strategy and

UX design have been performed in silos. This thesis can be considered a stepping stone for a new perspective on how to combine UX design and brand strategy. The digital meeting via products and the experience it contributes to - can be crucial for future relationships and business prosperity. Although this thesis only covers a fraction of what can be achieved by UX and brand strategy collaboration, it can be considered a starting point.

9

Conclusion

The project aimed to answer the research question *How can UX designers be supported in designing brand experience-driven interactivity in digital products?* The research process resulted in a workshop booklet that provides instructions to aid UX designers in designing brand experience-driven interactivity in products. The evaluations of the instructions indicated to assist the participants in creating brand-driven micro-interactions. Therefore, the instructions presented in the booklet answer the research question; see Result 7.2. In this context, it is important to highlight that this result is one of many possible solutions. See the discussion section for more details 8.

Three sub-questions were considered in the project. The sub-questions were used to guide the process and gain insights to design the booklet of instructions ultimately. The first sub-question was *What are the current responsibilities and motivations for UX designers concerning digital products as brand touch-points?* Found in the interviews and focus groups (n=16), UX designers aspire to have a more user-centred approach. Although the experience of products is considered important, the look is overly prioritised. In UX communities, there is a perceived contradiction between brand strategy and UX design, which can impact that there is little collaboration between the fields. However, organisational factors suggest limitations of design freedom, i.e. technical depth and technical hierarchy in design teams.

The second sub-question was *What are the shortcomings of brand manuals in designing brand experience (BX) in digital products?* Found in the qualitative user study (n=16) and the brand manual comparison, current shortcomings are that brand manuals are not optimised for digital products, resulting in brand manual guidelines being complex to apply for UX designers. Brand manual guidelines can be visually transferred. However, other aspects affecting the experience of the products, such as interaction patterns, are not covered and are thus up to UX designers' interpretation of the brand.

The third question was *What can cause a digital product experience to be inconsistent with a brand?* Found in the qualitative study (n=16), deviating interaction patterns highly affect the experience of a digital product, which can also affect a digital experience to be inconsistent with the brand behind it.

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A

Brand manual comparison chart

	Logo	Colors	Illustration/ Icons	Photography	Core Values	Mission/Vision	Tone of voice	Typography	Video	Interface guidelines	Interactions
Starbucks											
Walmart											
CEVT											
Skype											
Urban Outfitters											
Allenware											
IKEA											
Audi											
Twitter											
Aurobay											
Uber											
Youtube											
Dropbox											
Zendesk											
SEB											
SLU											
Almi											
Uppsala											
Berkeley											
BMC											
Cloud access											
Hotel premien											
APEC											
Teige											
Granberg											
Switcher											
Asana											
Attivo											
Slack											
Snapchat											
n=30	30	30	19	17	13	11	18	24	7	8	3

A. Brand manual comparison chart

B

Interview questions (Swedish)

Använd frågorna när det passar. Låt intervjupersonen styra intervjun.

LG: Vad är UX designers främsta ansvar?

LG: Hur påverkar varumärke designen?

LG: Vad har de för inställning till varumärkesarbete?

Intro

Kort om dig själv och din roll.

Vad har du för bakgrund - tidigare erfarenheter? Har det påverkat din roll idag?

Arbetsplats

Vad är din nuvarande arbetsplats?

Hur skulle du kortfattat beskriva bolaget du jobbar på?

Vad har ni för mål och visioner?

Roll[0.5em] Vad är ditt främsta ansvar som UX designer?

Bidrar din roll med ett nytt perspektiv?

Finns det något som du skulle vilja göra mer av, något du skulle vilja göra mindre av?

Process

Hur ser ett projekt ut?

Hur ser en process ut?

Vilka ingår i din projektgrupp?

Vem eller hur tas beslut om vad som ska utvecklas?

Hur testas produkter?

Vad har ni för verktyg att underlätta processen?

UX/varumärke

Hur påverkar varumärket hur ni designar och utvecklar produkter?

(Om de har kunder) vad behöver ni veta om bolaget/kunden för att kunna leverera?

B. Interview questions (Swedish)

Hur kommuniceras identitet?

Är varumärket viktigt för dig som designer?

Vad är din uppfattning om "branding"?

Look/feel

Vilken betydelse har "look and feel" för dig?

När i processen behandlas det?

Hur kommuniceras design till utvecklare?

C

Focus group

History: [the newspaper] is Gothenburg's oldest continuously published newspaper. On December 31, 1859, the first [the newspaper] was printed. From the first two issues of the week to publication every seven days, around the clock, [the newspaper] has grown into one of the country's largest morning newspapers.

Challenge: It is now 2018. News of climate change updates, international conflicts, celebrities, and health risks are constantly spread worldwide. Consumers have a broader supply of communication than ever, everything from public service to blogs, companies and organizations' channels that work with text, image, audio and video. The constant information has shed light on "fake news" and made it hard to maintain a business model that sells news.

In 2018, [the newspaper] was going through a significant strategic change. In a complex world of endless information, [the newspaper] wanted to be a credible and reliable source of information. For example, they invested in an agile approach to quickly change the organization and create a sustainable digital subscription service based on quality journalism with a local and regional focus. They designed a new identity that should communicate their role in society. [the newspaper] had the vision to contribute to a better Gothenburg by enlightening with a unique perspective and being a credible and reliable source of information.

Case: Since the app was developed internally, [the newspaper] now wants a second opinion before launching it. [the newspaper] is now asking you as UX experts for advice. Take 5 minutes and look into the app.

Questions: What is your first impression of the app? (10 min)

As UX designers, what would you consider necessary to test and fix before launching the app? (10 min)

From a business/brand perspective, what is GP trying to achieve with this change? (10 min)

Have they succeeded from what you know about [the newspaper] today? (10 min)
How is that vision communicated in the app? (10 min)

What can they do differently? (10 min)