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Enhancing User-Centricity in Digital Service Development

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Enhancing User-Centricity in Digital Service Development

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Käyttäjäkeskeisyyden parantaminen digitaalisten palveluiden kehittämisessä

Vuosi 2021 Sivumäärä 80

Nykymaailmassa erilaisten digitaalisten palveluiden kulutus on jatkuvaa, kaikkialla ja nopeatempoista, mikä antaa kuluttajalle mahdollisuuden vaihtaa palveluntarjoajaa äkillisesti toiselle. Usein syy palvelun vaihtamiseen on se, että palvelun tarjoama kokemus ei miellytä käyttäjää tai uusi palvelu palvelee tarkoitustaan paremmin ja siten suorittaa tehtävän tehokkaammin. Siksi käyttäjäkokemussuunnittelu (UX Design) ja asiakaslähtöisyys digitaalisten palveluiden kehittämisessä ovat ratkaisevan tärkeitä tuotteen menestymiselle.

Tämän opinnäytetyön tavoitteena on rakentaa asiakaslähtöisen suunnitteluprosessin viitekehys, jota voi hyödyntää digitaalisten palveluiden kehittämisessä. Tätä opinnäytetyötä ohjaavat teoreettiset viitekehykset ovat Muotoiluajattelu (Design Thinking) ja Asiakaskeskeinen ajattelutapa (Customer-Dominant Logic), ja malli on rakennettu soveltaen konstruktiivista lähestymistapaa. Muita tässä työssä käytettyjä menetelmiä ja puitteita olivat Käyttäjäkokemussuunnittelu, tapaustutkimus, Grounded Theory ja Käyttäjän hoidettava tehtävä eli Jobs-To-Be-Done -periaate. Yhdistelemällä näitä lähestymistapoja tutkimuksessa, käyttäjä pysyy keskeisessä asemassa prosessin jokaisessa vaiheessa, ja näin käyttäjän tarpeet ja odotukset eri konteksteissa ja olosuhteissa ovat keskiössä ratkaisun suunnittelussa.

Opinnäytetyön empiirinen tutkimus perustuu yksittäiseen tapaustutkimukseen toimeksiantajayritys Timespacen käyttäjäkokemussuunnitteluprojektista heidän OurBalance-tuotteelleen. Empiirisessä tutkimuksessa keskitytään siten sekä toimaksiantajan ennalta määrittelemän tehtävän, eli uuden business-to-business -tuotteen pääkäyttäjäportaalin suunnitteluun, sekä suunnittelu- ja tutkimusprosessin tarkasteluun yleisemmällä tasolla. Tutkimus perustuu pääosin laadulliseen tietoon ja oivalluksiin, jotka kerättiin OurBalance B2B -tuotteen määritellyltä pääkäyttäjäryhmältä.

Empiirisen tutkimuksen tuloksena on HR-ammattilaisille suunnattu B2B-hallintaportaali työntekijöiden hyvinvoinnin sekä työ- ja perhe-elämän tasapainon tukemiseen ja parantamiseen sekä kehityssuunnitelma palvelun tuleville ominaisuuksille.

Tämän opinnäytetyön lopputulos on PULSE²-malli digitaalisten palveluiden kehitysprosessiin. Prosessi koostuu kuudesta osittain päällekäisestä osa-aluepiiristä, jotka yhdessä muodostavat kolme sydämenmuotoista suunnitteluprosessin vaihetta. Kuten muutkin vastaavat mallit ja kehykset (kuten Double Diamond ja Hasso-Plattner Instituutin prosessimalli), myös PULSE²-malli on iteratiivinen ja joustava, ja kunkin piirin ja vaiheen laajuus riippuu kyseessä olevasta suunnittelutehtävästä.

Asiasanat: muotoiluajattelu, asiakaslähtöinen ajattelu, käyttäjäkokemussuunnittelu

Laurea University of Applied Sciences **Abstract**
Degree Programme in Service Innovation and Design
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Enhancing User-Centricity in Digital Service Development

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In the modern world, the consumption of digital services is constant, ubiquitous and fast-paced, giving the consumer the power to change the service provider from one to another abruptly. Often the reason for changing the service is that the experience the service was offering does not please the user, or the new service serves its purpose better and thus fulfills the job more efficiently. Therefore, User Experience (UX) Design and customer centricity in the development of digital services are crucial to the success of the product.

The aim of this thesis is to build a framework for a customer-centric design process that can be used when developing digital services. The theoretical frameworks guiding this thesis are Design Thinking and Customer-Dominant Logic, and the model was constructed applying the Constructive Approach. Other methodologies and frameworks applied in this work were UX Design, Case Study, Grounded Theory and Jobs-To-Be-Done. This combination ensured that the user is in a central position at every step of the process, and the needs and expectations in different contexts and circumstances can be considered.

The empirical part of the thesis is based on a case study of a UX design project for the case company Timespace on their OurBalance product. The empirical study focuses both on designing a suitable solution for the main administrator portal of the new business-to-business product, as well as on examining the design and research process on a more general level. The research was mostly based on qualitative data and insights gathered from the defined main User Group of the OurBalance business-to-business product.

The result of the empirical study is a Business-to-Business admin portal for Human Resource professionals for supporting and enhancing employee well-being and work-life balance, and a development roadmap for future features of the service.

The result of this thesis is the PULSE^2 model for digital service development process. The model consists of six spheres that form three heart-shaped stages for a design process. Like other similar models and frameworks, the model is iterative and flexible, and the magnitude of each sphere and stage depends on the design task at hand.

Keywords: Design Thinking, Customer-Dominant Logic, UX Design

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1 Introduction

1.1 Purpose and focus of this thesis

In the post-materialistic world of today, experiences have gained a bigger role than ever before. Owning something tangible is regarded less important than gathering non-tangible "capital", and therefore eliciting a positive experience plays a crucial role in defining whether a service is actually viable or not. Due to the over-supply of services and service providers, bad experiences in e.g. user interface or customer service are not tolerated by critical consumers, and the users will vote with their feet - i.e. carry their money elsewhere if the experience does not fit their context and expectations. In the digital world, there is always another service to go to, so the competition for the users is hard.

Developing a new service is always a risk for the provider. Product development is generally considered expensive and slow, depending of course on the domain of the provider. In the fast-paced world of startups the "fail fast" or "fail forward" approach have gained popularity and also spread out to traditional companies and corporations. However, this mindset of developing is rarely based on anything else than educated guessing and personal experience. Currently, the vast majority of product ideas arise from personal experience, and only a fraction from systematic user research. (Sharon 2016, XXIII)

The purpose of this thesis is to develop a framework for digital service development based on principles of customer-dominant logic and design thinking. Therefore, the main research question for this thesis is: **How to enhance customer centricity in UX design and digital service development processes?**

The aim of the framework is to offer a simplified and therefore widely applicable toolkit, or a process to follow, that will ensure the customer-centricity over provider-centricity. The framework will try to provide a roadmap for lasting, relevant insights of the users, that can be used and applied on all levels of the organization, and thus enable the product to serve the customer's context better and thus result in more relevant products for the customers. The tools used within the model are based on existing tools used in Service Design, and presented e.g. by Stickdorn et al. (2018) and IDEO.

The empiric research on which the framework is based on is conducted on a single case study, a service development project for a start-up company Timespace on their product called OurBalance.The empirical research aims to thoroughly investigate and solve the problem this task-at-hand is set to address. i.e. design a administrator portal of a B2B well-being service and to map future development steps for the product. This type of detailed research is a

characteristic feature of a single case study, as pointed our by Swanborn (2010, 126). However, in order to serve a wider audience and for the findings to be applicable to UX Design on a more general level, the results of the single case study will be used to construct a model for customer-centric development process.

In constructing the framework, this study applies the principals of the Constructive Approach, introduced by Kosonen, Lukka and Siitonen (1993). This approach will be further explained in chapter 3.3. This study also aims to describe and explain the development of the OurBalance B2B service with as much detail as possible, to transparently justify the research choices made and the conclusions arising from the study. However, since the research is conducted on an actual service, this thesis work must also be mindful about not compromising their competitive advantage gained from being part of this project.

The goal of this theses is to construct a model how the theories of Customer-Dominant Logic (CDL) and Design Thinking can be applied in practice in processes of designing or developing a digital service. This study aims to show in practice how the aforementioned theories can be put to action when designing a smooth and enjoyable user experience. This customer-centric approach will provide the user a wholesome experience, that can seamlessly suit their needs and cater for them, even outside the time the service is actually used. I will further explain the perspective of the CDL later in chapter 2.2.

Marketing, sales (e.g. pricing model, launch plan or mapping of potential customers) and the features of the B2C side of OurBalance are delimited from the focus of this study. However, one of the findings of the empirical research is a development roadmap, including suggested features that will also affect the B2C usage, which the principal company Timespace can deploy later on. Furthermore, this thesis only includes one full iteration round of a design process, albeit iteration of data and its interpretation is, of course, an ongoing process throughout the research. So even though in product development and UX Design in general one must emprace the holistic nature of the process, i.e. the explanation never being “ready” but continuously elaborated and developed, in this work I must consider what is relevant to the end result and what is not. (Swanborn 2010, 20)

1.2 Research Paradigm

The aim of this thesis work is to construct a framework of how to apply Customer-Dominant approach in digital product development. To rephrase that, this work aims to solve an explicit problem and provide an explanation for the phenomenon through the construction of a model. Developing a construction therefore means creating something that changes the way we perceive the contemporary paradigm, such as a new perspective. Therefore, the aim of this thesis is to create a new reality, a paradigm shift.

Furthermore, the usability of a construction must be demonstratable through implementation of the solution – i.e. the construction, the model, must be applicable in various circumstances, even if the model is based on a single case study, as in case of this thesis work. (Kasanen et al 1993, 243-244) Therefore my aim with this thesis work is to develop a model that can be applied to any digital service development project, that emphasizes customer-centricity and understanding the customers' context, and not just limit the usefulness to the field of UX Design and product development.

Since this thesis is focused on new product development through UX Design and aims to build a framework for UX Designers to use in their wprk, it is also important to clarify what UX Design is and how it relates to the other key theories and methodologies. UX Design is often mistaken for and confused with Graphic Design of user interfaces, which it effectively is not. Even though visuality is a considerable part of a digital user experience, UX Design focuses more on the holistic experience the user has with the product or the brand. I will elaborate this topic further in chapter 3.1.

This thesis, being a single case study, is mostly based on – although not limited to - qualitative research and analysis. Qualitative research allows the researcher to focus on understanding the complexity of the potential users and their context, and not just interpret the actions of the existing ones. Furthermore, as Swanborn argues, qualitative research allows the researcher to stay closer to the original data and to consider the valid interpretation than quantitative research. (Swanborn 2010, 114)

Even though qualitative research is often criticized for being too interpretive compared to the evidence it relies on, qualitative research enables interpretative and emhpatetic analysis, which correspondsto the explorative nature of the objective. (Gioia et al. 2012, 18) Furthermore, as I explain with more detail in chapter 2.1.3 on Service Design, and thus as well UX Design as it's sub-field, is a creative field and not an exact science - rather a mix of scientific methods and methods of art. However, it should be acknowledged that qualitative data is always less precise than quantitative data. I will elaborate on the topic of qualitative research in chapter 3.2, which is focused on the principals and characteristics of a Case Study. I will also discuss the analysis of qualitative data in this research further in chapter 4.4, where I go through the analysis of the interview data for the empirical research.

Another important framework applied loosely in this research is Grounded Theory, developed by Barney Glaser and Anselm Strauss. Grounded Theory basically means not being hung-up on

a pre-chosen theory, but instead letting the discoveries of the research guide the way, ensuring that the research is exploratory and not limited by interpretations made by others. I will explain these concepts and the theories with more detail in chapter 3.4.

To be able to fully integrate the principals of CDL to digital service development and UX Design, the researcher / designer must be able to relate to the customer's context. In order to do that in this particular case, this research applies the Circumstance-based approach, perhaps better known as Jobs-To-Be-Done approach, as introduced by Clayton Christensen and further developed e.g. by Kalbach. This approach will be introduced in chapter 3.5.

In order to clarify the myriad of terms and theories in this thesis, the framework below will try to explain how the theories and methodologies that I've applied in this work relate to each other (See Figure 1). The basis of this study are the blocks of Customer-Dominant Logic, on which stand the methodologies of UX Design, Case Study, Constructive Approach, Grounded Theory and Jobs-To-Be-Done thinking, which together support this thesis work.

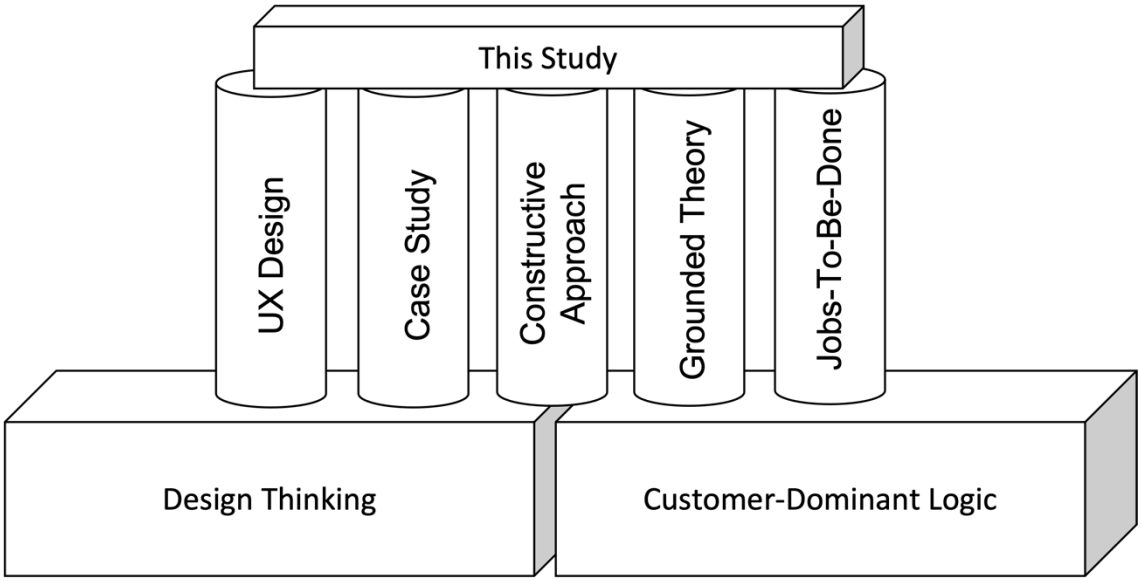


Figure 1: Theoretical and Methodological basis for this study

2 Theoretical framework

2.1 Design Thinking

Design Thinking is a mindset of creative problem-solving and a set of cognitive skills for creating new approaches to problems. It is an intricate process of thinking and envisioning new realities, bringing elements of industrial design and its methods into other fields as well. (Tschimmel 2012, 1-3) Design Thinking is about understanding the problem and its context, being able to empathise the user affected by the problem and then solving the problem in an

innovative way using the proper tools and methods for the task at hand. In other words, Design Thinking is about understanding the root cause of the problem for the user and then solving the problem resulting in a situation that pleases the user. (Rosenzweig 2015, 20)

The Design Thinking framework offers new process models and toolkits aiming to help improve, accelerate and visualise almost any type of creative process by multidisciplinary teams in any kind of organisation, not just designers in traditional sense. In Design Thinking it is important to be able to consider human needs, available resources, and the constrains as well as the opportunities of a project, all at the same time. Therefore a practitioner of Design Thinking must be both analytical and emphatic, to rationalize but be emotional, work methodically without losing intuitiveness, and be oriented by plans and constraints, yet remain spontaneous. (Tschimmel 2012, 3)

The first formal model of Design Thinking was encapsulated by Nobel Prize laureate Herbert Simon in 1969, and it then included seven iterative stages and their components and suggested activities. Today, the Design Thinking process usually involves from three to seven phases, including more or less the same core elements: Discovering, Defining, Ideating, Prototyping and Testing. The stages however are not necessarily consequential, and they also may be intertwined, overlapping, and out of order - and repeated iteratively. This fundamental structure nevertheless enables Design Thinking approach to tackle problems that are difficult to define or still unknown. Design Thinking is therefore nonpareil for “thinking outside of the box”, since it enables excellent means for uncovering innovative ways to meet the users’ needs. (Interaction Design Foundation 2021)

In this thesis work, two central models used as guidelines for the process were the 6-step model of the d-school of the German Hasso-Plattner Institute, and the Double Diamond, also known as the 4D model of the British Design Council. The models are briefly introduced below, and later revisited in chapter 5, where I discuss my own framework construction for user-centric design process.

2.1.1 The Model of the Hasso-Plattner Institute

One widely used and well-known model of Design Thinking is the model of the d-school of the Hasso-Plattner-Institute at University of Potsdam, later reffered to as HPI model (Hasso-Plattner Institute, no date). The HPI d-school uses a systematic approach that consists of six phases, which are presented in Figure 2. In the HPI model, the Design Thinking process is non-linear and iterative, and the focus of the specific phases and iterations can vary depending on the project and the scope.

In the HPI model, (the process starts with the definition of a design challenge, which is formulated into a question starting with “How might we…”. The design challenge thus defines the problem and the framework for the solutions. The following steps are, to describe them briefly (also see Figure 2):

1. **Understanding,** in which the design challenge is further explored by the design team through research
2. **Observing**, in which the team gathers empirical information about the user’s context through methods of qualitative data collection (interviews, observations etc.) which are then combined with the findings of the secondary research and fomed into insights.
3. **Defining the Point of view,** in which the team synthesizes the insights from the previous process steps, and decides to which direction and for which user group the solutions are developed. The team also creates a “persona” to represent the emotional and experienced reality of the selected user group, and strongly identifies with the persona.
4. **Ideation,** in which the team applies a variety of different methods in order to come up with as many solutions as possible. The solutions are then iteratively compared against one another, mirroring them to the created persona.
5. **Prototyping**, in which the team builds or draws quick and easy prototypes of the solutions, in order to reach a common understanding of the main function of the solution and to make it more tangible.
6. **Testing**, in which the team tests each prototype with the representatives of the user group in iterative cycles, collect new feedback and document the results carefully. After testing, the teams decide if they want to go back in the process to further develop their prototype.

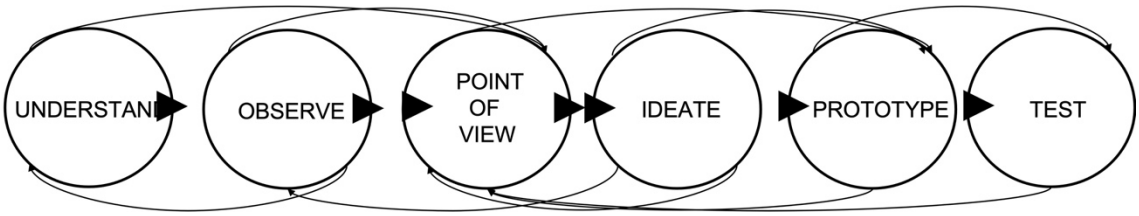


Figure 2: The model of the Hasso-Plattner Institute, based on Tschimmel 2012.

2.1.2 The 4 D or Double Diamond Model of the British Council

Perhaps the most famous model of Design Thinking is the 4 D model of the Design Council (Design Council 2019), more widely known as the Double Diamond. The Double Diamond (Figure 3) is a straightforward, comprehensive and visually effective description of a design process. The model was originally launched in 2004, and it has been updated several times since then.

Even though the focus of the Double Diamond is clearly on the design process, the framework also includes the key principles and design methods for designers to take, in order to achieve ”significant and long-lasting positive change”, as described by the Council. The four steps of the model are:

1. **Discover**, in which the designer(s) create an understanding of the problem and the people affected through research and interaction with the people
2. **Define**, in which the discoveries of the previous step are gathered in order to see the problem from a new perspective
3. **Develop**, in which a number of solutions are created to address the problem, often thourgh co-creation with the potential users
4. **Deliver**, in which the solutions are tested and evaluated through quick and easy prototypes or other methods, and decided whether to reject or further develop them

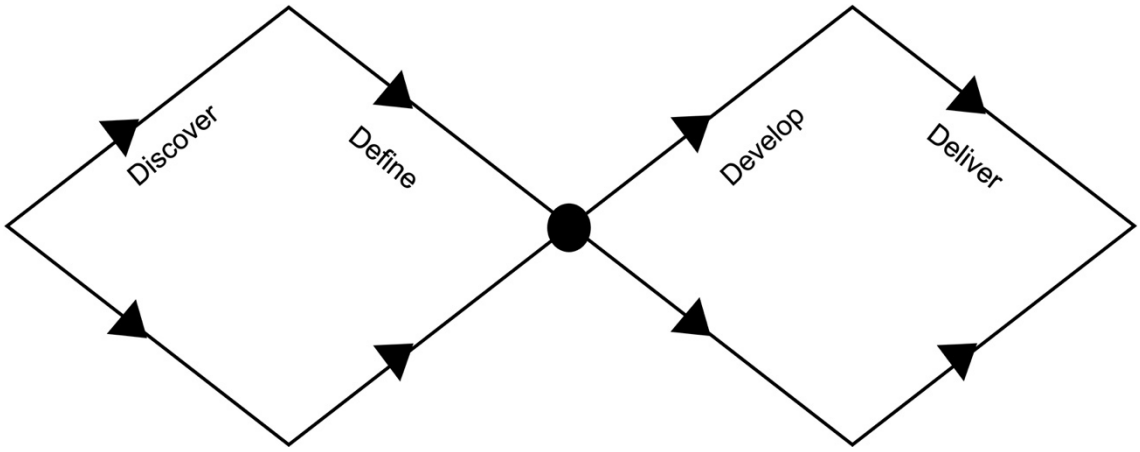


Figure 3: The Double Diamond by the Design Council, based on Design Council 2019.

2.1.3 Service Design

Design thinking is best most effectively applied through Service Design, which is a way of designing and developing services, experiences and value with various stakeholders, and not just for them. (Polaine et al 2013, p. 7; Stickdorn et al 2018, 19) Emerging in the 1990’s, Service Design was originally based on the principles of industrial design and Design Thinking, which were then applied to the design of the untangible, such as services and processes. Service Design has since developed into a versatile field constantly growing in popularity, bringing together behavioral sciences, marketing theories, user experience design, system design, and many more. Service design is the process of planning and organizing the service so that it meets the needs of the person for whom it is intended. (Rosenzweig 2015, 246)

Service Design and Design Thinking are sometimes difficult to distinguish, as they often appear hand-in-hand. However, Stickdorn et al. argue that there is no point trying to make a clear distinction between Service Design and Design Thinking, or try to define if applying this

type of thinking in service development is a mindset, a process, or a set of tools (Stickdorn et al 2018, 21-22). Therefore it is important to also address Service Design, when talking about Design Thinking.

As the name already suggests, the goal of Service Design is to serve people – serve them with better services, better experiences and better systems. (Rosenzweig 2015, 256) Therefore one of the main characteristics of Service Design is that it always includes co-creation with the actual end-users and a spectre of relevant stakeholders of the service or design task in question, which separates it from traditional user or customer experience design. This way Service Design enables organisations to see their value propositions from the perspective of their users or customers, and help the organisations gain better and more holistic understanding of their services. (Stickdorn et al. 2018, 20) Kurtmollaiev et al. even argue, that Service Design might even go against the traditional way of conducting business, by applying principals such as empathy, customer-centricity and holistic thinking. (Kurtmollaiev et al. 2018, 60)

Applying Design Thinking through the methods of Service Design to business organisations has become more and more popular, often expecting it to serve as a magic bullet to increase profits, streamline the organization and growing the market share. (Kurtmollaiev et al. 2018, 59). Indeed, as Stickdorn et al. also suggest, one key charachteristic of Service Design is that is must be relevant to business (or in a broader sense, the purpose that it is serving), meaning that the designer must understand also the business (or other) goals, the technological processes and the opportunities emerging from them. (Stickdorn et al. 2018, 25). However, only involving the customers in co-creation, but lacking the aspiration to truly understand the customer's context (let alone the effort to fit the product or service into their realities) marginalizes Service Design to be only a marketing perspective instead of a holistic business approach, which it aims to be.

Service Design can certainly be applied to a myriad of development processes, varying from tangible to untangible (focusing on the latter) and from large-scale endeavours to tiny details. It can be applied to both new and existing services, i.e. it can help innovate or improve services in a creative and practical way. (Stickdorn et al. 2018, 19) However, in order to successfully apply the theories and practices of Service Design, the organization often needs to learn away from their existing practices, and adopt new ways of thinking and doing, with putting the customer or the end-user in focus for real, for example by interacting with the customers and trying to emphatize them. (Kurtmollaiev et al. 2018, 67-69)

Service Design is not just a method of creating new services or products, but in order for it to be successful and not just a proxy, it needs to be rooted to all levels of an organization and make it an integral part of the organisation's culture. If Service Design methods are only used

by the development team, their insights and new innovations based on their findings will most likely fail to be adopted by other departments, not to mention the decision-makers. The principles of design should be applied in all areas of a development or design process in order for it to be successful (Rosenzweig 2015, 22).

As acknowledged earlier, Service Design is a creative field, and not an exact science. Hence, there is no one, correct way of conducting an Service Design process, and no research data will ever give scientific answers to what the designer should do next. Thus, the designer and their individual preferences, perspectives, experiences and biases can never be fully taken out of the equation. However, this doesn't mean that the designer should not be aware of these biases and preferences, but the designer has to find balance between what the data suggests and what are the designer's individual views and interpretations. (UX Pod 2017) Especially when gathering and analysing qualitative data, the researcher must actively be aware of their own biases produced by the individual experience framework, to avoid warping the results with cognitive-intellectual contamination. (Swanborn 2010, 162)

2.2 Customer-Dominant Logic

Customer-Dominant Logic (CDL) is a customer-centric theory and perspective on service development and marketing. The term "dominant" means that customers have a dominant position in the firm. Thus, when a provider applies CDL their decisions are not dominated by products, service, costs, or growth but rather by customer-related aspects and the customer's context. (Heinonen et al. 2015, 9) As also Cristensen and Raynor acknowledge, when customers have a "job" that needs to be done, they look for the best way to get the job done, i.e. whatever solution that serves their context. (Christensen et al. 2013, 75), and therefore the most logistic way to create a product or a service is to figure out what is the context of the customer or the user of the service, and not focus on how to make the customers want what the provider has to offer.

Compared to other logics that are often used in Service Design, such as the rather popular and often used Service-Dominant Logic (SDL) (e.g. Lusch et al. 2014) or Service Logic (SL), CDL argues that co-creating a service with the customer is not enough, because in that case the perspective is still provider-driven and focused on how to best integrate the customer to the service at hand. However, according to Heinonen et al., in CDL the starting point should instead be how to integrate the service to the customer's habits and context. This means that unlike SDL, the CDL does not focus on the interaction or co-creation between the service provider (business) and the customer, but on how the customer embeds the service in their own set of actions. (Heinonen et al. 2015, 5; Vargo et al. 2004,) In other words, when in other logics, to which I will refer as provider-dominant logics or approaches, the main question is

"*how to sell our offerings to customers*", in CDL it is "*what can we offer our customers to make them want what we offer*".The main differences between CDL and provider-dominant logics can be explained through three key concepts: **involvement, control and visibility**. (Heinonen et al. 2010, 538)

Involvement: In SDL, one of the main axioms includes active co-creation or co-production between the service provider and the customer. The very idea of co-creation already suggest the approach being provider-centic: the provider requires the customer's input, and therefore it must be attained – regardless if the customer is actually interested in co-creation or the service in the first place. In CDL however, the focus is not on involving the customers into the product or service development, but in involving the service provider into the customers' lives. Therefore, where SDL and other provider-domonant logics focus on the product or service rather than on the role the the service plays in the customer's reality. (Heinonen et al. 2010, 538)

Control: The question of control in CDL is probably what is the most difficult thing to swallow when applying it in a business environment. The idea of controlling the value-in-use in CDL is, that even though the provider can control their own value creation and the (possible co-)creation process, it cannot control the value creation of the customer. And "losing" control over the customers' value-in-use is most likely the last thing that the provider companies want to do. In CDL it is however acknowledged that the experience that the user has can only be partly controlled by the service provider, but partly the experience is created by the customer's subjective elements, that are beyond the control of the service provider. (Heinonen et al. 2010, 538) As I will discuss later in chapter 3.1, this is also the main premises in Experience Design.

CDL suggests that value-in-use should be perceived as everything that the provider does that the customers can use in order to improve their lives or businesses. Therefore, in CDL it makes more sense to talk about value-in-context rather than value-in-use, as value-in-context also acknowledges that the customer's context is dynamic and dependent on the customer's role in a specific social structure, and also the experiences that shape the customer's reality are continuously accumulated. (Heinonen et al 2015, 540-543)

Visibility: Related to the question of control, the question of visibility is one of the key differences between Provider-Dominant and Customer-Dominant Logics. In CDL most of the value-in-use– even the whole customer - might be invisible to the company, and therefore a broader understanding of the concept of value-in-use is required when applying the CDL. A broader understanding in this case means adopting the customer's view and experience, where the time frame for the experience is broader: value is experienced before, during and after the

actual service experience. Therefore, value-in-use is not linked only to the service process and the aforementioned touchpoints, but extends beyond the interactive process. Hence, value-in-use includes more than tangible activity – it also includes psychological activity, which is beyond the visibility of the provider. (Heinonen et al. 2010, 539)

The times where the provider does have control over the customer's experience is on different touchpoints between the customer and the service provider (e.g. finding the product, purchasing the product, using the product etc.) Emphasizing these interaction points between the provider and the customer brings the focus on instances where the provider has a direct contact with the customer. CDL however does not emphasize the importance of the interactions but instead argues that providers must understand and gain insight into customers' patterns of activities and idiosyncratic logic – which will allow the service or product to be relevant in the customers' lives even when it's not "active". (Heinonen et al. 2015, 474) In a way, it then becomes a part of the customers' lives, and is used and experiences in the way the customers need it to. That is to say, from the customer's perspective, a service or a product is not only consumed or used, but potentially integrated into the customer's ongoing experience and activity structures beyond the service process. (Heinonen et al. 2010, 534)

It is an interesting – although an intimidating – thought, that no matter how well a service is designed, a designer or the service provider cannot control how the service or product is used For example, a text-message can be a love message or a hate message straight to the user's pocket. However focusing on the user's context, they can help to create the ideal circumstances for the right kind of use and the intended positive experience. Being aware of the possible ways to misuse a service is naturally something a good designer must be aware of - e.g. can a rating system meant for transparency and encouragement to improve the service be used for distorting competition and bullying. (Hassenzahl, 79)

CDL argues that the providers should internalize in which processes customers are involved with in their own context, and what kind of input they would need to support those processes, and based on those findings then discover the potential value of their service for the customer. This means accepting the understanding of customers' activities and supporting those activities as the starting point for the company, rather than starting from products/services and then trying to figure out the activities where a company can fit in. (Heinonen et al. 2010, 545)

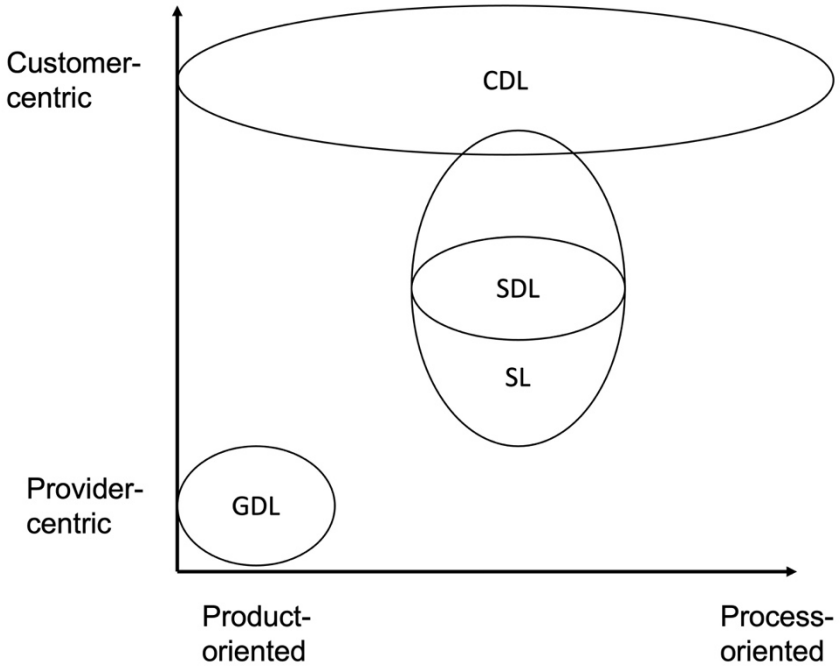


Figure 4: Comparison of characteristics of different Logics. Modified from Heinonen et al. 2015, 474)

The comparison of the main premises of these perspectives (Figure 4) shows that even though SDL and SL are more customer-oriented theories than Goods-Dominant Logic, which focuses on measuring the company success by the number of goods produced and sold, they still fail to put the customer before the provider as the very premise of the business development. The CDL however is mostly built on the foundation of SDL, but it positions the customer – or customer insights - to the very centre of the development process, and puts less emphasis on co-creation between the service provider and the customer. The CDL suggests that the logic of the customer should be the foundation of a customer-dominant marketing or business development logic. (Heinonen et al. 2015, 12-13)

	Goods-Dominant Logic	Service-Dominant Logic	Customer-Dominant Logic
Unit of Exchange	Tangible assets	Skills and knowledge	Experience
Role of Goods	End product	Transmitters of knowledge	Means for improving the customers' lives and businesses
Role of Customer	Recipient of the End Product	Co-producer of service or knowledge	Embeds the service into their own, preset contexts
Value determination	Determined by the producer, embedded in the goods	Proposed by the producer, determined by the customer	Emerges through customers' behavioural and mental processes
Role of Interaction	Customers are encouraged to consume the end-products	Customers are active participators and co-creators of value	Not emphasized - Producers aim to understand and serve the customers' context

Table 1: Comparison of GDL, SDL and CDL. (Vargo et al. 2004, 7; Heinonen et al. 2010; Heinonen et al. 2013)

Even if the CDL is fundamentally a marketing perspective (Heinonen & al. 2015, 11), the main logic can and should be applied also to service development, and especially UX design, which focuses on understanding and thus improving the holistic service experience of the user in the user's own context.

3 Methodology

3.1 UX Design

"God, grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to know the difference." This well-known prayer of serenity could also be a guiding principle for any User Experience (UX) designer, since whenever dealing with something so untangible and evasive as an experience, one does need to know the circumstances, and what the design can and cannot actually affect.

In order to examine what User Experience design is, we first need to study the nature of experience itself. Psychologically, an experience is a combination of motivation, perception, action and cognition, together forming a subjective, dynamic and situated experience. (Hassenzahl, 72). According to UX Design pioneer Peter Morville, User Experience can be described by seven factors of the product or service: Usefulness, Usability, Findability, Credibility, Desirability, Accessibility and Valuability. These factors apply both to the product as a whole as well as independent features within the product. (IDF, 25-30) UX Design must therefore address all of these factors from the point of view of what they mean to the user, not to the product or the provider.

An experience never takes place in a void or a vacuum – it is always grounded on both the contemporary or ongoing action, as well as past experiences and future anticipations, and is thus also always, without exception, tied to a person. So designing experiences is not an easy task – moreover, Eric L. Reiss states that the very nature of experiences, being so subjective, can be the greatest challenge for designers. (Reiss, Encyclopedia, 89) According to Donald A. Norman, who was actually the first to introduce the term UX in the 1990's (Rosenzweig 2015, 11), Experience Design simply means enabling of experiences. (Norman, Encyclopedia, 91)

By a simple definition, UX design is a sub-category of Experience Design that focuses mostly on interactive products. (Hassenzahl, 73-74) There is some debate about the "right" definition of UX Design and whether it focuses solely on experiences shaped through a device as e.g. Hassenzahl defines it (Hassenzahl, 63-65), or is it more about the perception that the user is left with after a series of interactions, and the interactions may well be between people, events and / or devices, or a combination of the mentioned, like Eric L. Reiss argues. (Reiss, 87) However, in this thesis work, when I talk about UX, I use it to represent the holistic experience of the product, experienced by the user of the given product.

Even though Experience Design is heavily focused on the non-tangible world, it cannot exist without the tangible attributes around it. A User Experience designer must therefore have a solid understanding of the both worlds, and be able to act as an interpreter between them. (Hassenzahl, 78) As formulated by Reiss, perhaps influenced also by the prayer of serenity, UX is the conscious act of coordinating interactions that can be controlled, appreciating those interactions that cannot be controlled and trying to reduce the impact of negative interactions beforehand. (Reiss, 88)

However, to convey the experience, there is a need for a product employed by the user. As Hassenzahl argues, the product itself is just a way of delivering the experience, and the creation of a "meaningful experience" through an interactive device is, in most cases, the responsibility of the user. (Hassenzahl, 84-85) Also Norman highlights that even if experiences can't as such be designed, they can nevertheless be supported by designing the framework and what the user can do with the experience (i.e. *affordance* of the experience), and the rest is indeed up to the users. (Norman, 91) This notion is well-aligned with the framework of the CDL, as presented in the previous chapter.

Hence, the product must be designed to enable the experience the user is looking for – or the job that the user needs to be done. As Hassenzahl frames it, the user "is more interested in the experience created than taking pride in the ownership of the product or technology that

created it." Therefore, he suggests that designing the experience should actually come before designing the gadget or service to provide it. (Hassenzahl, 76)

For designing the experience that the service or product then delivers, Hassenzahl offers a simple why-what-how -model to help a designer come to terms with what they are actually designing. The "why" means finding the need for the service and the experience it offers, i.e. why do I need this problem solved or a job done. "What" defines the "vessel" needed in order to cater for that need – what can I do with this product. "How" is where interaction designing steps in, i.e. designing the best kind of vessel to deliver the experience. (Hassenzahl, 82-84) In a way, "why" is the user-centered aspect in this model, whereas "what" and "how" are more product-centered. However, I think it is impossible – or short-sighted to say the least – to look for an answer to "what" without focusing on the user and the user's abilities and context. In a way, as pictured in Figure 5, I see the "what" being the mediator between "why" and "how" – and thus being part of both the user-centric as well as the product-centric spheres.

Hassenzahl's model as such however is not very user-centric. As pointed out in her commentary to Hassenzahl's article "User Experience and Experience Design", Whitney Hess points out that there is a dimension missing: the question "who". This means that it is not enough only to define why do something, what to do it with and how to do it, but also who is it for – i.e. the intended audience or users. According to Hess, it is the "what", "how" and "who" together that form the "why" of the product. (Hess, 97) Nevertheless, acknowledging that there are different levels in design is the key to producing and developing services that appreciate the originality of human experience. (Hassenzahl, 82-83)

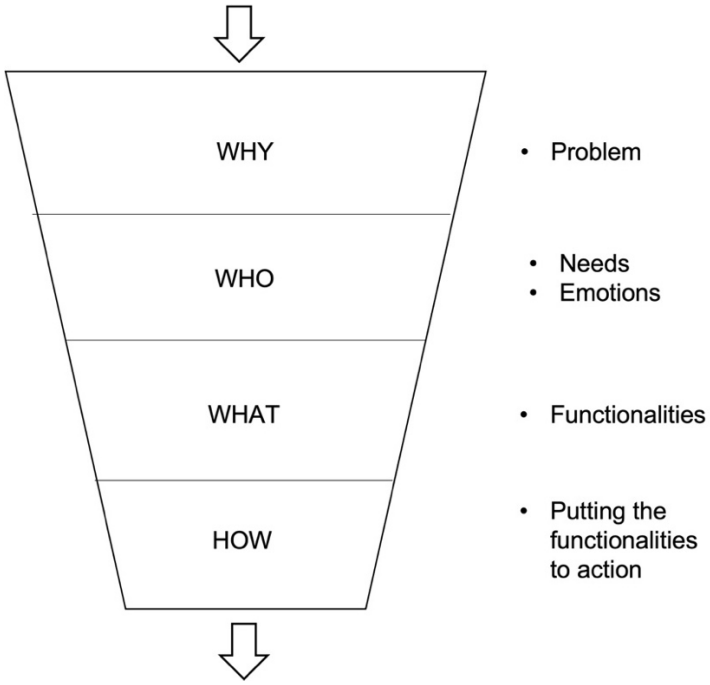


Figure 5: A combined model by Hassenzahl and Hess for what to consider in UX Design

As already acknowledged in chapter 2.2 when talking about Customer-Dominant Logic, the customer's context should be in the center of the service development instead of the context of the provider. Thus, UX design is also contextual design – meaning that it must consider the actual situations and needs of the users. And these contexts are discovered by the designer through *contextual inquiries* if the users – or other stakeholders. This way the future service can work seamlessly and potentially even improve the existing habits of the user, making the service easier to adapt to, and creating a positive experience to the user. I will discuss these more in the following chapter about UX Research. (Holtzblatt et al., 419-425)

What then is the relationship between UX Design and Service Design? As pointed out in chapter 2.1.3, Service Design is focused in producing and developing services that offer the users a positive experience, and in order to do that, it places the customer or the user in the center – as does UX design. Stickdorn et al position Service Design to be *"firmly sitting at the intersection of design thinking and customer experience"* (Stickdorn et al 2018, 23), referring to design thinking as management methodology and to customer – or user - experience as the main focus of a growing number of organisations. In other words, UX design can be perceived as the business interface of Service Design, which is a methodology to apply the principals of Design Thinking.

One of the important sub-fields of UX design is usability, which focuses mostly on the user interface of the product. In the recent years however, when interacting with digital devices has become more and more popular in the context of personal and recreational use, usability has

become more involved with the holistic experience of the user. (Rosenzweig 2015, 8) Furthermore, effortless usability is a corner stone of a good user experience, and therefore usability should never be overlooked when designing a user experience, even if the designer has no expertise e.g. in front-end development or graphic design. In fact, good usability is one of the results of a well-conducted, user-centered design process. (IDF, 29)

In 1999 the ISO defined usability as "*the active involvement of users and a clear understanding of user and task requirements; an appropriate allocation of function between users and technology; the iteration of design solutions; multi-disciplinary design.*" (Rosenzweig 2015, 9) Usability thus depends on the job that needs to be done.

Usability is often measured through usability testing, in which the product is tested and measured with clear indicators, such as how long does it take for a user to perform a task, or what is the success rate of the process. In the research conducted for this thesis, usability is not in a central role, unlike often in UX Design, because the Case Study for this thesis does not cover protyping to a detailed enough level to assess the usability of the service. The issue of usability is however addressed in the model for product development process created as a result of the case study at hand. (Sharon 2016, 176-177)

To sum up what UX Design – or any Experience Design – requires, is a solid understanding of the context and the needs of the users, what the solution could be and how to wrap that solution up nicely, so that it all works seamlessly together, leaving the user with an elevated feeling or achieving what they wanted to achieve effortlessly and without contradicting their existing experiences or assumptions. A mission impossible? Perhaps, but with careful design work, it is indeed possible to come close to the theoretical ideal of designing a full experience.

3.1.1 User Experience Research

Thorough research on the users of the service is an integral and important part of any user experience development process. In this thesis, I chose to use the term User Experience (UX) research rather than perhaps a more commonly used User Research. I justify my choise by referring to the definition provided by NIMI Travis and NIMI Hodgson, that the term "User Research" refers – or at least implies – that the research is focused on only the user, whereas the term "UX Research" emphasizes a more strategic view and also includes all stakeholders (e.g. different teams and departments in an organization), binding them to focus more on the experience of the user. (Travis et al. 2019, 9)

In their book “Think like a UX Researcher” Travis and Hodgson define a successful UX Research as something that gives “actionable and testable insights into users’ needs” (Travis et al, 2019, 5) and they argue that instead of focusing on opinion-based research (i.e. asking the users or customers what they want), UX Researchers should focus more on behavioral-based research, i.e. observing the users. That way it is possible to discover the questions you didn’t even know you wanted to ask, and can deliver services that the users actually want, not just what they think they want. (Travis et al 2019, 5).

This is also the core idea of Contextual Design, a structured design process and philosophy developed by Karen Holtzblatt and Hugh R. Beyer: understand the users and their fundamental intents and motivations as well as their *work-practice* (i.e. the way they do things in everyday life, and what driversare there behins the behaviour) through reliable data, and interpret that data to create meaningful products together with the users. Contextual Design relies on the notion that any service is always situated in a larger context - and that introduction of new solutions always changes the mentioned context for the users. (Holtzblatt & al, 419-420)

Based on theories from e.g. anthropology, psychology and design, Contextual Design was from the start aimed for practical application with commercial design or development teams. The aim was to help the teams uncover the *work-practices* of the set of users in a particular environment in a methodological and systemic way. (Holtzblatt & al, 419-420) In the center of the Contextual Design are the *contextual inquiries* made to the wold and the work-practices of the users, i.e. observations, deep interviews and other ways a researcher can get reliable, first-hand data on the work-practices of the users.

Like the Double Diamond, Contextual Design is usually divided into two major phases: requirements & solutions and define & validate concepts (Holtzblatt & al, 424) In this thesis work I loosely followed the guidelines of the first phase, combined with the mentioned Double-Diamond process, but decided to take some liberties and not follow the process of the second phase. There are without a doubt influences and practices borrowed from Contextual Design - partly intentionally, partly accidentally and partly because many of the methodologies in Service Design offer similar steps to take, even if the end-results of the deliverables would vary.

Unfortunately, during the time the UX Research for this thesis was conducted, the world was more or less closed for any kind of human contacts due to the Covid-19 pandemic. Therefore it was not possible to arrange e.g. observations, field visits, or live workshops with the existing pilot customers of OurBalance. Therefore I have done my best to translate the principles of UX Research into the digital world, for example when planning and designing the field guides for interviews.

3.2 Conducting a Case Study using Qualitative Methods

A case study is an in-depth study of one (or few) specific instance of a phenomenon. The word "case" derives from the Latin word "casus", which basically means an event or a situation. The approach of a case study is intensive, meaning that the case is studied in its own context and in detail, and therefore the aim is not to gather a large data sets to ground the conclusions. And since this kind of approach can offer some initial ideas or clues about a broader phenomenon, a case study can also be used as answers to any kind of research questions, despite not necessarily being generalizable in other contexts. (Swanborn 2010, 1-3)

A case study represents an intense approach to research, as opposite to extensive research. The terms "intensive" and "extensive" do not refer to the timespan or the pace of the research, but to the coverage and depth of the study. Where an extensive approach aims to explain broad phenomenons through several perspectives, intensive approach focuses on diving deep into a single perspective or detail(s) of the phenomenon. This difference is visualized in Figure 6: Intensive vs. Extensive research approach.

Furthermore, an intensive research, such as a single Case Study, is often based mostly on qualitative methods, such as interviews and observations, whereas extensive research uses more quantitative approach, seeking to establish correlations between the instances of the phenomenon, using methods such as standardized surveys. (Swanborn 2010, 2-4)

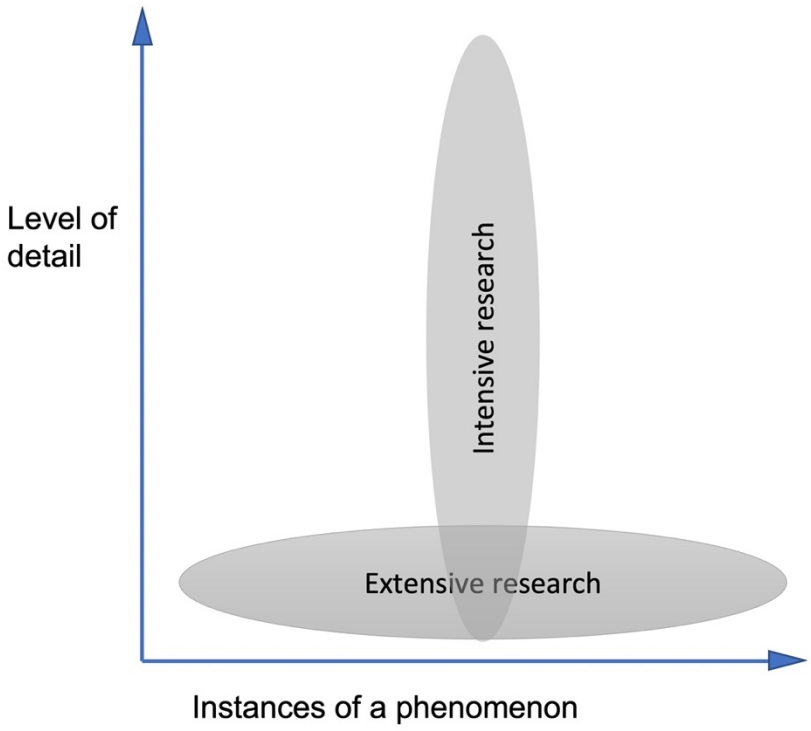


Figure 6: Intensive vs. Extensive research approach. Based on Swanborn 2010, 2-4.

The tradition of Case Studies is known in - and thus originates from - many fields, such as cultural anthropology, sociology, political science and psychology. In all of these fields, case studies are approached through their own perspectives and methods, suggesting that the principles of a case study can be applied to many discourses and disciplines. (Swanborn 2010, 10-11) However there are some common features, such as the use of several data sources (that of course vary depending on the field and the topic), dealing with several groups of stakeholders and the exploratory approach and the researcher's maximal openness towards new or unknown aspects. (Swanborn 2010, 17-18) All of these features apply also to this thesis. Furthermore, in all case studies the interpretation of the results can be challenged, since often there is not that much data to rely on, and other explanations can be found and preferred by others. (Swanborn 2010, 97) This I see also as a fundamental feature in any design process: the designer makes the design decisions they see best, whereas other designers could end up with different solutions based on the exact same data.

In a Case Study, one of the defining characteristics is the exploratory nature of the research. Exploratory research means, that the research is open and flexible towards the subject that is being studied, and that research decisions follow the data; the researcher can and should change the direction of the research if the findings suggest so. This enables the researcher to really find innovative and groun-breaking solutions, since thay are not delimited by a pre-set framework. However, the disadvantage of conducting purely exploratory research is that it tends to drift around and swall, thus becoming very time consuming. Furthermore, the constant adjusting makes the research more exposed to the researcher's own biases to influence the results. (Swanborn 2010, 30)

Even if qualitative research is the corner-stone of case study research, it should not be solely identified with qualitative research. Over the course of the past decades, the emphasis of case studies has turned more towards applied research and away from the traditional qualitative and exploratory approach. Nowadays e.g. qualitative methods and many more approaches are common features – and even qualifications for within-case data - in many case studies. (Swanborn 2010, 11; 21)

3.3 Constructive approach

A research procedure for producing constructions, i.e. creating a model or a system based on research findings, is called a constructive approach. Constructive approach is widely used in many scientific fields, such as medicine, pharmacology, philosophy, mathematics and even linguistics. (Kasanen et al. 1993, 245; Oyegoke 2010, 579) The same approach can be applied also to more practical and applied sciences and fields, such as Service Design.

Constructive research is classified as applied studies, since it produces new knowledge in the form of normative applications. Therefore it differs fundamentally from another kind of applied stud, analytic model building, which on its behalf aims to produce a solution to a proved problem mostly in theoretical level. (Kasanen et al. 1993, 252-253) Furthermore, especially important in any constructive research is not only to create a model to solve a problem or to offer an explanation to a phenomenon, but also to tie the problem and its solution with the relevant theoretical knowledge within the field. Therefore not all problem solving and model constructing can be called constructive research – without a strong, theoretical paradigm, problem solving based on a real-life case is more consulting than science. (Kasanen et al. 1993, 245-246) As explained in chapter 2, the theoretical frameworks that this research is based on are Customer-Dominant Logic and Design Thinking.

Since the aim of constructive research is clear – to construct a model or a system based on real-life findings – the research can be defined as goal-oriented activity. However being goal-oriented or goal-directed is not the only key characteristic to constructive research. Kasanen et al. define the three main features of the method to the following:

1. The research is a phased procedure, and that the nature of each phase is specified in the methodological framework system of the respected field
2. Each phase of the construction can be revisited and checked
3. The research procedure serves a defined purpose, i.e. the procedure is goal-oriented. (Kasanen et al. 1993, 258)

Kasanen et al. also provide several examples of constructive research and constructive approach in Management Accounting in their article “The Constructive Approach in Management Accounting Research” (1993), such as the Return of Investment (ROI) -management system and the capital budjeting and investment system of Discounted Cash Flow (DCF). Adekunle Oyegoke, in his article “The constructive research approach in project management research” (2010), applies the framework to the field of project management, offering an example of creating the development of Specialist Task Organisation (STO) procurement approach.

As defined above, constructive research is characteristically a step-by-step procedure. Kasanen et al. suggest the typical steps of the process to be (not necessarily always in the same order):

1. Defining the problem which also has research potential
2. Generating a profound understanding about the problem and its context through research
3. Constructing an innovative idea for a solution
4. Validating the viability of the solution in practice

5. Tying the research that the solution is built on to the relevant theoretical framework
6. Exploring the solution's range of applicability (Kasanen et al 1993, 246)

In the research for this thesis work the steps followed this suggested model, of course taking into consideration that the initial problem was mainly defined by the principal and then further examined by the researcher, and the theory was not tied to solution in the end but was rather the starting point providing a loose framework to the research process. Furthermore, the research process was, as typically in research applying the Grounded Theory methodology (which will be explained in chapter 3.4), a constant dialogue of findings from the data and applying those findings to the initial solution and structuring the research process. Therefore the steps in this research were more intertwined than the original ones presented by Kasanen et al.

3.4 Grounded theory

Grounded Theory is a research methodology developed in the 1960's by Barney Glaser and Anselm Strauss. This theory is today widely applied in research addressing qualitative issues, e.g. in social and behavioral sciences. However, the theory can also be applied to the fields of business, marketing and design. (Birks et al. 2019, 1)

The Grounded Theory approach is based on constant comparison between the collected data and data analysis, meaning that the phases of research and sensemaking are intertwined. The aim is thus to create an overarching theory grounded solidly in the data and the observations. (E.g. Swanborn 2010, 122) This characterizes Grounded theory as purely exploratory methodology. Hence, the Grounded theory approach does not relate to any existing theories or frameworks that would lead or guide the researcher, it is well suited for customer-centered processes, such as Service Design (as further examined in chapter 2.1.3) and UX Design (as discussed in chapter 3.1), as well as for Case Studies, such as this thesis work.

Like many theories, Grounded Theory too has several approaches and schools of what is the perspective and focus of the researcher. In the positivist approach to Grounded theory the main focus is on the hard evidence and there is little room for interpretations by the researcher. On the other hand, in the interpretivist approach to Grounded theory the role of the researcher is recognized and accepted as the interpreter of the data, explaining the examined phenomenon. (Goulding 2002,19-23; Birks et al. 2019, 1) In this research therefore, I am approaching Grounded theory through the interpretivist paradigm, since the realm of (User) Experience Design requires the researcher also to apply empathy in order to grasp the context of the users, and to discover the hidden and underlying work practices of the users – which require being able to interpret the findings.

However, it must be noted that the aim of the Grounded theory is to develop a theory – which makes the Grounded theory approach as such incompatible with the aim of this thesis, which is to construct a model of a process, not a theory. However, the methodology of the Grounded theory, especially the constant comparison and the methodolical approach to analysing data through the creation of a "coding tree" are well suited also for this purpose. Although in this thesis I will apply the Systematic Method as presented by Gioia et al. (2012) , the Grounded Theory coding process is rather similar to Gioia's method. With Grounded Theory, the first step is "open coding", followed by "axial coding" and finally resulting to "selective coding", thus iteratively analysing the data through different codes emerging from the data. (Swanborn 2010, 118-119)

Grounded Theory is often criticized for its purely exploratory character. Due to being tied to the findings that emerge from the data, it has been accused of not having a real relation to the theories of social sciences or behavioral sciences. Moreover, when it comes to the coding and analysing of the data, Grounded Theory has been criticized for not revealing the interpretations of the researcher, let alone their existing theoretical notions – i.e. the researcher's influence is not transparently shown. (Swanborn 2010, 122) However, Grounded Theory offers a usable framework for creating new theories – the question is, is it necessary for new theories to always rely on old ones, if they rely on systemathic research?

3.5 Jobs-To-Be-Done thinking

Another important concept in this thesis work is (Christensen et al. 2010, 75) Jobs-To-Be-Done (JTBD), in other words, focusing on User Jobs or circumstance-based categorization of market rather than segmentation based on demographics. JTBD is a way of seeing, a methodology in a broader sense, that allows the researcher or the developer of the service or a product to understand the objectives of the people the product aims to serve, and to step away from business and provider centricity. The aim of JTBD is to understand the customer's, i.e. the Job Performer's, underlying intent (See Figure 7: Dimensions forming a circumstance. Based on Christensen et al. 2010, 75.). When used in business context, JTBD seeks to secure product-market fit from the early stages of the development process, thus reducing the financial risk that innovation and new products always include. (Kalbach 2020, 7-8)

JTBD has potential to facilitate applivation of Customer Dominant Logic because JTBD does not focus on a product, a service, or a provider. Instead of being solution-centered (inside-out mindset), JTBD aims to turn the focus to the problem that the users have (outside-in mindset). invites to understand what the users want and why they want it. JTBD is therefore deeply rooted in behavioral sciences and aim to predict human behaviour: individuals are motivated to make progress toward an objective. If an organization can predict what drives user

behavior, the likelihood of creating successful solutions increases. Hence, in order to create a relevant solution, one must first comprehend the process that the users go through to solve a problem. Only then can a service provider align its services and products to meet these goals and needs. (Kalbach 2020, 3-8)

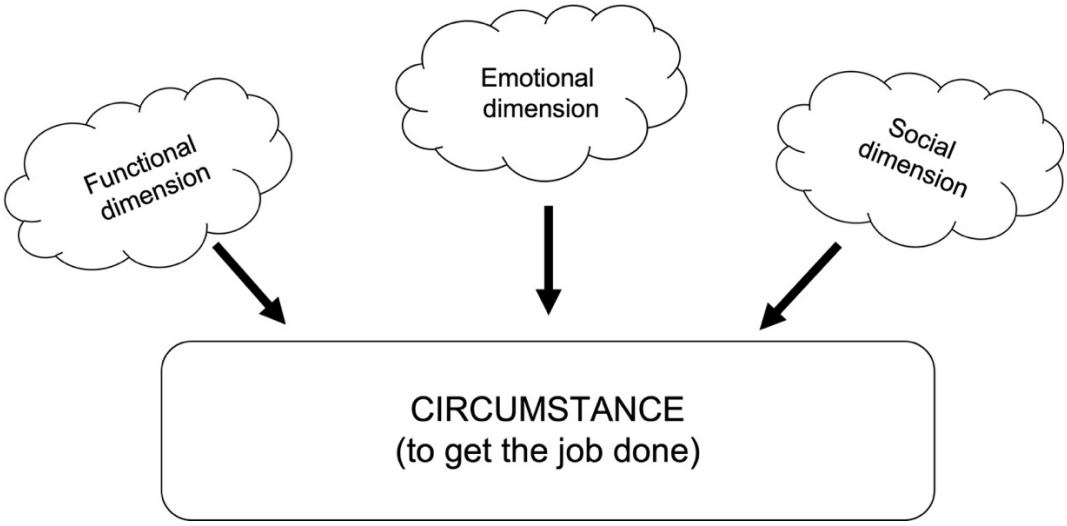


Figure 7: Dimensions forming a circumstance. Based on Christensen et al. 2010, 75.

Originally popularized by Clayton Christensen, the JTBD methodology today includes two main disciplines or approaches: the so-called "Switch" school, developed by Bob Moesta, which aims to deduct the underlying motivation for changing from one solution to another and thus to increase demand for a given product or service, and the Outcome-Driven Innovation (ODI), developed by Tony Ulwick, which focuses on finding customer-centered opportunities by discovering specific outcomes that people want from getting a job done, thus helping to create products that meet the users' underlying needs. (Kalbach 2020, 5-6) In this thesis I am applying the ODI approach, since the aim of the empirical research is to create an innovative service, not to increase the demand of an existing one.

In JTBD methodology there are five widely adopted principles that bridge the disciplines within the field:

1. People do not seek to interact with a product or an organisation, they seek to get the Job done
2. The Jobs don't change with technology advancements
3. People value getting more of the Job done as quickly and effortlessly as possible
4. Making the Job the objective makes innovation more predictable.
5. JTBD is applicable throughout an organization and to tasks of any magnitude.

(Kalbach 2020, 8-10; Christensen et al. 2010, 93)

These principals highlight that JTBD focuses on the relationships that people have with reaching their own objectives as quickly and effortlessly as possible, putting little to none value to

the means of achieving the objective. The objectives are stable, even if the solutions develop – meaning that discovering the fundamental objectives allow enable drawing innovations for a long time – the Jobs don't expire quickly, even if technology does. Therefore JTBD can be broadly applied in different levels of an organization, not only in design and development.

In JTBD, the core elements (the Jobs, the Job Performer, the Process, the Needs and the Circumstances, see Figure 8) are defined and analyzed separately, which makes the method both precise and flexible. (Kalbach 2020, 18). The elements answer to the basic questions of what, who, how, why and where, and are all related to the main objective – getting the Job done.

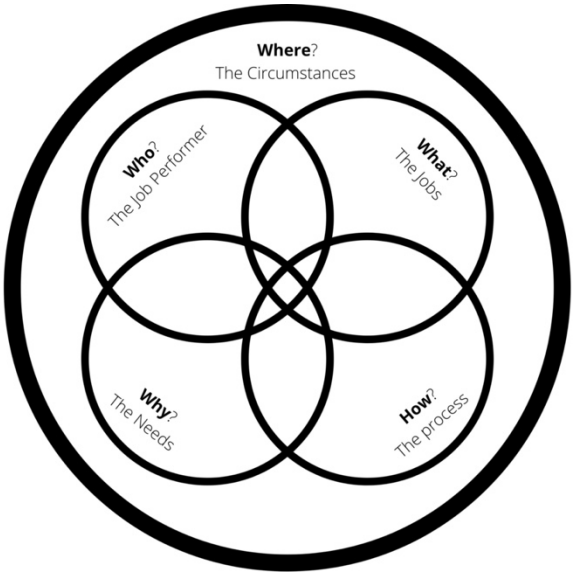


Figure 8: The Core Elements of JTBD. Modified from Kalbach (2020)

Besides the core elements of JTBD, it is important to distinct and clarify the different kind of Jobs and how they relate to each other. The **Main Job** is the overall objective what the Job Performer wants to achieve or fulfil. The Main Job has a clear "end state" and is rather concrete. But adjacent to the Main Job there are one or often several **Related Jobs**, but often significally different, sometimes even contradicting the Main Job. An **Emotional Job** refers to how people feel when completing the Job, and **Social Job** the perceptions of others towards the Job Performer. Even though the JTBD models are always simplifications of complex realities of intersecting and colliding interests and aims, adopting these different sorts of Jobs help to empathise and understand the fundamental drivers of the Job Performer. The primary task however is to serve the Main Job, and the remaining Jobs are secondary and can be catered to later on in the process. (Kalbach 2020, 21-23)

Furthermore, when defining the Main Job, it is important also to understand the different levels of Jobs, to ensure that the scope is right. According to Kalbach (2020, 34-35) there are

three levels of Jobs: **Big Jobs**, **Little Jobs** and **Micro Jobs**, that all serve a purpose in the process. All Jobs have a concrete end-result, i.e. they can be "done", but Micro-Jobs and Little Jobs are merely steps in fulfilling the Big Job, which is the level of the Main Job. Above these levels, there are **Aspirations**, which are often subjective aims without concrete, achievable end-results, such as "Be a Better Person". To navigate between these levels, the question "why" will take you to a higher level, and "how" to a lower level. (See Figure 9)

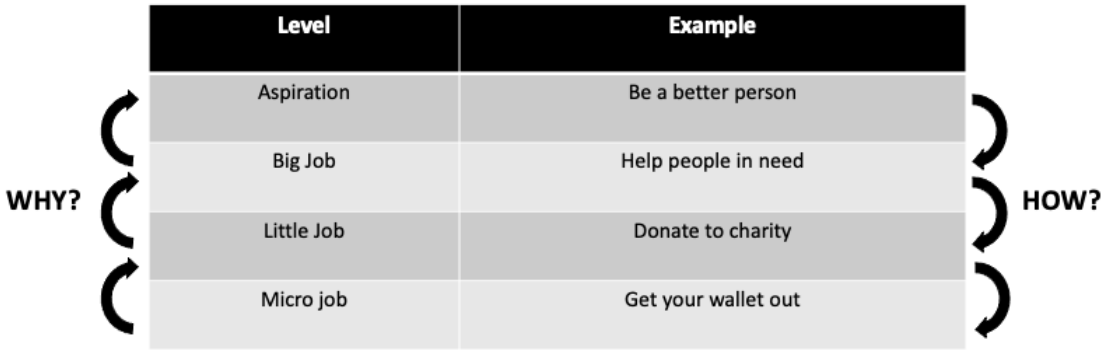


Figure 9: Levels of Jobs and how to navigate them. Based on Kalbach 2020, 34-35)

To summarize, the main idea of circumstance-based approach or JTBD-thinking can be compressed to the notion, that only if the provider defines the market segments based on the circumstances in which their customers are in when they make the purchase decision, they can accurately project how the product will resonate with the customer. (Christensen et al. 2010, 74) To put it in another way, if the customer segmentation is based on experiences rather than demographics, the product has a better chance of serving the right need at the right time. This for example makes the use of Personas, which are a very popular deliverable in Service Design and UX Design, seem superfluous. As Kalbach formulates it, "*People don't 'hire' products and services because of the demographic they belong to; instead, they employ solutions to get a job done.*" (Kalbach 2020, 3)

However, since the product itself is on the B2B service aiming to solve a certain problem, and not on the B2C product, we cannot rely on circumstance-based categorization alone. Therefore also a User Group must be defined. I will elaborate this defining process and decisions more in chapter **Error! Reference source not found.**, but the tentative focus given by the principal company was knowledge workers, which was then further focused to people who work in HR. To remain true to customer-dominant logic, finding out and understanding the circumstances at the work of this user group are the cornerstone of this research and the design process.

4 The case description: Designing OurBalance B2B product

4.1 Research object: OurBalance by Timespace

The empirical research the produced model is based on was conducted for a principal company, a Finnish software startup called Timespace Cloud Oy (later Timespace or principal), on their product called OurBalance.

OurBalance is a digital and mobile service for monitoring, understanding and improving individuals' life balance and holistic wellbeing. The application was originally launched in 2020 OurBalance is Timespace's second product, the first one being a project- and task management tool with a mindfulness perspective, called Focus.

OurBalance is a completely anonymous service and it does not require any kind of registration to use. To assess the overall wellbeing and balance, it uses the data already automatically collected by a smart phone, e.g. step count, sleep tracker, location etc. By analysing and combining this data, the service calculates a daily balance score for the user. The service requires no manual updating or logging in, so the user does not have to actively think about using the service.

The balance score is based on four categories of behavioral and biological metrics. The behavioral metrics are Work Balance and Social Life, and the biological metrics are Sleep and Activity. Each category is given a score of 0 to 2 points, based on the individual data in each category, and a "fifth dimension"- a balance score - is added on top of that, to give the overall score between 0 and 10. This score, and the daily, weekly and monthly changes in the score and the categories indicate the life balance of the individual, and can pinpoint some areas of life that need attention in order for the balance to improve.

The main functionalities in the My Balance -part of the application are the "At a glance" view, which shows the balance score of the ongoing week, past week, ongoing day and the previous day, and also provides more detailed information of each segment (see: Figure 10); the Timeline view, where the user can examine their balance score history; and the Trends view, where the user can examine the daily and weekly trends within each category - together or individually - as a stacked area chart or a linear diagramme (See: Figure 11: The timeline, stream and lines views of OurBalance B2C)

In addition to these representations of individual well-being, there is the Our Balance -part, i.e. the group feature, where the user can create groups and then examine the average well-being of the group. The group's overall balance score is shown in the Our Balance frontpage,

where it is also possible to create new groups for different uses. The application also automatically creates a group based in the location of the user and other users in the region. This group feature, to which I will from now on refer as “Our Balance” to make the distinction to My Balance, i.e. the single-use interface, is the main focus of this thesis work.

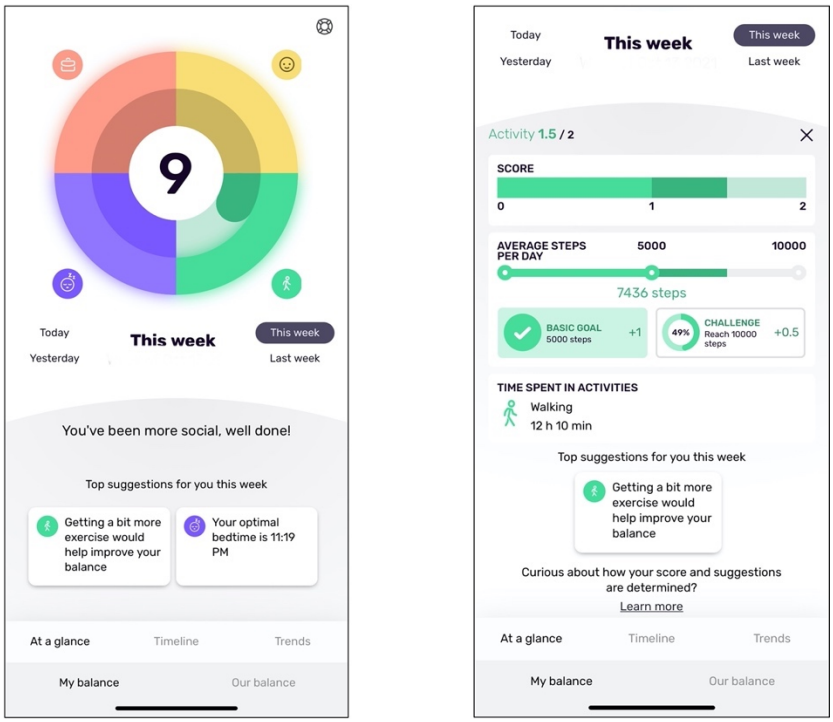
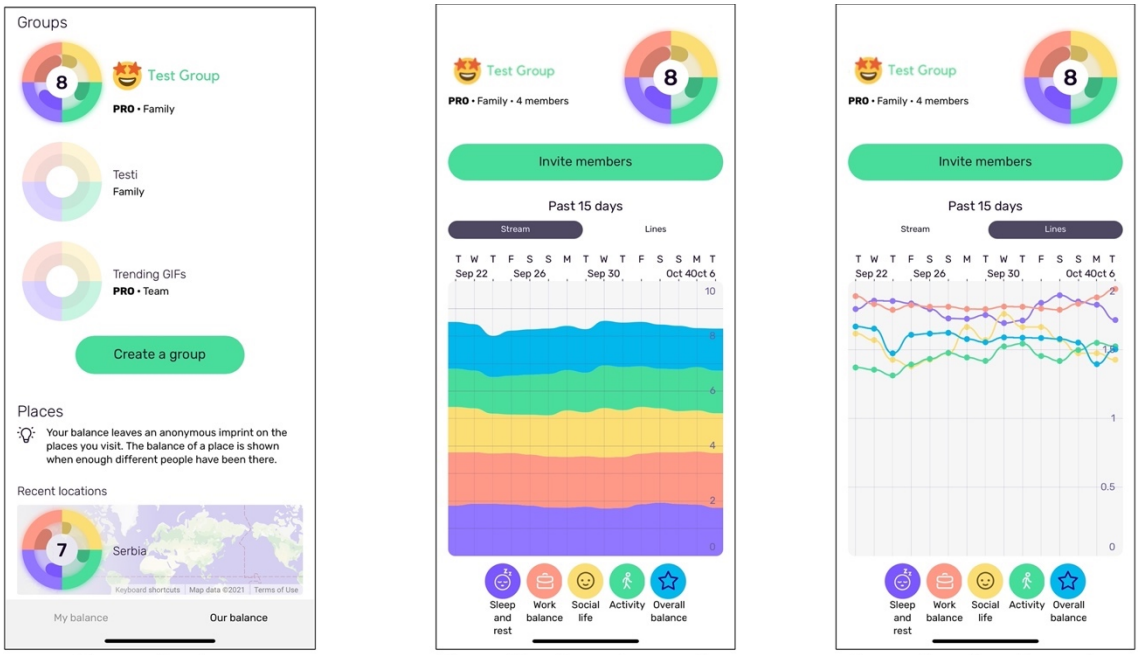


Figure 10: The MyBalance At A Glance -view and details of a well-being segment

Figure 11: The timeline, stream and lines views of OurBalance B2C

In Our Balance, it is not at the moment possible to see the data in any other format than “Trends” (stacked area chart) or “Lines” (linear diagramme) (see: Figure 12) in addition to the overall Group Balance Score of the group. For the Groups, there are no tips, analysis of the balance or any other more detailed information about the segments, except for activating and de-activating segments from the charts by clicking the icons below the chart, e.g. in order to isolate a single segment or to compare the segments to each other to discover possible dependencies and causalities. Overall, the features and functionalities in Our Balance are at the moment scarce compared to My Balance.



Groups frontpage | Group timeline, stream view | Group timeline, lines view

Figure 12: Frontpage of the Our Balance and the Group Timeline in both Stream view and Lines view

The design task of this project was set to further develop the UX of Our Balance, to serve as a tool for HR professionals and team leaders while supporting the employees’ overall wellbeing. The given task was therefore two-fold:

1. To develop the UX of the existing service by offering relevant info in a usable format to the users, i.e. design a new group admin interface for OurBalance
2. To design a roadmap of new or improved features to further develop for OurBalance B2B, in order for it to better serve the context of the users, i.e. provide solutions to the problems in their contexts.

The empirical research, or rather the UX development project took place between February and September of 2021. As already mentioned in the introduction, the research was conducted remotely due to the COVID-19 pandemic, which made it impossible to carry out any

parts of the research face to face, or e.g. make field visits or to carry out observations etc. Nevertheless, according to for example Bolt and Tulathimutte, remote research for websites or mobile services is just as valid as lab research, since they are meant to be independent of location in any case (Bolt & al. 2011, 24).

However, as also Bolt et al. acknowledge, there are some challenges in remote research, that the researcher should be mindful of, such as technology failures, not necessarily being able to read the users' facial expressions and multitasking while running the interview or testing (Bolt & al. 2011, 417-431). However, after the book by Bolt et al. was published a decade ago, the technology enabling remote research, such as high-quality video conferencing tools with recording option have developed significantly, and made remote UX research much more reliable and easier to conduct. Also the COVID-19 pandemic has made people more used to and comfortable with videoconferencing tools, since most of the work withing the field of knowledge work was conducted remotely from the spring of 2020 onwards. (Statista 2021)

According to Stickdorn et al., when conducting a Service Design or Design Thinking research or project, the main things to remember in addition to the three principals of empathy, human-centricity and holisticity, are *sequencing* and *evidencing*. Sequencing refers to visualizing the complex relationships between various touchpoints of which the service experience consist of, e.g. through Journey Maps and Blueprints (which were used in this case study and are further introduced later in chapter 4.5) . Evidencing means drawing attention or visualizing the value provided by the service. In this case study, Journey Maps, different System Maps Wireframes and Prototypes were used to convey the insights of the added value (and they will be presented with more detail in chapter 4.6). (Stickdorn et al 2018, 24-25)

Furthermore, as this study is conducted within the framework of Customer-Dominant Logic (CDL), in the very core of the development process is the customer and their context, rather than those of the provider, even though this thesis is made for a principal company.

4.2 Research process and data collection

In the beginning of a research or a case study, making a research plan, or a research design, is usually the first step to take. Research design of a contructive research consists predominantly of five affiliated aspects: the aim or purpose, the theoretical basis, the research question or the Job(s)-To-Be-Done, the method of collecting data and the strategy of analysing the data. (Oyegoke 2011, 574) As already discussed in chapter 3.2 about conducting a Case Study, carrying out an exploratory research includes a risk of the research drifting away from its original purpose or simply becoming too large to handle. This is especially the case with a

holistic approach, which suggests that an explanation is never “ready”, resulting in the explanation and the things to explain diffusing into a blur. (Swanborn 2010, 19) Therefore having a good research plan, or a research design, is crucial, especially in a practical (e.g. business) context.

However, the research plan should not be held on to too tightly. As explained in chapter 3.4, this thesis work also draws from the Grounded Theory approach, meaning that the findings and the data guide the way. Therefore, over the course of the research, one must be prepared to change the plan, should the findings take you to a new direction – of course keeping in mind the design task provided by the principal company.

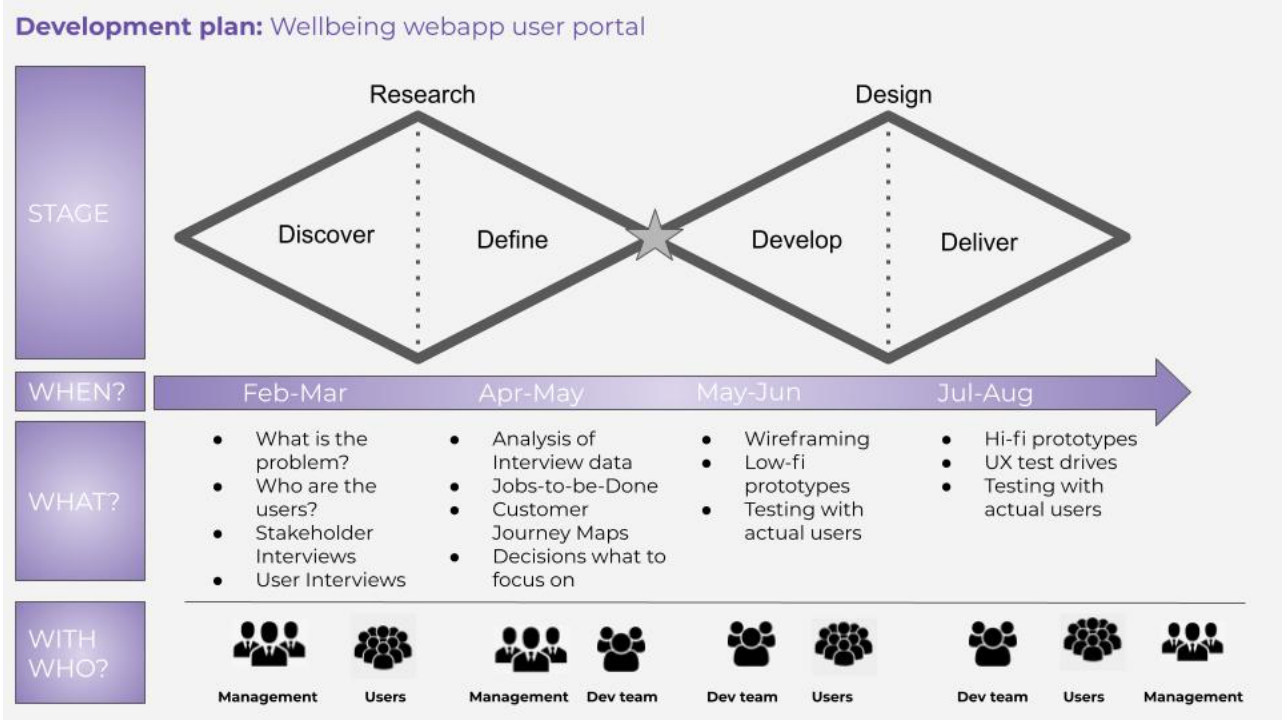


Figure 13: Research design for OurBalance B2B UX development process.

The research design for this study (Figure 13) was based on the Double Diamond by the British Design Council, as presented in chapter 2.1, and the double diamond shape dominates the first row, called “stage”. The row below that, called “when” indicates a timeline of the process, grounding the double diamond into a temporal framework. The third row (“what”) lists the main questions to be asked at each stage of the process and the expected outcomes and boundary objects to be produced, helping the researcher, me, not to get sidetracked.

The final row, called “with who” transparently shows the stakeholder groups that are included or consulted in the stage. “Management” refers to the decision-maker(s) of the principal company (namely the CEO), “Users” refers to the representatives of the main User Group

of OurBalance and “Dev.team” refers to the development team of Timespace, i.e. mainly the Lead Designer.

This figure is not a final or in any way precise “plan-of-action”, but rather a roadmap and a visual representation of the overall design process. The figure also fails to show the iterative nature of each step, as well as the constantly ongoing interaction between data collection and data analysis, which is typical to Grounded Theory approach, such as case studies and intensive research. (Swanborn 2010, 114)

4.2.1 Formulating the initial Main Job through Stakeholder Discussions

In most of case studies, the starting point for the researcher is to come up with a rather broad and even vague research question – or in this case, the Main Job. In the course of the research this research question would then develop into several questions, that are more precise. (Swanborn 2010, 16-17) In this case however, the starting point was a ready-given research (or design) tasks:

1) To design an admin panel interface for the HR Professionals to use to manage the groups
2) To develop a roadmap for future development of new features for the B2B product

Oftentimes the best way to start any design research is by conducting comprehensive stakeholder interviews. (Travis et al. 2019, 44-45) The free-form stakeholder discussions with Timespace took place in January and February of 2021 with the CEO and the Lead Designer of Timespace, as part of the orientation for the project. During the discussions, we formed a common understanding of the scope and the focus of the project. The main motivation for developing OurBalance product was, as defined by Timespace, that productivity in workplaces - especially among knowledge workers - declines if the work-life -balance of the employees suffers, and it may result in decline in motivation, exhaustion and even burnout. These matters are discussed more closely in chapter 4.2.2.

The stakeholder discussion also revealed that the product philosophy behind OurBalance is to provide the users with valuable and accurate information regarding their well-being, without adding stress of screen-time to their lives. Therefore, unlike in most of digital service development, the aim is not to increase the times the application is opened nor grow the time spent in the application, but to deliver quality information that can be effortlessly accessed when needed, and to provide accurate and actionable analysis and tips over the group’s well-being. This product philosophy is important to understand when starting the design process – unless a product philosophy and the goals of the product are not understood by the designer,

it may well result to wrong problem-setting and ending up designing a service that does not serve the client's needs or meet the expectations.

The most pressing issues identified by Timespace were the lack of a "portal" or a user interface that would provide the data gathered by the application on the wellbeing of the group, and the customer insights that would enable the company to understand their customers and their contexts better and thus offer a product that would suit the customers' framework. Furthermore, the underlying problem of why OurBalance is needed in the workplace is, that based on the interviews conducted earlier, it seemed that the team leads and HR professionals have little to none solutions for following the overall wellbeing of the employees based on anything else than the empoyees' own reports and narratives – which can in some cases be untrue or even false. In most cases, the only way of getting information about how the employee is doing was though employee services and one-on-one discussions, that were conducted 1-2 times a year. The need for a solution that would provide anonymous but accurate data on the overall wellbeing of teams, departments or entire organisations was even more pressing, due to the long period of working completely remotely due to the corona virus pandemic.

As Gioia et al. very comprehensively put it, "*Advances in knowledge that are too strongly rooted in what we already know delimit what we can know*" (Gioia et al. 2012, 16). This means that the research question that is formulated at this point should be revisited when the understanding regarding the problem grows vaster and deeper. Otherwise the researcher may end up answering the right question, but in a wrong context – resulting into a product that doesn't cater for the needs of the potential users. Also Stickdorn et al. argue that a good research question is open-ended, which then allows it to be revisited and iterated over the research process. (Stickdorn et al. 2018, 101-102)

Based on the stakeholder discussions and the existing data, and taking into consideration the agreed design task-at-hand, the initial problems to solve were formulated into a functional job-statement:

- ***(I want to)*** **Enhance employees' well-being and work-life balance through reliable data**

4.2.2 Familiarizing with the domain – desk research

As already touched upon in chapter 3.1.1 about UX research, the importance and the scope of desk research is often overlooked and underestimated in UX design processes today, as beckoned by many lean and agile project management philosophies and the general culture of finding solutions rather than problems. However, Travis and Hodgson argue that you cannot

find a solution if you don't understand the problem in the first place, and therefore the researcher should always carefully build a framework for the problem before trying to solve it, and that is in the first place done through desk research. (Travis et al. 2019, 44-45)

Furthermore, like e.g. Stickdorn et al. point out, the goal of design research is not to find "the" truth, but rather to discover relevant information and insights on "a" truth or truths, meaning that design research should aim to answer questions and cater for the problems of the chosen user or customer group. (Stickdorn et al 2018, 98) That is why it is important for a service designer to build an understanding of the context, both from the point of view of the users as well as the service provider, to be able to fully grasp the real problem that the design process is aiming to tackle.

As already mentioned in chapter 3.1 about User Experience Design, another important question also to ask in the early stage of the research as well as is after the launch of the product, is "what do people need?". This question ensures that the product or service is actually solving a real problem, and thus provides added value to the users. However, this case study does not cover the launch and the assessment phase, so the aforementioned questions must be asked at the Discovery Stage of the research (See Figure 13).

Research on the existing data is called *secondary research* or sometimes simply *desk research* (however desk research should also include *preparatory research* in order to deepen one's understanding of the field). (Stickdorn et al. 2018, 118-119) For the secondary research for this study, an important source was the existing data and insights on the development and creation of OurBalance, such as notes from interviews with potential users, in-app data on the usage of the service and other documentation regarding the planning and designing the service. The secondary data regarding the product and its development included detailed notes from interviews with altogether nine HR professionals and team leads within the field of knowledge workers.

As discussed in chapter 2.1 about Design Thinking as well as chapter 3.1 about UX Design (and supported by the general qualifications of a constructive research), the research process should always be iterative, and that is also true when it comes to desk research. (Stickdorn et al 2018, 25) It would be tempting to think that desk research is something you conduct at the beginning of the Service Design process, and then you could carry on with just empirical findings. However, in most cases the more information you gather, the more desk research you need in order to understand the phenomena you are dealing with, and to find answers to questions that may arise alongside with new information.

This is where applying the Grounded Theory approach steps in: the data gathering and the data analysis must go hand in hand to ensure the exploratory character of the study. Therefore also the Main Job sentence, which is formed based on the initial desk research and stakeholder interviews (which are discussed in more detail in the next chapter) should also go through several iterations over the course of the process. (E.g. Stickdorn et al. 2018, 101-102) Thus, the design process is not really as straightforward and linear as it may seem in the research design for this study (Figure 13), but the desk research as well as defining the research question linger as underlying currents throughout the research.

Hence, at this point of the process, the desk research conducted for this UX design process was a mix of confirmatory research (i.e. looking for information and data confirming the initial problem-setting and the design task given by the principal company) and exploratory research (i.e. finding new, relevant information related to the research topic, the focal user group and the general context of the design task). (Stickdorn et al. 2018, 100-102)

Findings from the desk research on Employee well-being

Over the past decades, the very concept of work has evolved and developed in several directions. The jobs have become more complex, which means that the employees are expected to perform on several fields, or at least possess knowledge more vastly than before. The emploees are therefore under more pressure to produce good results, and in shorter timeframes, as the pace of life has accelerated notably in all areas of life. This has also resulted into a redefinition of working hours, especially within the domain of knowledge workers, as jobs have become mobile. All this results to an increase in cases of burn-out or feeling stressed. (Wickham et al. 2006, 2) The problems are widely known, and many employers do put an effort into the well-being of their employees, but often lack the means.

It is important to distinct between employee *well-being* and employees' *health*. Employees' health data or information can only be accessed or even inquired by the health professionals. For example in Finland, the employer only has the right to know the immediate reason for a sick-leave, provided by the health professionals. Information such as chronic diseases, illnesses, medications and therapies, or any personal data that could indicate in any way if a person has a physical or mental illness or an indisposition of any kind are only accessible for the employer with a written consent from the employee. The employer's role therefore is mostly to prevent health-problems by offering support and knowledge for a healthy lifestyle. (The Occupational Safety and Health Administration of Finland 2021)

However employee well-being refers to what is defined by the Oxford English Dictionary as "the state of being comfortable, healthy, or happy". (OED 2021) In other words, wellbeing is

more about how an individual perceives their own state. According to Tchiki Davis in Psychology Today (2019), it also includes the experience of meaningfulness and purpose, as well as high life-satisfaction. In other words, and as the term itself suggests, wellbeing is simply about feeling well. Wellbeing is therefore not restricted to only health professionals, and is consequently a very important to acknowledge and aim to develop at workplace.

In Finland, the employer's duty by law is to arrange occupational healthcare, and the law also defines what the healthcare should include. The employer is bound by law to monitor and support the "*health, working capacity and functional capacity of employees at the different stages of their working careers*". In the definitions of the act, "*activities to maintain working capacity means systematic and purposeful activities concerning work, working conditions and employees organized through cooperation and which occupational health care uses to help promote and support the working capacity and functional capacity of those in working life.*" (Occupational Health Care Act, § 1-2) Therefore, the employer is not only responsible to care for possible physical or mental illnesses and injuries, but also prevent them from happening in the first place. The means and tools for that are however left open, and are to be planned together with the occupational health care according to the needs of each organization.

The Occupational Safety and Health Act (738/2002) provides a more detailed regulation over what the employer's responsibilities include. The act aims to "*improve the working environment and working conditions in order to ensure and maintain the working capacity of employees as well as to prevent occupational accidents and diseases and eliminate other hazards from work and the working environment to the physical and mental health -- of employees.*" (§1) Furthermore, "*The employer shall -- systematically and adequately analyse and identify the hazards and risk factors caused by the work, the working premises, other aspects of the working environment and the working conditions*" (§10)

A human being is a psycho-physical-social entity, and therefore things that happen outside of work also influence the way people perform at the workplace. Hence only minimizing the risks at workplace do not guarantee that the full capacity of the employee can be unleashed. If you are stressed, it may affect you sleep and eating habits, and thereby also your performance and your coping at work. Therefore focusing more on the holistic health of the employees and supporting life choices that increase well-being also outside of work are choices made by a growing number of employers, especially in the field of knowledge work. Different programmes, gadgets or applications that increase individual well-being have become a competitive advantage to employers – and it seems to be a win-win deal. (Forbes 2021)

There is a great deal of research regarding work-life balance (WLB), meaning basically the balance between the individual's psychological well-being and the overall feeling of harmony

in life. The general consensus is, that managing WLB in the organisations benefits both the employees as well as the organisations. However, according to e.g. Wickham et al., in general the literature on WLB fails in acknowledging the holistic context and the diversity of the employees' everyday lives, and focuses too narrowly on the work/family interface. In order to minimize the stress and dissatisfaction of the employees, the organisations should effectively integrate the work and non-work roles. This means, that even the organisations who do put an effort into managing WLB still often lack the understanding of their employees in sufficient details, framing them into "ambiguous and idiosyncratic non-work roles". This leads to further need of managing the employees' stress-levels, well-being and job satisfaction, which can be very consuming for the organisations. (Wickham et al 2006, 2-5)

However, there seems to be no simple and straightforward solutions how to implement WLB policies. Moreover, the studies suggest that the employees are reluctant to take part in the available WLB programs or opportunities, because they fear that tey maybe framed as "special cases". (Wickham et al 2006, 4) This may result from poor conceptualization of the WLB policies within the organisations, but nevertheless, poses a problem relevant also to this case study: how to improve and support WLB and the overall well-being of the employees without making them feel that they are under surveillance or expected to perform?

4.3 Data collection and informants

Many of the times after a product fails or doesn't fulfil the expectations, the reason is that it failed to meet the real user needs or simply did not solve an actual problem. (Sharon 2016, 1) Hence one of the most key parts of product design is to understand what the target audience is – as suggested also by Hess in her comment to Hassenzah's Why-What-How -model (Hess, 97). The question "who are the users" should therefore be asked in an early stage of the design or development process. Alternatively – and additionally - the question can (and should) be asked once the product or service is launched, i.e. in the assessment phase, when a whole new user group the designers and developers never even thought of might be revealed. (Sharon 2016, 35-36).

It is important to note, as argued by Heinonen et al. (2015, 4), that the term "customer" can include several roles, e.g. buyer, user and payer of the service, and therefore the perspective can and should be applied to many different levels and circumstances. When the perspectives of each role or individual user are taken into consideration in the UX design, it is possible to design a service experience that suits the context of all aspects of the customer, which in the B2B context refers to the client organisation as a whole.

The main user group this development project is focused on are the HR professionals, since – as confirmed by desk research - in most companies they are responsible for the wellbeing solutions as well as monitoring and managing the wellbeing issues among the employees. Also, people who work under the titles such as HR manager or HR director, are often the ones who make the decisions on which services are used within the organisations. Therefore focusing on delivering a User Experience that best caters for the context of the HR professionals is beneficial for the future sales of the service.

4.3.1 Data capture through survey

In order to validate some of the findings of the desk research on the product itself, I drafted an online-survey aiming to get a general idea of the thoughts and attitudes towards the group function, to map out the biggest pitfalls in the current service, and to get some feedback of overall design and useability of OurBalance from the actual and potential (B2C) users of the service. The survey was distributed through my personal as well as OurBalance's social media channels, and also though a survey participant platform called Opinion X. The survey was created using Google Forms, and it included 14 questions – five of them open-ended, and nine multiple choices. (See Appendix 1: Survey on Thoughts and Impressions on OurBalance's Group feature)

Now, as mentioned in chapter 4.1, OurBalance is a completely anonymous service, which means that the service provider has no data on the basic demographics of their users, such as age, gender, location etc. Even though the sample of the respondents to the survey cannot be used as an actual representation of user demographics, and the data gathered through this survey would alone be completely unreliable, it was important to get a glimpse of how the users see the service and especially what their thoughts were on the group feature. After all, even though the *customer* of the OurBalance B2B would be the HR professionals, the *users* are all the people using the service – i.e. the end-users. (Stickdorn et al. 2018, 63; Heinonen et al. 2015, 4)

The survey was open for two weeks and gathered altogether 86 responses. 75% of the respondents were in "working-age", i.e. between 20 and 60 years. 76 of the respondents had never heard of OurBalance before or used the service, which was not surprising considering the relatively low number of users and the service also being quite new. When asked about their current life situation, where the respondents could choose on or more options that best described their position, the most popular categories were "student" (chosen by 37 respondents) and "employee" (chosen by 28 respondents). 16 of the respondents reported being "un-

employed", 12 being "entrepreneurs" and 9 "freelancers". None of the respondents represented employers, which of course does not mean they would not be in decision-making position within their organisations.

When asked about who the respondents would most likely use the group feature with, i.e. learning more about the joint wellbeing balance of the group, the most popular answer was to use it with close friends (64 mentions), the second most popular was with family (45 mentions) and the third most popolar was to use with family and other relatives (39 mentions). Using the feature with colleagues from the same team was chosen by 21 respondents, and to use it with the entire organization or department was only chosen by 8 respondents. This confirms what Wickham et al. suggested in their article, that employees are not keen on participating on WLB programs or opportunities. However as mentioned, there was no employer perspect available in these survey results, so one can only guess - and make hasty assumptions - whether that would have changed the ratio towards more usage in the workplace (teams or entire organisations).

In the questions regarding the features of the application, the aswers were rather consistent on one theme: privacy. The results of the survey suggest that the end-users are not keen on sharing their group's wellbeing score in public, and that the end-users value privacy and anonymity over e.g. informativeness or effortlessness. (See Figure 14 and Figure 15) This in a away confirms the notion by Wickham et al. (2006, 4) that within the framework of WLB, the employees do not want to show their weaknesses and are thus hesitant to share information with their organisations (colleagues and employers alike). Of course, in this case, most of the respondents were thinking about using the service with close friends or family – but it is safe to assume that if you don't want to share personal information with the near and the dear ones, you certainly do not want to share it with the people you work with or for.

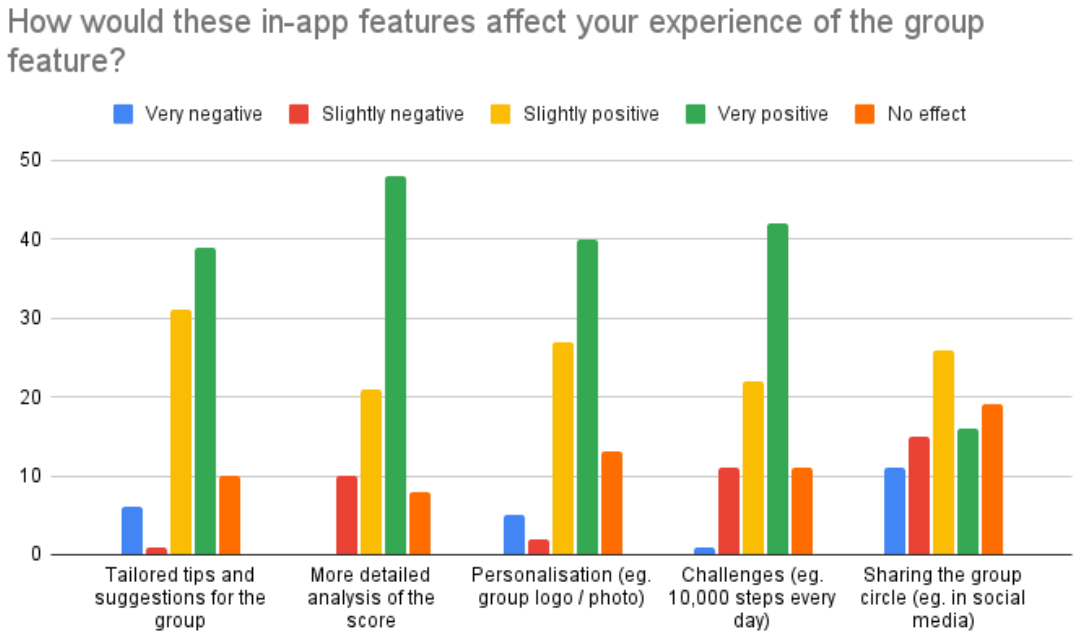


Figure 14: User views on the Group Features

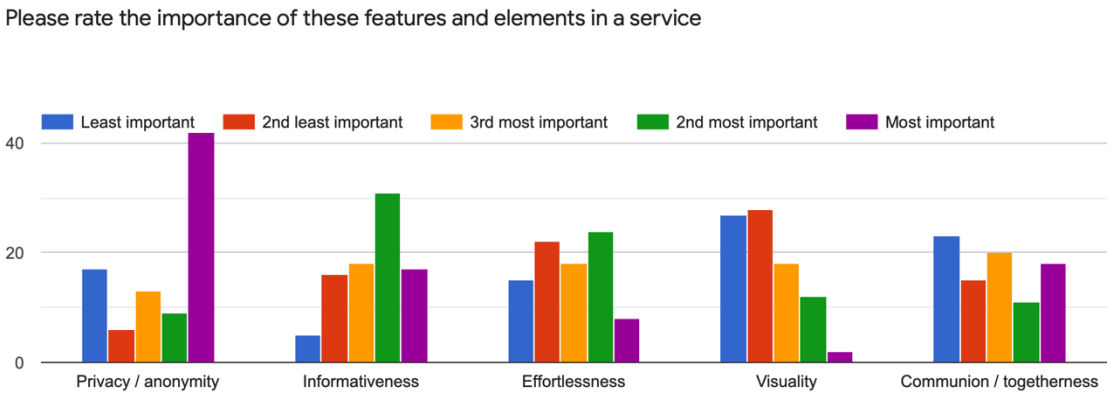


Figure 15: User views on the importance of features to their user experience

Considering the survey responses, a Related Job was formulated to the Main Job as follows:

- ***(I want to)*** **protect the privacy of the employees**

4.3.2 Data capture through interviews and card sortings

As mentioned in chapter 4.2, the main user group to focus on in this project was determined to be the HR professionals, especially HR managers, since they would most likely be the ones deciding on the well-being services used in their organisations, and also because they would have the best overall picture and insights on what kind of information would help in managing and supporting the wellbeing of their employees. Furthermore, they could provide important

insights on what makes a good user experience for them as the administrators of the service. Therefore deep, conducting semi-structured interviews followed by an active Card Sorting with HR professionals were the most suitable way to gain understanding of their context and their expectations towards a service they could use for this study.

Interviews are one the most used methods of gathering data in Case Studies and other qualitative research projects. In his book “Validating Product Ideas”, Tomer Sharon states that interviews are one of the best ways to get an answer for the key issue of who are the users (of the product / service), but also to other important questions, such as “what is the workflow of the user?”, “is there a need for this product or a feature?” and “what are the requirements for this product?” (Sharon 2016, 37-39). Also Swanborn emphasizes the importance of interview data in case studies, and to focusing on the “perceptions, interactions and decisions of people” a a substantive dimension is added to the case study. (Swanborn 2010, 14), and Kalbach stresses the role of interviews as tools for mapping the job that the people in a certain market segment need done (Kalbach 2020, 47-83).

The aim of these deep interviews was both to deepen the understanding of the HR professionals and their needs and expectations towards a tool to support and monitor employee well-being, and to gain insights from these experts on the specific subject of how employee well-being is currently monitored. Therefore the interviews were not purely deep interviews, but a mix between contextual and deep interviews. (Stickdorn et al 2018, 121-122) According to Steve Portigal, deep interviews aim not only to gather new information or data to use, but perhaps even more importantly they offer us as the researchers shifts of perspective, which are crucially important when trying to understand the user context. These “reframes” will reveal new ways of seeing the problem, and eventually lead to new, innovative opportunities with the design. (Portigal 2013, 5-6)

In this type of deep interview, the depth of the discussion is more important than the number of interviewees, which means that these interviews will not offer quantitative data, but qualitative. Therefore, it is important to understand that the insights gained in these interviews do not necessarily reveal future behavioral patterns, and are at best the interviewees’ own narratives, based on their own biases and interpretations. (Travis et al. 2019,100)

However, the interpretations of the users about their own ways of working, values or preferances offer the designers important information about the users’ experience horizon, or as Gioia et al. put it, “help us understand their lived experience” and therefore build and increase empathy towards the users (Gioia et al. 2012, 19). Furthermore, interacting with the actual users will also challenge the underlying assumptions we may have as researchers. (Sharon 2016, 38-39)

Interviews alone are not a sufficient for doing thorough user research, but they need other methods to provide quantitative data and evidence of behaviour. (Portigal 2013, 8-9) Still, gathering information through interviews will build credibility for your product (and your research), especially if and when the analysis is done methodologically and transparently, respecting the information the informants have shared with us. (Sharon 2016, 38-39)

Asking the right questions - The Field Guide / Interview Protocol

An important tool for conducting the interviews successfully is a Field Guide, which needs to be carefully planned and designed beforehand. A Field Guide is the skeleton of your interview, whose purpose is to help the researcher not only to gather the necessary data and insights, but also to help them focus on the research goals even if the interview straggles. (Sharon 2016, 81-82) For this study, I designed the Field Guide before recruiting any informants, to clarify for myself what are the knowledge gaps I need filled and how I could get the information I need. Once the sample was recruited, the Field Guide was revisited to see if there was something to add, remove or rephrase.

According to Gioia et al., a good field guide (or Interview Protocol, as they call it) is focused on the research question at hand, yet thorough – meaning that it also addresses issues that are related to the topic of the interview. The Field Guide must also be flexible enough to take on those issues should some interesting thoughts be presented by the informant, and therefore – just like the research question – subjected to iterations over the course of the research. (Gioia et al. 2012, 19-20) It is important however to distinct between a research question and an interview question – the first one being the questions the researcher needs to find an answer to, i.e. a gap in knowledge, and the second one being what is actually asked from the informants during the interview. (Sharon 2016, 81)

The Field Guide should never contain questions that may lead the informant on. This means the type of questions where the researcher tries to manipulate the informant to agree on certain aspects, bu formulating the questions to start with “Don’t you think that…” or “wouldn’t you say…” This is a real challenge for a researcher – how to design the questions in a way that the interview answers to the needs of the research, but doesn’t narrow the scope too much? In this case I had to find a balance between using my own experiences from the domain of HR and to use that to create a rapport, and still not using them as the basis for the interview, trying to get the informants to concur with my initial thoughts. (Eg. Sharon 2016, 56-58; Portigal 2013, 14-24)

Gioia et al. argue that if a Field Guide is too dependent on existing theories, it risks to overshadow the aspects and the sensemaking of the informants. (Gioia et al. 2012, 17) Since the

aim was to conduct semi-constructed interviews allowing the informants themselves decide on what to highlight and what is important, the field guide was designed to be quite generic and not too detailed. This decision was also based on the research being conducted in the framework of Customer-Dominant Logic (in contrast to provider-dominant logic) as further elaborated on in chapter 2.2, as well as the exploratory character of Case Study, as presented in chapter 3.2. Furthermore, this minimized the risk of any cognitive-intellectual contamination, i.e. the researcher's own frame of reference dominating and limiting the observations and the extent of the conclusions, based on their own experiences. (Swanborn 2010, 162)

In the interviews conducted for this stud the questions were rather broad, in order to allow the informants to paint a picture of their working environment and the challenges they encounter in their work. Therefore the interview questions were formulated rather to start with "how" than "what", to nudge the informants into describing rather than e.g. listing things that they do, think or feel. (See: **Error! Reference source not found.**)

Finding the right people - The Sample

Selecting the sample for the interviews is a critical part of the SD process and user research. Identifying and recruiting the right people will provide you with useful, accurate and insightful data, allowing you to learn something new from the domain and possibly to validate or invalidate your initial assumptions on the subject at hand. On the other hand, if the sample is biased or out-of-scope, it will have a major negative effect on the results of the research. (Sharon 2016, 284)

For the interviews conducted for this study, the informants were gathered from social media, to be precise the Facebook group "HR-ammattilaisten verkosto" (freely translated as "Network for HR Professionals") and LinkedIn group "Agile HR Finland (#Agile4HR)". Specialised social media groups are a very efficient way of finding the right kind of people for your research, and posting to social media pages or groups allowing the potential informants to seize the opportunity is called self-service sampling. In self-service sampling a framework and criteria is given publicly for a certain group (in this case HR professionals), and interviewees volunteer or express their interest based on that information. (Stickdorn et al. 2018, 103; Sharon 2016, 289)

In addition, in order to ensure that the interviewees would be relevant for this study, additional screening was in some cases made by asking few clarifying questions from the volunteers before admitting them to the sample. All the potential interviewees were also sent an email with more detail and instructions for how to prepare for the interview. Since there was no clear-cut need for specific domain knowledge, but the aim of the interviews was to provide me with understanding of the many aspects of HR, no full-scale screening was conducted

with detailed questions about the informant and their experience beforehand. (Sharon 2016, 12-13)

In this kind of interviews a good sample size is approximately 8-10 people. (E.g. Sharon 2016, 49; Travis et al. 2019, 101) Out of the 11 volunteers who expressed their interest towards being interviewed, altogether seven HR professionals participated in these approximately 1 hour long interviews.

In this sample the relevant experience from the field varied from approximately one year to over ten years, and three of them had also experience from the field of psychology. Two of the interviewees worked in retail, two in software development or IT and three in consulting or coaching (the industries are partly my own interpretation and generalization). (See: Table 2) The number of employees in the informants' organisations varied between 5 and 200, and three of the informants worked as "HR team of one", meaning they were the only people in their organisations to work in HR. All the interviewees were female, approximately in their 30's and 40's, which probably represents the industry quite well – however a male perspective would have been a nice asset to these interviews, to bring diversity to the sample. Nevertheless, the focus of the interviews was on circumstances, not demographics, as suggested by Christensen and Kalbach (see chapter 3.5).

Name	Relevant Experience	Field	Length of the interview
Informant 1	13 years	Consulting	52 min
Informant 2	10+ years	Finance / Consulting	1 h 13 min
Informant 3	3 years	Non-profit / Consulting	47 min
Informant 4	5 years	IT	1 h 7 min
Informant 5	5 years	IT	1h 4 min
Informant 6	Approx. 10 years	Retail	1 h 35 min
Informant 7	Approx. one year	Retail	1 h 6 min

Table 2: Background information about the informants

Conducting the interviews

The interviews were conducted remotely through Zoom videoconferencing service. All the interviews were recorded (both audio and video) with the consent of the informants. The informants were also asked a permission to share the recordings with the Lead Designer of

Timespace, to minimize the risk of biased interpretation of the provided insights by the researcher, and to enable analysing and sorting the data together with the design "team" of the principal company.

In his book "Interviewing Users", Portigal stresses the importance of creating a rapport with the interviewee. Rapport is an intense connection and the feeling of mutual trust and understanding between the interviewer and the informant, and it ensures that the informant feels comfortable and secure answering the questions by the interviewee. (Portigal 2013, 20) Also Sharon highlights, that the first five minutes a researcher spends with the informant can have an unexpected effect on the behaviour of the informant throughout the entre interview. (Sharon 2016, 92) In this case, the rapport had to be established remotely, which can be more challenging than when doing face-to-face interviews.

In the beginning of each interview the informants were explained that this interview is not about testing their knowledge on anything, but to provide the researcher a glimpse of their experiences. The informants could not give answers that were "wrong" (or "right, for that matter), and everything that they say is most likely to contribute to the aim of the interview one way or another. As Gioia et al. put it, the informants are "knowledgeable agents", who explain their thoughts and experiences of a certain domain they are familiar with, whereas the researcher's role is to be a "glorified reporter", whose aim is simply to adequately consider and give account of what the informants share with them. (Gioia et al. 2012, 17)

When conducting the interviews remotely, the situation may feel unnatural for the informant, and they can be insecure using the technologies etc. This makes it even more important for the interviewer to strive to create a safe and comfortable mental environment for the informant, which can be achieved e.g. by using the same terms as the informant (even if they seem outlandish for the interviewer), showing active interest in what the informant is saying, and in some cases even revealing something about the interviewer, to encourage the informant to give more information about their views. In remote interviews especially it is critical not to have a contradiction between what you say and how you appear – eg. saying that you are very interested in any aspects the informants have to share, but letting your eyes wander around the screen revealing that you are doing something else at the same time.

One must, however, be careful not to disturb the balance and the dynamics by taking the focus off of the informant and on the interviewee – it may ruin the established rapport if the informant feels you are more interested in yourself than in them. (Portigal 2013, 21-22) It is also important to find a balance between making the informant feel safe and being "too close", i.e. being able to relate to the views of the informant but not to swallow and adopt them as such. (Gioia et al 2012, 18)

One challenge if remote interviews is of course the technology and how well it works. (e.g. Portigal 2013, 126) With most of the interviews conducted for this research, the connection worked well and there were no hiccups with the softwear. However, with both the informants and the interviewer working from their homes due to the COVID-19 pandemic – meaning that they were using wifi-connection and not a landline connection – the connection was slightly unstable from time to time in some of the interviews. This nevertheless did not seem to disturb the rapport, perhaps since people are now more used to working with remote connections and to deal with the occasional disturbances and cut-offs than before the pandemic. Also one informant had trouble getting an editor access to the Card Sort, so the cards for her by the interviewer according to her instructions.

The second part of the interviews, the Card Sorting exercise, had two parts. First, after explaining that the cards were all features in a imagined admin portal for a WLB service, the informants were asked to go through all the cards to see if there are unclear terms or meanings, and then change the colour of the card according to whether they found the feature useful, neutral or not useful. (See Table 3: Prioritazations from Card Sortings) Once the informant was satisfied with the prioritization, the second task was to group these features and name the groups. The aim of the exercise was to see how the User Group representatives perceive the terms, to get insights on the logic of the users of the future admin portal. Based on the card sortings, canvases with clear statements of what features the HR managers found useful and what not were gathered, including also some information about how they should be organized in a service portal. This information was used in designing the information architecture of the wireframes (which are discussed more in chapter 4.5).

4.4 Data analysis and findings

4.4.1 Analysing and structuring the interview data

Altogether the interviews produced approximately eight hours of video recordings, based on which (after viewing them carefully several times) the “Design Team” (i.e. The Lead Designer and myself) made detailed notes about each intervies individually. No transcripts of the interviews were made since the both of us had access to the video recordings and the opportunity to visit and revisit them. This way we could also both see the reactions and micro expressions on the face of the informants, which would not come across with just transcriptions or audio recordings.

To make sense of the amount of information we were dealing with, we decided to use the Systematic Approach introduced by Gioia et al., keeping in mind the exploratory approach

and open mindset required in conducting a case study. (Swanborn 2010, 17) Therefore in this case, our “first order analysis” (as Gioia et al. call it (Gioia et al. 2020)) or “open coding” (in a Grounded Theory framework), i.e arrangeing the data using informant-centered terms and codes, was done by two independent researchers, thus already triangulating the first round of coding the data.

The notes were added to a digital research wall tool called Miro, each note as an individual digital sticky-note. At this point there were altogether 433 sticky-notes on the research wall, which were colour-coded with a yellow note representing an interview note and a blue note a thought or an idea sparked during the interview.

The next step was the “second order analysis” or “axial coding”, meaning further arranging the codes resulted from the “first order analysis” using researcher-centric concepts, thus grouping the first order concepts into themes. (Gioia et al. 2012, 20) It is critical at this point to transparently show the linkage between the data and it was interpreted, in order to maintain high research standards and thus also elevate the credibility of the analysis. (Gioia et al. 2012, 18) The notes with similar content were gathered into groups, similarity at this point meant e.g. the appearance of the same terms or the informant describing the same phenomenon. After several iterations there were 30 second order analysis groups, some of them overlapping and intertwined.

The second order groups were not balanced in size. Some groups had dozens of notes whereas some groups had just few. This gave us also a visual representation of how often a term or a phenomenon was mentioned in the interviews, which could be thought to indicate the weight of the phenomenon. However, mixing quantitative features to our qualitative analysis was not focal for the analysis, at least not before the data structure was complete. (Gioia et al. 2012, 18-20) The scope of the themes of the groups were also quite diverse, ranging from a very general such as “HR Pain Points”, to rather specific such as “Remote Work” (See Figure 17: Second order themes and Aggregated themes).

The final step of the systematic analysis was to create a third and a more interpretive layer of grouping, called “aggregated themes” (Gioia et al.) or “selective coding” (Grounded Theory, e.g. Swanborn 2010, 119), where the researchers get to apply their domain knowledge from the desk research to interpret the phenomena at hand. (Gioia et al. 2012, 20) The third round of coding resulted to 3 key themes: **Acquisition of well-being data**, **Managing and leading well-being**, and **Organizational culture and atmosphere**.

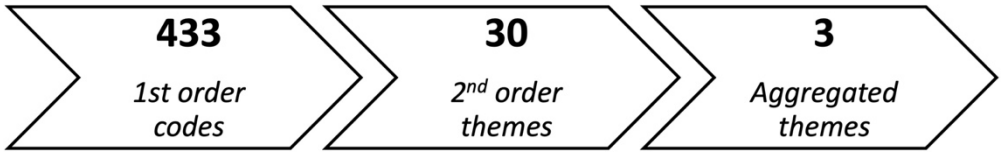


Figure 16: Data Structure for the analysis of the interview data

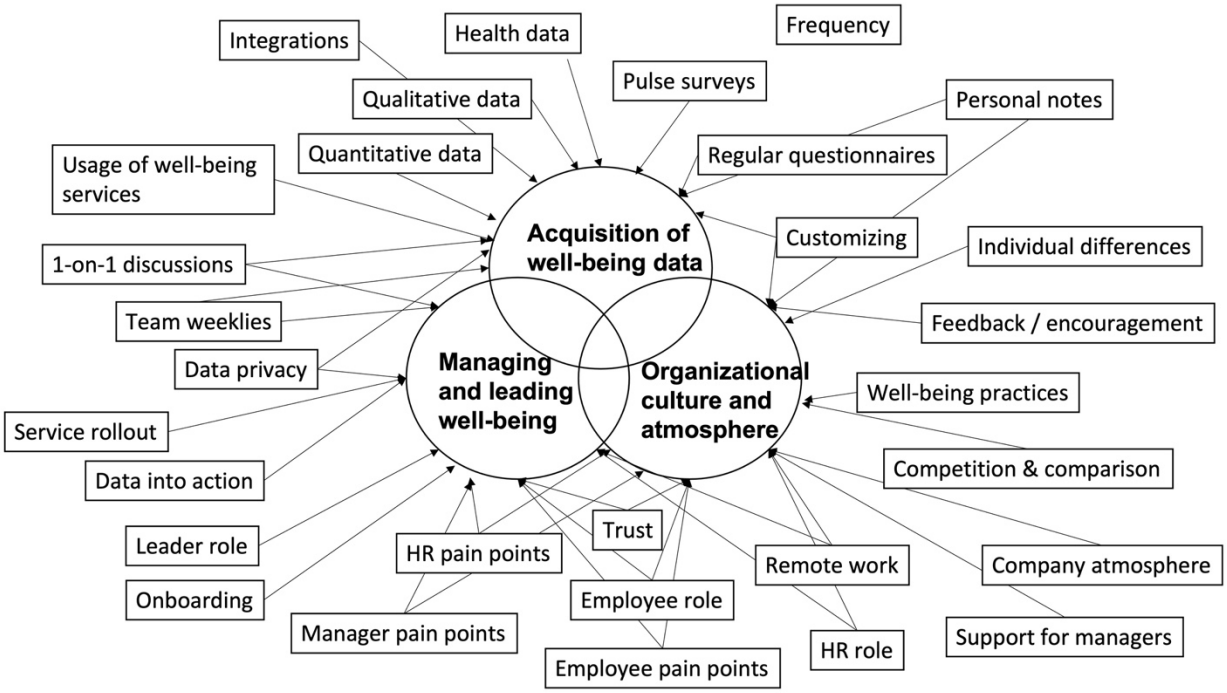


Figure 17: Second order themes and Aggregated themes

The summary of the results and findings from the interviews were shared with the informants, firstly to transparently show them that their trust and the information that they have provided are not misused, and secondly to allow them to see the evolving analysis and to comment it and also correct if something feels off or is misinterpreted. Furthermore, co-creating with the customers is one of the main principles of Service Design, and in order to apply Customer-Dominant Logic (chapter 2.2), the (potential) customer must be at the focus of the design process, not marginalized to be just "informants" or "knowledgeable agents". As Gioia et al. argue (2012, 19), "diplomacy, discretion and transparency" are important concepts in involving the informants into the research. Also Swanborn suggest that "member checking", i.e. presenting ideas and findings to the stakeholder groups in order to avoid wrong interpretations and last-minute corrections, is adviseable. (Swanborn 2010, 18)

The summary was sent to the informants to their emails in pdf-format, to ensure that everyone can open the file. All the feedback from the informants was positive and no corrections were made, which suggests that we had succeeded in staying true to the informants in the analysis, and that we had made the right interpretations. This was encouraging, since analysing a vast set of heterogeneous, qualitative data from multiple sources can tempt the researcher to generate interesting and inspiring, yet very tentative and even unreliable hypothesis. After all, qualitative data is more unprecise than quantitative data. (Swanborn 2010, 135; 114) And, as already mentioned in chapter 3.2, the results of a Case Study can be challenged, since they are rarely water-tight.

4.4.2 Analysing the data from the Card Sortings

The second part of each interview was a Card Sorting exercise. Card Sorting is an umbrella term for a variety of activities, that aim to give names or group objects and concepts by either the users or the stakeholders – depending on the scope of the process. The cards in the sortings can be physical or virtual cards (e.g. photos, sticky-notes etc.), or sometimes even physical objects. Oftentimes the main focus is in which objects were most frequently grouped together, and what were the names given to the resulting categories. Thus, the sorting process provides the researcher with insights on terminology used by the users, perceived proximities and similarities, and categorization logic of the users. (Hudson, 1435)

In general, Card Sortings can be categorized into three types of sorting exercises: Open, Closed and Hybrid sortings. In Open Card Sortings the users are not given any predetermined categories, whereas in Closed Card Sorting the categories are predefined by the researcher. In a Hybrid Card Sorting, as the name suggests, there can be elements of both Open and Closed sortings. When designing something new, open sorting often provides the most useful information, whereas a closed sorting can be useful when trying to renew or change an existing structure. (Hudson, 1462) Threfore in this case and at this point where the aim was to understand the users and their contexts, Open Card Sorting was the most suitable approach.

At the beginning of the Card Sorting exercise, the informants were asked to familiarize themselves with the potential features and functionalities of a B2B well-being service listed on digital sticky-notes on a Google Jamboard. The notes were in random order, so they could not give the informants any hints if a feature was an already existing one or a potential, made up one. According to IDEO, it is important to mix concrete and abstract ideas and objects with more precise ones in the range of cards to sort. This prevents the Card Sorting becoming just a ranking exercise, and allows the researcher to learn more about the users and their perceptions. (IDEO Toolkit)

As a first task, the informants were asked to prioritize the features and functionalities listed on the post-it notes by changing the colour of the note (e.g. green note if important, red if not important – however the informants were free to choose the colours according to their own preferences). The informants also were given instructions to add potential features that they regarded as important or necessary if they felt that something was missing. The aim of this step was to gain insights of what the User Group regarded as important features in a well-being service. Furthermore, the informants were asked to "think aloud", so that their thoughts and questions could also be recorded. In Table 3 are presented the listed features and how they were prioritized by the informants. Some of the prioritizations needed some interpretation, since not all informants used the same categorization (Must have – Nice to have – Not Important – No opinion), but based on the discussion as well as the colour-changes, conclusions could be drawn of how important the informants regarded the features (See Table 4: Result of the Card Sorting Exercise).

	Must have	Nice to have	Not Important	No opinion
Trends	7			
Tips	7			
Segment info	6	1		
Analysis	6	1		
Past year	5	1	1	
Past week(s)	5	1	1	
Past month	5	2		
Encouragement messages	5		2	
Articles on wellbeing	5	1	1	
Yesterday 's score	4	1	2	
Own notes	4	1	2	
Invite members	4	1	1	1
Feedback	4	2	1	
Remove members	3	2	1	1
Overview of all groups	3	2	1	1
Export info / create report	3	4		
Emoji reactions in groups	3	3	1	
Edit group name	3	2	1	1
Edit group logo	3		3	1
Custom messages for group	3	2	1	1
Country comparison / average	3	1	3	

World comparison / average	2	2	3	
today's score	2	2	2	1
Integrations to other systems (slack, teams etc)	2	2	2	1
Industry comparison	2	3	2	
Help / contact	2	4	1	
Feature requests	2	3	1	1
City comparison / average	2	1	4	
Awards / badges	2		3	2
Usage data	1	3	2	1
Product info	1	3	3	
Group comparison (org level)	1	2	3	1
TOTAL	110	53	48	13

Table 3: Prioritazations from Card Sortings

Once the informants were happy with the prioritizations, they were asked to start grouping the cards according to what they found logical. The aim was to get some insights about the logic of the users, in order to arrange the information and the features streamlined to their context. The groupings were however very diverse, so with a sample this small no conclusions could be drawn on the information architecture. However the prioritizations were possible to analyse quantitatively, thus providing us with a clear reference figure of the perceived importance, as presented in Table 3.

Must have	Nice to have	Not important	Inconclusive
Trends	Past week, past year	City comparison	Awards and badges
Tips	Industry comparison	Group comparison (on organizational level)	Yesterday's score
Segment info	Own notes		Edit group logo
Analysis of the data	Emojis		Country & world comparisons
Past month	Feature requests		Intergations to other systems
Articles on well-being	Usage data		Overview of all groups (company level)
	Product info		
	Invite & remove members		

Table 4: Result of the Card Sorting Exercise

4.5 Scoping the opportunities through synthesization

4.5.1 Jobs-To-Be-Done sentences

In order to grasp the different level objectives that the stakeholders, or the Job Performers, need done (as explained in chapter 3.5), the data gathered from the desk research, the survey, and the interviews, the key discoveries were formulated into actionable, Jobs-To-Be-Done (JTBD) sentences. The sentences were based on the findings froms the interviews and the desk research data, thus representing actual user problems and the jobs they need done.

JTBD sentences are statements of objections aiming to summarize the bigger picture of what the customers are users are trying to achieve by using the service or the product. The JTBD sentences construct a new frame for discovering opportunities by understanding what is the actual aim and the circumstance of the customer. Furthermore, they can point out steps and features that do not add provide value or "get the job done" for the customer, but only serve the processes of the provider. Therefore JTBD sentences are also sometimes called User or Customer Jobs, referring to what "jobs" customers want done, what needs they want met. In other words, what do the customers use it for, in their own context. (Stickdorn et al. 2018, 131; 47, Travis et al. 2019, 35) The focus of a JTBD sentence can vary from the entire product to a single feature or just one step on a Customer Journey Map. Whatever the scope, the goal is nevertheless to help the designer or the design team discover new solutions by focusing on what the customer really wants to achieve. (Stickdorn et al. 2018, 52;131)

JTBD sentences and thinking are therefore essential tools when applying the Customer-Dominant logic to actual design or development work. Figuring out the jobs customers hire the product or the service for, help the provider understand the way their customers experience life and thus give the provider,or in this case the designer, a straightforward road map for improving or developing the product. Therefore applying the JTBD framework help providers and designers develop products that are closer to what the customers actually value or will learn to value. (Christensen et al. 2013, 74-79)

As Stickdorn et al. aptly add to the famous quote by Thomas Levitt that "*People don't want a quarter-inch drill, they want a quarter-inch hole – In fact people don't actually want a hole in the wall either, they want a confortable livingroom.*" (Stickdorn et al. 2018, 52) Therefore the true competition for the service, in this case the quarter-inch drill, isn't only e.g. other drill brands, or services who come to drill the hole for you, but also any other means to achieve what needs to be achieved by drilling the hole in the first place. And that is why understanding the bigger picture of the customer circumstances and the primary motives what the customer wants the job done for is critical.

The formulation of a JTBD sentence varies within the field of Service Design. The most typical form of a JTBD sentence however is "*When* … (a situation where a job is needed), *I want to*… (motivation for the job), *so I can*… (expected outcome). (Stickdorn et al. 2018, 131) The sentences can be self-reported, i.e. a product of a diary-type autoethnographic research method and not interpreted by the researcher, but in this case we created the JTBD sentences based on all the data we had managed to collect so far and the key themes arising from that data. (Travis et al. 2019, 147)

Through the interviews we learned that HR managers' work includes many tasks and threads to hold on to. Therefore they prefer ready-analysed, bite-sized information and suggestions based on reliable data over large sets of raw data to dig into and draw conclusions from (however that option should be available as well). Therefore, the service should serve as an archive, providing information on long-term trends, rather than a service that requires a visit daily or weekly.

Based on the findings from the interviews, altogether 17 sentences were created, of in which 6 the subject was the end-user (i.e. the employee), and in 11 the subject was the customer (i.e. HR manager). Since working with such a large number of JTBD sentences would have been impossible, the researcher and the Lead Designer voted on the most critical ones and continued working on the five sentences with the most votes. The sentences were:

1. When I host a team meeting where I address wellbeing issues, I want to be confident about the topic and have a clear plan, so I can come out as a good leader and offer concrete tools for my team members (main actor: HR Manager)
2. When I rollout a solution, I want to see the results and what the effect was, so I can learn if the solution worked in the context and if more action is necessary (main actor: HR Manager)
3. When I answer a pulse survey or give other personal data or feedback, I want to see concrete changes or an action plan, so I can be sure that the data I give actually makes a difference (main actor: Employee)
4. When there's an endless amount of information available, I want to get filtered and personalised information that's relevant for me and/or my team, so I can avoid wasting tie browsing for content that might help me / us (main actor: HR Manager)
5. When I'm insecure about my performance I want to hide it from my employer and coworkers so I can maintain my credibility and only suffer under the surface (HR Manager / Employee)

To be exact, the aforementioned type of JTBD sentences are in this case used to formulate the Related Jobs of the Main Job, and adding the circumstances and needs of the Job Per-

former to the sentence. (Kalbach 2020, 28-31) This exercise enabled relating to the complexity of the Main Job (*Enhance employees' well-being and work-life balance through reliable data*) from various perspectives and in several context, thus not only creating empathy and a broader understanding, but also to discover and pinpoint potential new features to Our Balance, in order for it to help to fulfil the Main Job.

In UX Design and Service Design, it is very popular and often even seen as a necessity to create Personas of the users, based on the research data, to remind the designer(s) who they are designing for. To actually be useful and bring added value to the design process, the Personas should include data from all the aspects of the lives of the users, such as demographics, views, values, work, freetime, family etc. However, in this case the decision was made not to create Personas but instead focus circumstance-based categorization of the user, as already justified in chapter 3.5.

This decision was proven to be a right one, based on the interview data: Even though the informants had different backgrounds and contexts, their circumstances were actually quite similar in many aspects. Therefore catering for the common circumstances makes more sense than trying to differentiate personas and look for a one-solution-to-fit-all. This way it was ensured that the context of the user remains in the center of the design process, as it according to Customer-Dominant Logic should.

4.5.2 Visualising and empathizing the contexts with System Maps

System Map is a term covering a myriad of visual representations and ways to illustrate the the system around a phenomenon or an experience. System Maps can include Stakeholder Maps, Ecosystem Maps and Value Maps, and in this research the term twas extended to also cover Empathy Maps. In this thesis work Journey Map, Stakeholder Map, Empathy Map and a User System Map were used as tools to study the findings from new perspectives as well as to put the findings in a format that can be understood in the same way by all stakeholders.

<u>Journey Maps</u>

Journey Map is a popular Service Design tool, that allows the designer to create a visual representation, and even a storyline or a narrative, of a customer or user experience. (E.g. Stickdorn et al 2018, 44) They are powerful and useful tools, but they are only as good as the data they are based on. For example, an assumption-based Journey Map will only provide educated guesses, while Journey Maps based on actual data and insights hold the key to real discoveries and opportunities. (Stickdorn et al. 2018, 46) That is why in this case study it was important to base the Journey Maps in the existing data.

Journey Maps can present the current state or the future state of things, depending on the goal. In this study, both current-state and future-state maps were used, the first ones to empathise with the users and their current experience, and the second ones to map out opportunities for the service. All of the Journey Maps were experience-centered (vs. Product-centered), since the emphasis of the case study was in UX development, not in product development as such. (Stickdorn et al. 2018, 51-53) Furthermore, framework of Customer-Dominant Logic in this study made the product-centered perspective somewhat vain.

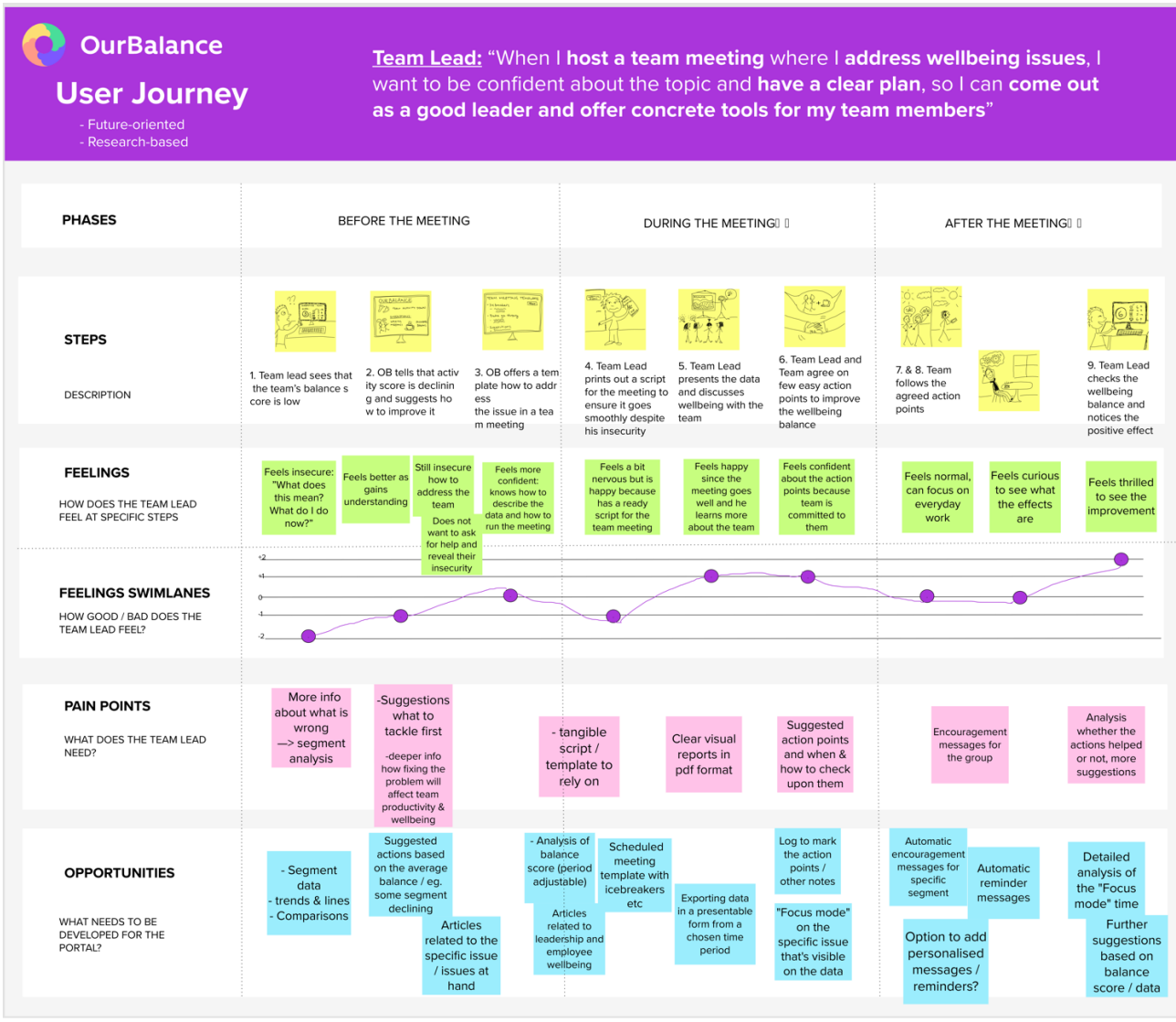


Figure 18: Example of a User Journey Map for OurBalance B2B

For this case study, research-based Journey Maps were of the Jobs-To-Be-Done sentences described in chapter 4.5.1 were created in order to discover the opportunities for OurBalance from each of the sentence. (see Figure 18) The opportunities were pinpointed and analyzed together with the Lead Designer of Timespace, in order to identify the possible new features

to develop to the service in order for it to provide the optimal user experience and to cater for the actual needs of the customers.

The goal of the Journey Maps was not only to serve as boundary objects between the researcher and the principal company, but also to envision and map out opportunities for the future OurBalance B2B, and to bring undestanding and empathy towards the user circumstances and the user jobs we had defined with the JTBD sentences.

With the Journey Maps, it became evident that many of the Jobs were overlapping and intertwined, and suggested that a common denominator and an underlying challenge is problems in leadership, including also the lack of proper tools and structures to follow, and difficulties in understanding, managing and addressing well-being issues at workplace. This confirmed what the findings from the desk research already suggested, and was also in line with the three key themes that we identified from the interview data.

The Journey Maps also fortified the insight that instead of only offering reliable data in a usable format, OurBalance B2B should also offer support in good leadership practices – or to rephrase that, to help the managers and team leads in leadership issues, in order to become better leaders. At the same time, this meant that to the side of HR Managers, arose another Main User Group – the Team Leads and Managers. However, research on a new user group was out of scope for the design task of this thesis work, but the discovery poses an opportunity for further research.

Stakeholder Map

A Stakeholder Map is a popular Service Design tool, that aims to illustrate all the stakeholders involved with a user or an experience. It therefore helps to understand the staleholders within an ecosystem, uncover relationships between the different stakeholders and even pinpoint networks and proximities, enabling the researcher to discover new opportunities – and even more importantly, grasp the complexity of a certain reality. (Stickdorn et al. 2018, 59)

The findings of this study suggest that HR works with vast variety of stakeholders, hence a service catering for their needs must be able to produce or show a variety of different-sized information effortlessly (e.g. reporting, summaries, visuals). HR is often stampeded by other business lines if the “going gets tough”, because what the HR does does not directly show in the financial results. Therefore all the investments or new services must be well justified and provide clear results. In order to better understand these relationships, a Stakeholder Map from the perspective of a HR Manager was created to provide a visual but simple representation of the complexity.

Three levels of stakeholders were identified and categorized based on the level of interaction with them and how essential they are in the everyday work (see Figure 19: Stakeholder Map for a HR Manager). At the very core of the map are the HR Team and the Employees, that the HR Manager is most likely to interact with every day. In the middle circle there are groups such as Team Leaders and Business Line Managers, who are also considered as “internal” stakeholders, but who are not necessarily interacting with the HR Managers on daily basis or the contact with them may be indirect. The third and the most outer circle represents mostly external stakeholders such as service providers and other instances dealing with the issues of the employees.

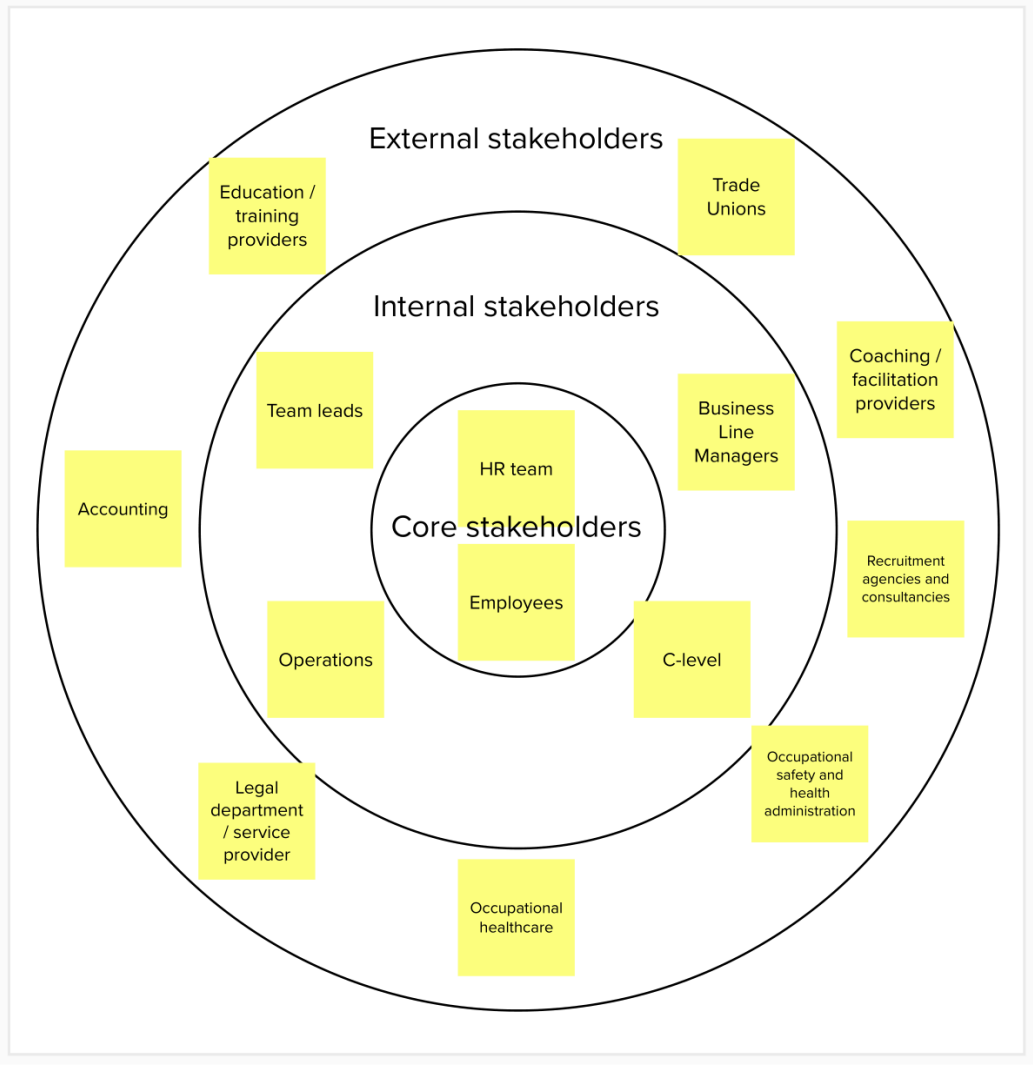


Figure 19: Stakeholder Map for a HR Manager

The aim of this Stakeholder Map was to clarify who the HR Managers work with, who they report to and who they interact with, in order to understand all the stakeholder groups the Our Balance should serve. All the mentioned stakeholder groups have a relationship with the HR

manager and an interest towards the well-being of employees and a healthy work-life balance, and are thus relevant to consider when understanding the circumstances of a HR Manager.

Empathy Map

The Empathy Map is a visual tool to organise and present the information based on the gathered data. The objective is to have a visual impulse to reflect and discuss the perspective of a user, including their observations, emotions, desires, pains and gains, related to the context of the project. (Tschimmel 2012, 13)

In the Empathy Map created for Our Balance (see Figure 20), the different stakeholders are also represented in the Map by using different colour notes, further emphasizing the variety and complexity of the HR Managers' work.

Figure 20: Empathy Map for HR Manager

Ecosystem Map of HR Manager

Since the User Group in focus for this case study is the HR Managers, it was also important to create a map visualizing not only the stakeholders and the pains, gains and sentiments of the HR Manager, but also the issues they deal with. Therefore creating an applied Ecosystem Map of HR Manager provided a perspective and a visualization of the different tasks of a HR Manager.

An Ecosystem Map is a visual representation of all the entities and their relationships with the User. Usually Ecosystem maps are based on Stakeholder maps and complimented with also non-human actors, such as places and services. (Stickdorn et al. 2018, 58) In the Ecosystem Map of HR Manager for Our Balance (Figure 21), this idea was applied with creating two separate but related Ecosystem maps, with thus the tasks divided into two categories. The left side map represents the workplace wellbeing, which the HR Manager can actively contribute to, and the right side map represents the individual well-being of an employee, which the HR Manager can only support and encourage, but has no actual power over. The two sides are however interlinked, since as already concluded in chapter 4.2.2, the things happening outside of work also affect the performance within the workplace. For Our Balance, the overall goal is to serve both sides, even though this research mainly focuses on developing the features that support the interactions on the left side.

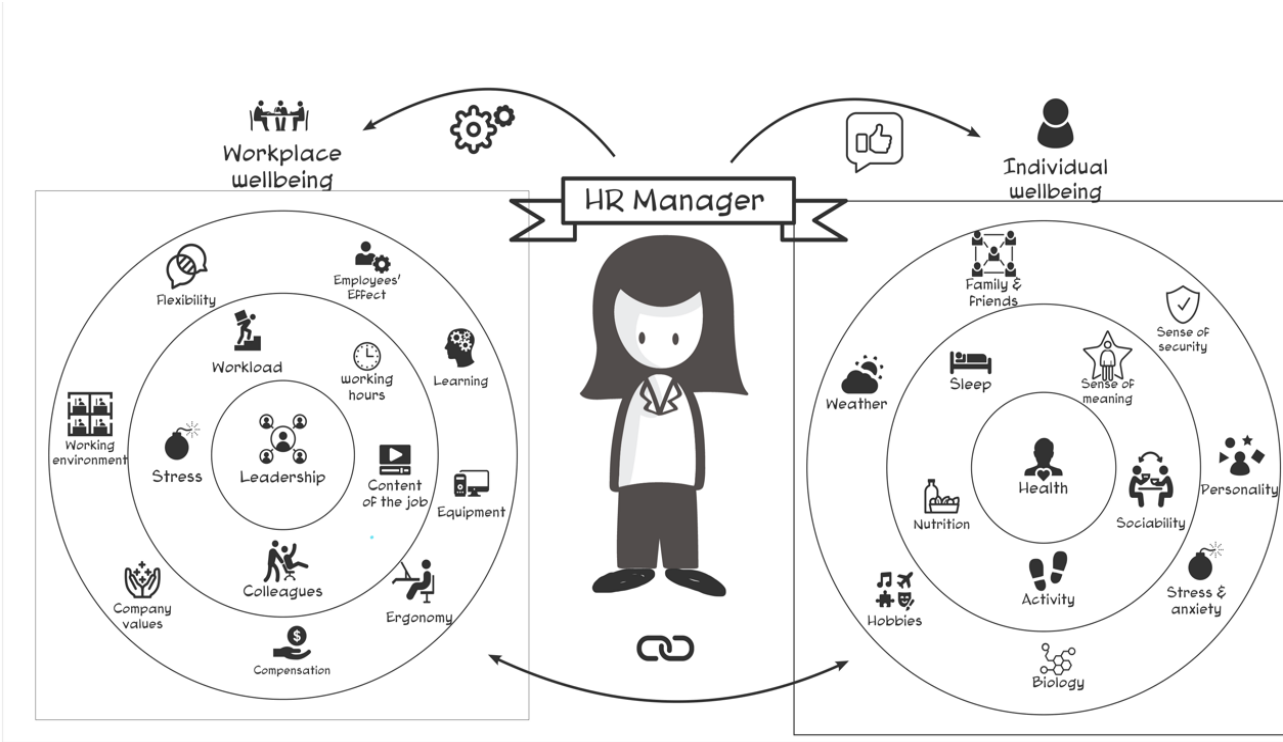


Figure 21: Applied Ecosystem Map for HR Manager

Based on the systematic analysis of the qualitative data, and the interpretations based on the insights formed from the data, seven new features were put on the product roadmap. The ideas were

- Article Library and Suggested Reading based on the Group's data
- Guides and templates for Managers to address wellbeing issues
- True stories from inspirational leaders
- Automated and easy-to-compile (and -export) reports
- In-app quick / pulse surveys

- Own notes to the data
- In-group Emoji reactions

4.6 Evolving and Evaluating the Solution(s)

At this stage of the research, the focus of the research was turned away from the user and to the product itself. However at this point, with all the data and different visualisations and angles used to analyse the data, and of course the Job Statements to guide the way, the designer should thoroughly understand the user's contextand thus be able to make user-centric design decisions. Therefore the user lingers in the background of the design process, or rather provides the framework for the design.

4.6.1 Decision-making

Going back to the start of this thesis work, one of the design tasks for the empirical study on OurBalance was to create a roadmap for the future development of the service. At this point there were several insights and a vast amount of data on the circumstances of the Main User, and insights that indicated that further research was needed on other User Groups (e.g. Team Leads) as well, in order to serve their needs more efficiently.

At this point of the research we had discovered seven new features to be deployed, as mentioned in the end of the previous chapter. In order to make decisions about placing the new features that were developed based on the research on the product roadmap, the ideas were arranged into an idea portfolio together with the CEO and the Lead Designer of Timespace.

An idea portfolio is a simple canvas with dimensions of impact and feasibility, and the features or solutions are set on the canvas according to these attributes. (Method Library — This is Service Design Doing 2021) The goal of the exercise is to identify ideas that have both high impact, and that are easily achievable. The main outcome of the exercise is to get a visual presentation of the achievability and impact, but the discussion leading to the positioning of the solutions on the canvas is almost as important for the researcher. Therefore it is important to have people with different point of views participating in the forming of the portfolio.

Through this exercise the Suggested Reading -feature was identified to be the most desirable and easy to create, however the feature that is strongly interrelated with the Suggested Reading, the Article Library, was already more difficult to create. Also highly desirable but difficult to create were the True Stories and Guides and Templates for the Managers. Own notes and Emoji reactions were regarded as easy to create, but lacking real impact on the

product. (See: Figure 22) Therefore, the Suggested Reading feature was decided to be included to the product wireframes for this project, and add the rest of the features to the roadmap, to be implemented in due time, depending on the overall situation with the company and the product.

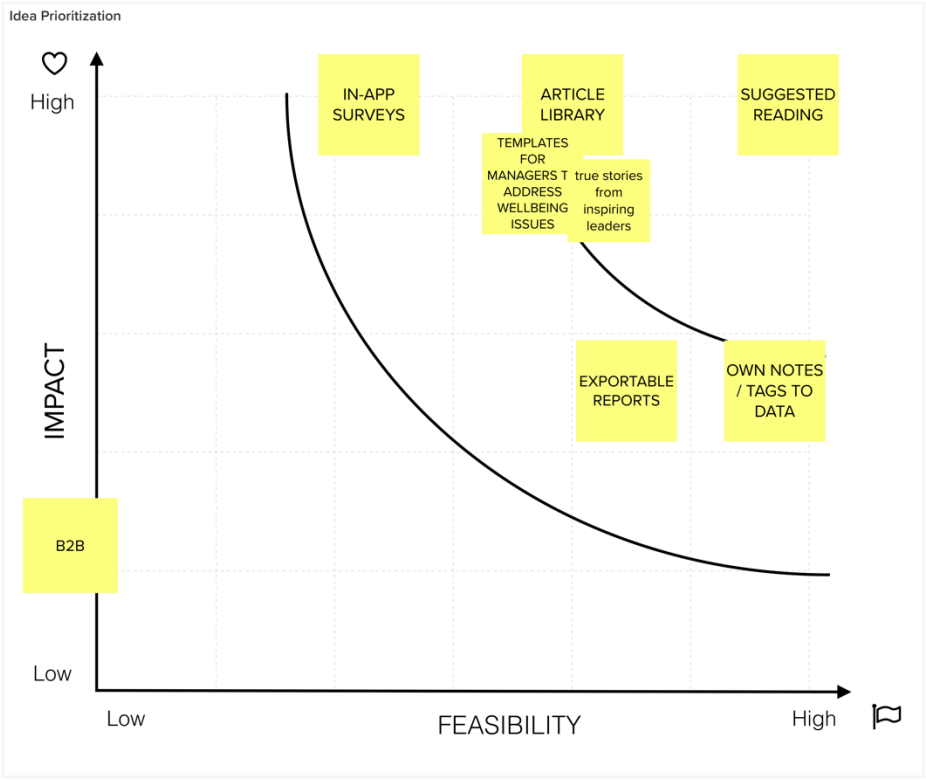


Figure 22: Idea Portfolio for Our Balance

4.6.2 Mapping the big picture

Prototyping in its simplest form can also mean just drawings or simply a walk-through of an idea. However, no matter what the actual form of presentation is, the goal is the same: to investigate what it would be like to engage with the product. Prototypes therefore aim to create a shared experience and provide a basis for a common view within the design teams, and even outside of them. They are used to grasp the existing experiences and contexts, to explore and evaluate solutions, and communicate ideas to stakeholders and even the users. (Koskinen et al. 2011, 135-137)

One way to enhance this common understanding and exploring new ideas is to draw a system map of how the functionalities relate to the users as well as other functionalities. For Our Balance, the main actors are the end-users (“The Team”), the Admin (“HR Manager”) and the product itself (“OurBalance”), i.e. the functionalities the product offers.

As the Figure 23 illustrates, The Team interacts with both the Product as well as the HR Manager, by contributing asnwers to surveys (potential new feature) as well as biometric data to the different segments of well-being balance and by receiving knowledge and feedback on individual wellbeing and requests to take part in surveys. The HR Manager receives from the service automated reports and summaries of the Group's well-being, the Balance score for the Groups, suggestions for actions and further reading (potential new feature) based on the data, and support how to address well-being issues (potential new feature). The HR Manager would on their behalf provide e.g. team-specific questions for the surveys. The HR Manager also communicates out summaries and reports outwards, e.g. to their managers or the decision-makers if the company.

Outside of Our Balance, The Team provides the HR Manager with "quiet signals" about their well-being, that the HR Manager "senses" when interacting with the employees. Together The Team and HR Manager contribute to team well-being plans, development of company culture, constructive 1-on-1 discussions and the overall deeper understanding of employee well-being.

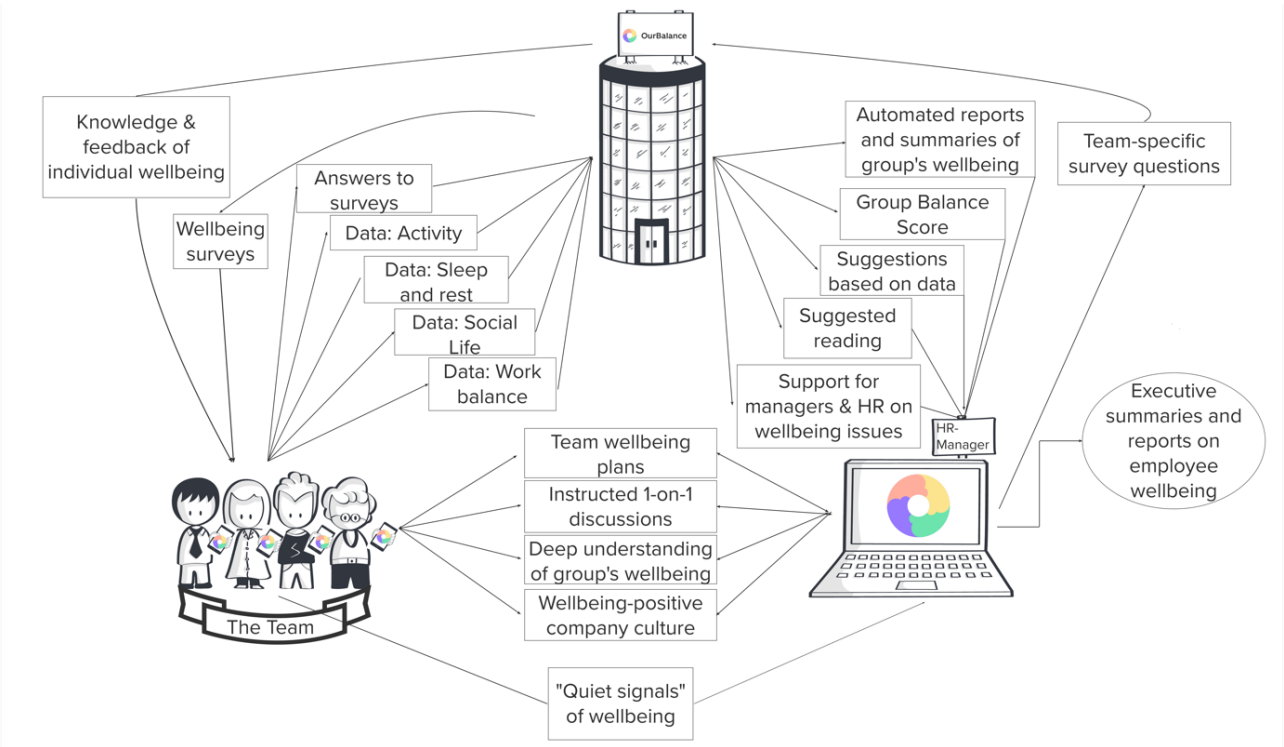


Figure 23: System map for Our Balance

With this type of System Map, it is easy to create a common view what the product should include, understand the context and the experiences (together with the other maps and illustrations presented above) as well as examine the individual features and solutions.

4.6.3 Designing the User Interface - wireframing

In order to create successful product, the designer must be able to provide a common understanding or a language for all the stakeholders, regardless of their level of technical know-how. Therefore prototyping is in a key position when the designer wants to present of discuss the design with a broader group of people, including e.g. the end-users, the clients, the decision-makers etc. (Stickdorn 2018, 231; 242)

Prototyping does not – or at least it should not - require any specialist skills, and it is therefore a cost-efficient way to test out what the next steps for the product will be and what sort of expertise needs to be brought in. For example, digital services can be tested with simple low-fidelity paper prototypes, and pen-and-paper or digital wireframes without writing a single line of code. (Stickdorn 2018, 231)

A wireframe is a visually extremely simplified representation of the User Interface, that aims to clarify the information architecture and the positioning of the elements and features within the service. Even though wireframing may feel like an unnecessary step between an idea and a first actual design, the benefit of wireframing is, that the designer can together with any stakeholder group evaluate a product before it is fully built out, thus saving time and resources. Wireframes are quick and easy to create, since they don't require explicit elements, but only simple boxes and lines as placeholders. (Rosenzweig 2015, 45; Stickdorn 2018, 236)

Another benefit to testing wireframes is the feedback received; because the wireframes are not fully functional, the tester can focus on the interactions without being distracted by design choices, which are not yet critical to examine at this point of the process. (Rosenzweig 2015, 45) With wireframes it is easy to try and test alternative layouts and e.g. different approaches for navigation to see which works best for the users, and since they are effortless and inexpensive to create, drafting several wireframes with different focuses is also in some cases a fruitful approach. (Caddick et al. 2011, 162-163).

For OurBalance B2B, digital wireframes for the main functionalities of the Admin User Interface were created, using a software specialized in wireframing and prototyping, called Figma (see Figure 24). In the situation, where the designer and the principal were not in the same country and all face-to-face meetings were a risk due to the COVID-19 pandemic, using digital wireframes was the most convenient option. In a service such as Figma, all the editors and viewers can insert comments, allowing discussion on a detailed level. The new functionalities and opportunities discovered through User interviews and other research, remained to be wireframed according to the product's development roadmap, and therefore are not part of this thesis work.

Even though the OurBalance B2C product is a smartphone application and thus used with a mobile phone, and despite the fact that mobile devices are becoming ubiquitous, making the “mobile first” thinking (i.e to start from the smallest screen to reduce complexity) a prevailing strategy in many UX design processes, with OurBalance B2B this doctrine had to be challenged. (Rosenzweig 2015, 97) In this case, where the context of use would be the workplace (or a place of remote work), it is safe to assume that the service would mostly be used with laptop or PC. (Nagel et al 2015, 76) However, since the modern digital services should be “device agnostic”, i.e. usable with any device the user has in their vicinity, the decision was to draw the wireframes for 1) tablet computer and 2) desktop.

The tablet is still used primarily as recreational device for entertainment purposes, although the work-use if the tablet is clearly on the rise. Tablet is fundamentally a mobile device, meaning it is semi.ready and operatable at all times, and they are often used in situations where the user doesn’t want to or doesn’t need to use a mouse or a keypad. The tablet is used primarily in the ”lean back” rather than the ”lean forward” mode, meaning that it is leass used to create texts, graps, images etc. and more familiarizing, reading and studying phenomena. The tablet however is still not regarded as a replacement for the desktop computer, but rather a supplement to it, in order to make the work more mobile – even though the modern tablets are actually more efficient and even versatile than older laptops. In a non-desk environment, tablets are regarded more comfortable and convenient than a laptop computer. (Nagel et al. 2015, 27-28)

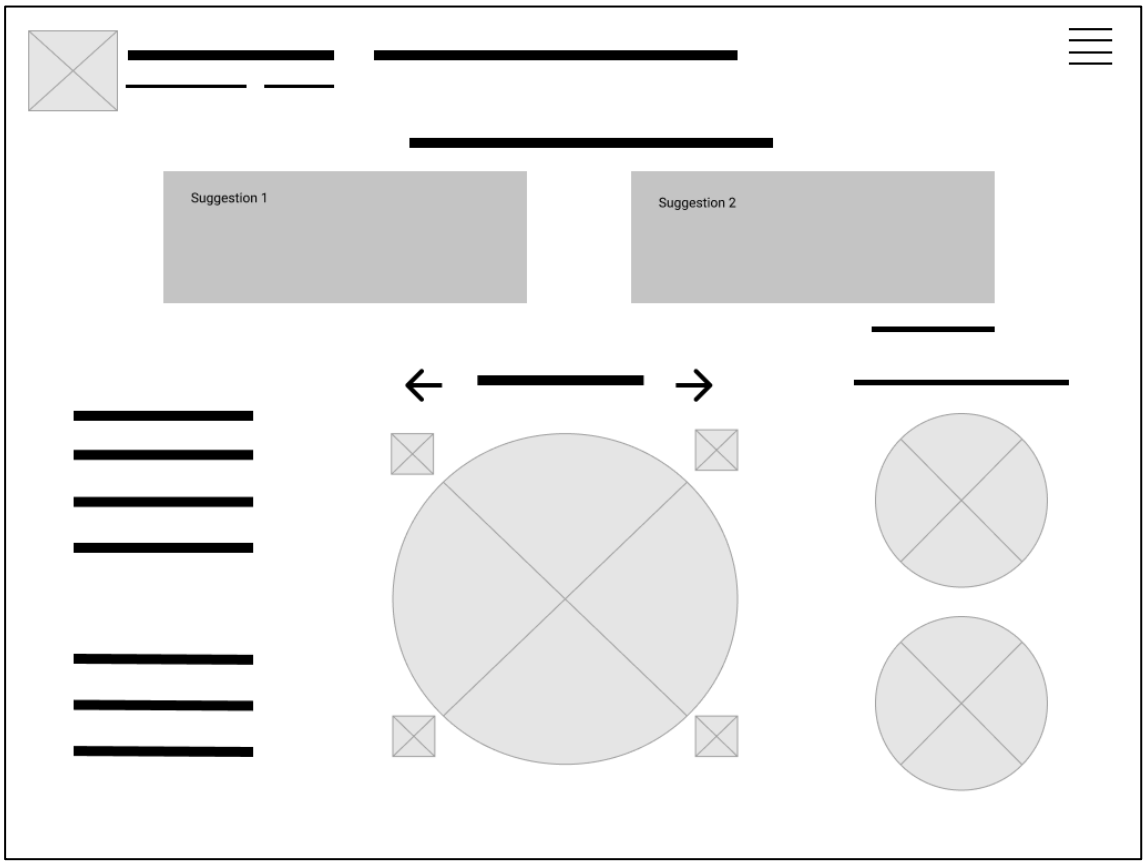


Figure 24: Example of a wireframe: At a glance -view in OurBalance B2B (for iPad)

The primary device for knowledge workers are still Desktop PCs and laptops, which are used both for work and for recreational purposes. With a (separaete or integrated) mouse and a keyboard, and with a laptop aften also a separate screen, the ergonomics and the versatility, and of course the strong computing power, of computers make them by far the most popular work devices in the field of knowledge-work. Even though the flexible use of various devices and seamlessly jumping from smartphone to laptop to tablet is definitely a rising trend and a prevailing way of completing the more and more complex and demanding tasks of working life, the most complex tasks are best executed with computers. Thus, it is used primarily in the lean forward mode – i.e. when the user is actively creating something or at least actively looking for specific information. (Nagel et al. 2015, 28-29)

Since the general aim and the product philosophy behind OurBalance, and thus also OurBalance B2B, is not to make people open the app often, it is a justified decision to not to prioritize the smartphone design of the B2B admin panel. Furthermore, since the B2C product already has an interface for mobile phone, adjusting the features of the B2B admin panel to existing smartphone design is relatively easy. Therefore designing for a smartphone screen is delimited from this thesis project, as is smartwatch and also Smart TV, which is aimed mostly for recreational use, and not to workplace context. (Nagel et al. 2015, 30)

4.7 Main findings about the research process

As the aim of this thesis is to construct a model, and not only to elaborately present the findings of the single case study, reflecting on the research process is an integral part of this thesis work. Therefore I want capsulize my main findings from the process in this chapter, even though some reflections and findings are already written down in the description of each step.

First of all, it is important to separate the desk reserch or the problem-setting and the focusing on the User into two different steps, otherwise there is a risk of the research on the domain overriding the research on the user groups, which would make the forming of the aspiration level less accurate.

The knowledge of the domain or the phenomenon, as well as the users, should cumulate as the research progresses – there is no converging of knowledge. Also there is no point where the researcher can consider the desk research "done". Therefore I find that the Double Diamond doesn't accurately represent the role of research, which to my experience is omnipresent throughout the whole design process.

Analysing qualitative data is both time and energy consuming process, and it should be given enough time. The amount of data is vast and it is not in a specific form. Feelings of being lost and frustrated are probably familiar to any researcher in this phase – but with a systematic approach, and with several iterations it all will start to make sense Furthermore, emphatizing with the user is immensely important, but the researcher should not adopt the views as such, but to also apply all the other existing data (eg. desk research, surveys, app data etc). This is why dialogue between the data reserve and new data is extremely important – all research should include both exploratory as well as confirmatory elements

Keeping the focus on the users and not the product or the provider is challenging – therefore the Main Job must be revisited in each step, to ensure that the focus is on the job to be done and the user circumstances. However, as prototyping must convey all the knowledge and insights gained through the research to actionable ideas, it forms an exeption: the focus must be on translating the understanding of the circumstances into the design. Several iterations are needed, as well as visits to the data. Triangulation with another designer / researcher is also required in order to produce reliable and good-quality results.

5 The PULSE^2 -model of Customer-Focused UX Design process

As mentioned in the beginning of this thesis, the aim of the thesis work is to construct a framework for Customer-Focused process for digital product development, based on existing

tools of Service and UX Design. The model is based on a single case study conducted with the OurBalance product and aiming to solve a problem of how employers could better support the employees' holistic well-being and work-life balance. Even though in this case study the original problem, the design task, was provided by the principal company Timespace, this model aims to also serve processes emerging from a different source, or instead of being based on an existing solution, are ground-breaking and emerging from a human-centered problem instead of provider-centric one. With this model I believe it is possible to turn any problem-setting to a user-centric one, regardless of the origin.

The stages, or rather the spheres of the PULSE^2 model, which I will further elaborate on in the following chapters, are

1. **P**remise sphere
2. **U**ser sphere
3. **L**earning sphere
4. **S**ynthesis sphere
5. **E**volving sphere
6. Evaluation sphere

As with all the other Service Design and UX Design models and methodologies, the PULSE^2 process is not necessarily a linear one, which is why I chose to use the word "sphere" instead of a "stage" or a "step". According to the Merriam-Webster Dictionary, a sphere is "*an area or range over or within which someone or something acts, exists, or has influence or significance*". The idea of spheres is borrowed from the Design Thinking model of the d-school of the Hasso-Plattner-Institute, as presented in Figure 2 in chapter 2.1. Even though for reasons of visual clarity I left the arrows of iteration out of the visual representation (Figure 26), the model encourages the researcher to iterate the spheres, and change the order too if necessary. After all, the PULSE^2 model is influenced by Grounded Theory, which argues that the data should lead the research and not the other way around.

However, unlike in the model of the Hasso-Plattner Institute (as explained in chapter 2.1.1 and Figure 2), the spheres in the PULSE^2 model are overlapping thus suggesting that they are intertwined. These overlaps not only visualize the nature of research, where it is rather difficul to draw exact lines between stages, but also emphasizes the Grounded Theory approach: Each overlap also indicates a point to make decisions regarding the direction of the research, based on the accumulated data.

Unlike the Double Diamond model, the PULSE^2 model emphasizes the design research, since the aim is to create – as Kalbach (2020) described it – solutions with a long shelf-life. That is

to say, if the basis of the process is solid and real insights into the needs of the users are discovered and a concise analysis of the field it addresses is conducted, the iteration rounds don't have to reach all the way to the first stages – making the iterations of the design process more nimble.

Adopted from the Double Diamond model, the PULSE² model also recognizes that in a research process, you can not only build-up knowledge, but you also have to make decisions based on it – otherwise the researcher will end up a massive amount of data but no concrete suggestions based on it. As explained in chapter 2.1, in the Double Diamond this process of diverging and converging is illustrated through the diamond shape (or the arrows forming the diamond, depending on the visualization). In the PULSE² model, similar arrows are applied below the spheres to indicate when in the process the focus is on deepening the knowledge and expanding the data reserve, and when on lessening the complexity and compressing the knowledge into decisions (see Figure 25).

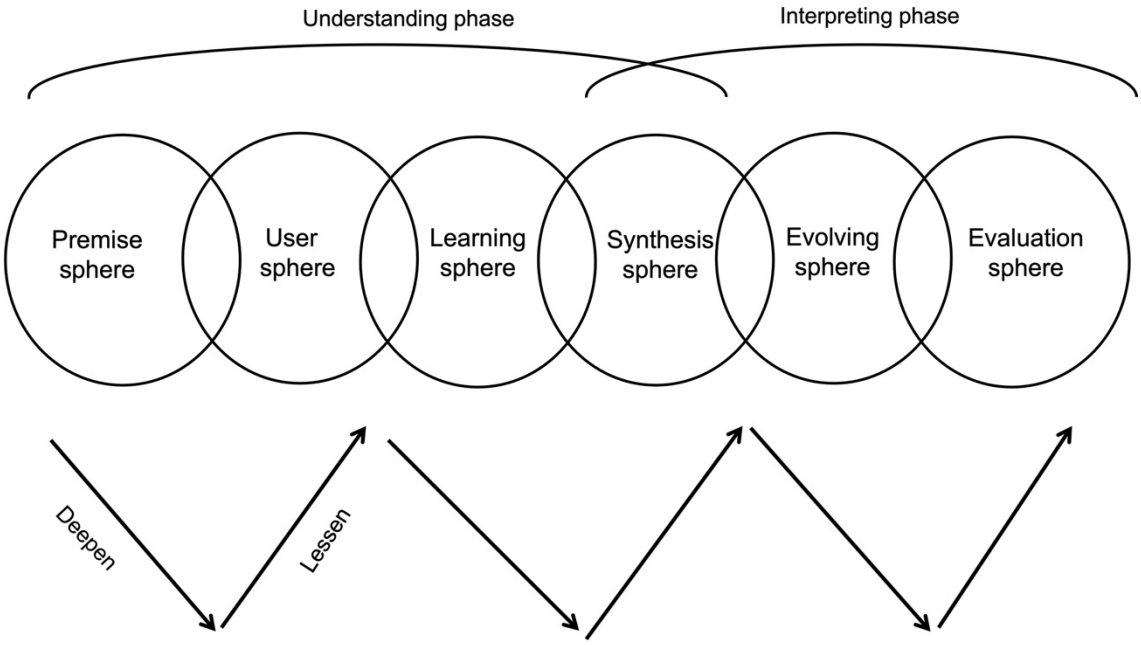


Figure 25: The wireframe of the PULSE² model

The name of the model refers not only to the acronym generated by the spheres, but also to the main focus being on empathizing the users, and empathy is often visualized by a heart shape. Furthermore, the upper parts of the hearts, that consist of semi-spheres, also are a good reminder that despite the process being iterative and difficult to divide into specific stages, in order for the process to progress, each phase has to have a beginning and an end: a trajectory. The spheres and the trajectories can always be revisited if necessary, but the research should not stagnate. (See: Figure 26)

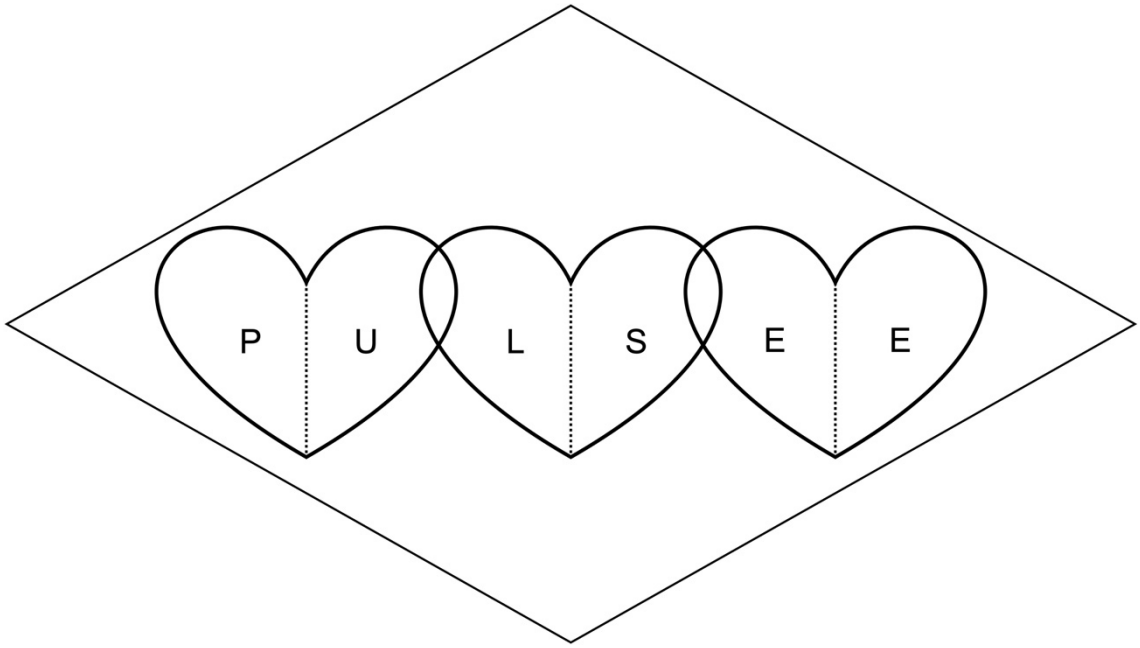


Figure 26: The simplified visualization of the PULSE² model

5.1 The Premise sphere

The PULSE² model divides the early stage of the process into two steps: the Premise, where the focus is on the problem setting and the domain of the problem, as well as planning the research; and the User, where the focus is on determining the users and user group(s) involved. I will elaborate on the User sphere in the next chapter.

The first sphere of the PULSE² model is the Premise, meaning defining the framework of the problem, or the problem sphere, and designing the research framework. In the case of OurBalance, the Premise was partly given (the existing OurBalance service that the B2B service was to be built on) and partly defined by the researcher through stakeholder interviews and studying the field of well-being and work-life balance. With the PULSE² model I argue, that it is nevertheless always important to do the preparatory research – otherwise the researcher may end up with a wrong scope or a wrong context, distorting then the solution-building later on, and resulting in a product that does not do the job for the users.

Similarly to the steps of the HPI model, also this first step of the PULSE² model is mostly focused on the phenomenon or the field. In the terms used by Kalbach (2020), this stage aims to define the Aspiration level, rather than the Main Job (i.e. the problem that needs to be solved), which is preliminary addressed in the User sphere.

As already addressed in chapter 3.1, the aim of a research design is to guide research, reducing the risk of the research getting derailed or expanding out of hands for the researcher. A

research design should consist of five interrelated aspects: the aim or purpose of the research, the theoretical basis, the research question(s) – or the Jobs, the method of collecting data and the strategy of analysing the data. (Oyegoke 2011, 574) In addition, it is important to draft out a schedule or a timeline, since as mentioned in chapter 3.2, intensive studies tend to be quite time-consuming, given the opportunity.

5.2 The User sphere

The second sphere of the PULSE² model is the User, where the focus of the research is turned away from the phenomenon or the field and into the user. In order to remain true to the Customer-Dominant Logic and Jobs-To-Be-Done approach, this step is of great importance, since in the User sphere the researcher should not only define the focal User group, but also define the initial Main Job for the User group (which is of course iterated on along the design process).

The User sphere already builds up on the accumulated data and knowledge from the Premise sphere, meaning that the research on the User group(s) is already contextual, even though both the User sphere and the Premise sphere are focused on desk research. Furthermore, to formulate the initial Main Job, the researcher must revisit the Aspiration defined in the Premise sphere and navigate down by asking how this particular User group would get closer to that Aspiration (as explained in chapter 3.5 and Figure 9: Levels of Jobs and how to navigate them. Based on Kalbach 2020, 34-35).

In Figure 25 the process is simplified and presented in a two-dimensional format and seen from the side, hiding the several User Spheres, each representing a specific user group. Both Premise sphere and User sphere are still regarded as “desk research”, i.e. preparatory research for the actual, empiric research that will be conducted in the following spheres. Based on the research, the initial aspiration is formed, i.e. the research question.

5.3 The Learning sphere

The Learning sphere is where the empirical, contextual user research takes place. In the case of Our Balance we used semi-structured expert interviews together with an open card sorting, but this sphere can also include observations, field visits, autoethnography or any other method of collecting reliable data based on actual behaviour of the users. It can include both qualitative and quantitative methods, however, as concluded in chapter 3.2, qualitative data often provides more insights and thus promotes understanding, whereas quantitative data often helps discover more questions or validate some earlier findings.

Using the term “learning”, instead of e.g. “researching”, “discovering” or “observing” implies a human perspective. According to the Merriam-Webster thesaurus, learning also means coming to an awareness of something, indicating that learning is not only about mastering a skill but also encounter something new – which accurately depicts the aim of user-centered research, which aims to understand the users and their needs.

Again, in the Learning sphere it is important for the researcher to iterate between the existing data and the new data, and adjust the direction of the research based on the new data, if necessary. Furthermore, since in the Learning sphere the researcher will at the latest crawl out of their cave to interact with the users (directly or indirectly), in this sphere the researcher should also revisit both the Aspiration and the Main Job defined in the previous spheres, and also discover and pinpoint Related Jobs of the Main Job, as the understanding of the Users expands. As noted in chapter 3.5, the Related Jobs can be numerous, and they are not necessarily aligned with the Main Job

5.4 The Synthesis sphere

The Synthesis sphere is where the data is systematically combed through and analysed. Also some early hypothesis of a solution can start to form. The Synthesis sphere is therefore in the intersection of the Understanding phase and the Interpretation phase, as presented in Figure 25: The wireframe of the PULSE² model At this point the researcher should have enough knowledge about the domain, the user group, the context and circumstances (e.g. pain points and limitations), and by systematically analysing the acquired data, synthetize the data into tangible insights.

In this phase the data is not only synthesized, but also presented in several formats, such as Empathy Maps, Stakeholder Maps, System Maps, Ecosystem Maps and Value Network Maps. The aim of all the tools is twofold: to create an understanding of the Emotional and Social Jobs of the users, that also have an affect on the Main Job. In many Design Thinking and Service Design methodologies, the researcher would build personas based on the data, but as explained in chapter 3.5, using circumstance-based categorization and different Job-frameworks, the service can address several “personas” at the same time, and avoid having to process the additional information (age, family, hobbies etc.) that might be more or less useless regarding the Main Job.

5.5 The E^2 – Evolving and Evaluating spheres

The Evolving sphere focuses on ideation, creating solutions and prototyping them. As a stage this can be compared to the Ideation phase of the d-school model of the Hasso-Plattner Institute or the Developing phase of the Double-Diamond process (see chapter 2.1.1 and chapter 2.1.2). Here the designer must translate all the knowledge gained in the process into elegant solutions, addressing the issues of different circumstances and thus developing solutions that get the job done efficiently for the user.

The term "evolve" suggests that the ideas that are developed in this sphere are not drawn from thin air, but are firmly based on the findings based on methodological research. In natural sciences the term is also used when as a result of reaction some new compound is emitted – which I find to illustrate quite well what happens in a design process: knowledge of the domain or phenomenon and the understanding of what needs people have in certain circumstances react and evolve new innovations in the designer's brain. Of course, unlike in nature, the process is oftentimes not straightforward, spontaneous or instinctive, but includes conscious decision-making and interpreting.

As explained in chapter 0, the solutions developed at this point do not have to be ready or even necessarily viable – the aim is to have as many ideas as possible to narrow down from in the next phase – in the Evolving sphere the direction is to expand, not to compress (see Figure 25). The ideas however must be in a format that states how they intend to solve a problem or do the job for the user – such as in form of Jobs-To-Be-Done statements, Journey Maps, Storyboards, System Maps etc.

The Evolving sphere sits steadily in the Interpretation phase, meaning that the focus is now on putting all the gathered insights, findings and learnings to action. This does not mean that the user is set to side, but the focus is however in creating solutions that may (or may not) offer added value to the user in their endeavours, i.e. on the product. As elaborated more in chapter 2.2 about Customer-Dominant Logic, the eventual value of a product can only be defined by the user, and the service provider can do their best to contribute to that by designing their offerings according to the user's context and needs.

In case the researcher feels unsure or discover that they still lack some crucial information, it is always possible, and even encouraged, to revisit the previous spheres. However, the ideas evolved in this sphere will be tested and evaluated in the Evaluating sphere, where the researcher seeks for feedback from users and stakeholders to validate, discard or save ideas for later.

The Evaluating sphere is where the the most viable ideas are chosen and further developed. The other ideas evolved can either be discarded or saved for later, depending on the product or the scope of the process. The focus here is on the product, but in the decision-making regarding the viability of the solutions, the criteria must be customer-dominant and not provider-dominant. Of course, a reality check is in place, and as mentioned in chapter 2.1, service design (and therefore also UX design) should also understand the business needs – they should be internalized by the designer already in the Premise sphere (see chapter 5.1).

The decision regarding the viability of the solution can be done e.g. through decision portfolio, as was done with Our Balance and further explained in chapter 4.6.1. However, it is of utmost importance that the decision-makers are well aware of the process and the findings, so they are properly informed. If the decision-maker does not know or understand the circumstances and the Main Job, the decision made can be based on provider needs rather than customer needs.

By and large the aim of the Evaluating sphere is to validate the findings of the process so far, i.e. the solution. The best way to do that is through prototyping them either quickly and effortlessly with a low-fidelity prototypes (e.g. paper / cardboard prototypes and wireframes, different kind of walk-throughs or staged situations). The fidelity of the prototypes grows iteratively, which resuces the financial risk for the provider, as the solution can be realiably tested if it actually gets the Job done for the user, before investing into production.

In the Evaluating sphere, the result can also be that more research is still needed, which then takes the researcher back to the earlier spheres.

Depending on the aim of the process, the Evolving and Evaluation spheres may be difficult to distinct. For example, if instead of developing a new service, the solution is a feature in an existing service. That is why the “two E’s” are budled up into “E^2” — suggesting that the model includes two E’s, even if both of them are not always applied in the process as separate spheres.

5.6 Validation of the PULSE^2 model

Developing a model based on research with only one case cannot be more than a starting point. Further testing and validation of the model is essential, if we the aim of the model is to cover more instances than the case the research was conducted on. (Swanborn 2010, 31) In

addition, the model should be validated or at least reviewed by other researchers, to minimize the affect of the researcher's own biases. Testing of a model would require more research on more cases, which makes it out-of-scope for this thesis work.

The constructed PULSE^2 model is based on relevant literature, on theories and methodologies, empirical data of a single case (OurBalance), and tried and tested design tools, adapted to the context of Customer-Centric UX design. That is, a full research is conducted in the creation of this model. The fundamental question however is: are the results of these activities in any valuable to other UX designers, Product developers and Service Designers, i.e. is the model usable or useful? And furthermore, how could it be further developed to become more valuable and useful?

According to Kasanen et al. (1993, 253), there are three levels of market validation for a construct:

- **Weak market test,** where the model is validated by a manager, who is responsible for the financial results of the organization, into their decision-making
- **Semi-strong market test:** where the model is widey adopted by organizations
- **Strong market test:** where the units applying the model have consistently produced better results, i.e. the model has a proven, positive influence on the performance

As discussed earlier in this thesis, a thesis is always a rather limited both in terms of a research question as well as the time-frame. Ideally, of course, the best way to validate the model would be to introduce it widely in the field of UX and Product Design to see if the products developed based on the PULSE^2 model outperform their competition, or if the teams applying the model work more efficiently. However, due to the limitations of a thesis work, the validation of the model must be carried out in a narrow timeframe with minimal resources - in this case meaning that both strong and semi-strong market tests are out of scope for this research.

An encouraging start is, that since the case study of this research was carried out for a principal company, the methods used in this model have constantly been evaluated by a design professional, and have gathered positive feedback. Furthermore, the findings on the product in question, OurBalance, have also been adopted by the principal company, including the CEO of the company – although to be applied in due time, once the tight development roadmap of a startup company allows. In other words, all the stages of the research as well as the findings have been accepted by a person responsible for the financial result of the company.

However, the PULSE^2 model itself, constructed based from the practical side to the research conducted on OurBalance and from the theoretical side to Design Thinking and Customer-Dominant Logic, has not yet been reviewed by other people in the field of design or service development.

6 Conclusions and discussion

6.1 Summary

The supply of services today, especially digital services, is abundant, and the competition for users and customers is intense. For a service provider, finding a way to offer users a positive user experience is a key competitive advantage, and the smallest things can make a big difference in the user behaviour. However, an experience is always subjective, meaning that different people rarely if ever have the same experience, since experiences are rooted in our own frames of past experiences and expectations. Therefore in UX design it is important to always consider the context of the user, i.e. the circumstances the user or the customer operates in.

The main research question for this thesis was “How to ensure customer-centricity in a UX Design and digital service development process?”, and therefore the aim of this thesis was to build a model for a user-centered design and development process especially for digital services. The model could be used by development teams, designers, marketers and decision-makers in different organisations. The construction of the model was based on the theories of Design Thinking, especially the Design Thinking model of the Hasso-Plattner Institute and the Double Diamond by the Design Council, and the findings from an empirical research of a single case study conducted on a well-being service called OurBalance. The building of the framework followed the framework of the Constructive Approach, in which a model or a framework is constructed based on generating a thorough understanding of a problem, then designing a solution for it and validating the model through applying it in practice. The model should also be tied to the relevant theoretical paradigm and to find a way to apply the model widely.

The empirical research was influenced by methods and approaches of User Experience (UX) Design and Jobs-To-Be-Done. This means that the problem was approached through a why-who-what-how -model (see Figure 5) from the point of view of the user, in order to understand how the problem occurs in the user’s context and different circumstances. The problem was approached as a “job” that needs to be “done”, based on the thoughts and ideas of Clayton Christensen, Michael Raynor and Jim Kalbach. By perceiving the problem as a job, the solution will address anyone with the same problem regardless of the demographics, and also produce long-lasting solutions, since the jobs are often rather profound and static despite e.g. advances in technology.

The Grounded Theory approach was loosely applied in conducting the empirical research. This means that instead of choosing a pre-defined theory or process to follow purposively, the research was a constant dialogue of data acquisition and data analysis, therefore allowing the research to be truly exploratory by nature. This exploratory character is also an important feature in a Case Study, where the aim is to conduct intense research on a single occurance of a phenomenon – in this case on a single service. A Case Study therefore aims to build a deep understanding on a limited perspective, in order to discover views and insights that could be applied also to the wider phenomenon and other similar cases in further research.

The Case Study object for this thesis work was a digital well-being service called OurBalance the design task was focused on developing the existing group-feature of the service (with limited functionalities) into a solution for organisations to use to support employee well-being and their work-life balance. The main user group was determined to be the HR professionals (e.g. HR Managers). The task was therefore two-fold:

1) To design an admin panel interface for the HR Professionals to use to manage the groups
2) To develop a roadmap for future development of new features for the B2B product

In order to meet these two objectives, insights into the context and the field of work-place well-being as well as the product philosophy was created through desk research, and an understanding of the end-users' and the main user group's context and circumstances was created through an online survey for the end-users and by deep interviewing and conducting Card Sorting exercises on HR Professionals.
Through a comprehensive and systematic analysis of the data provided by the informants and the desk research, as described in chapter 4.4, 30 key themes were discovered, and further grouped into three focal themes of Acquisition of well-being data, Managing and leading well-being, and Organizational culture and atmosphere. Based on these findings, the jobs to be done were formulated into five actionable sentences, in order to discover all the circumstances and opportunities involved. This was done through creating Journey Maps for each sentence.

In order to further comprehend and emphatize the users' context, the data was arranged into System maps, such as an Empathy Map, a Stakeholder Map and an applied Ecosystem Map. Based on these visual representations of the complexity of the work of an HR Professional as well as the understanding developed through continuous desk research, the following new features were suggested to be put on the product roadmap:

- Article Library and Suggested Reading based on the Group's data
- Guides and templates for Managers to address wellbeing issues

- True stories from inspirational leaders
- Automated and easy-to-compile (and -export) reports
- In-app quick / pulse surveys
- Own notes to the data
- In-group Emoji reactions

To decide on the prioritization, the features were placed on an idea portfolio (see Figure 22) and evaluated based on their feasibility and their impact on the product. As a result, a development roadmap for new features for the OurBalance B2B product was established.

For the design task of designing a B2B administrative portal, a System Map visualizing the flow of data between the end-users, the main user ("HR Manager") and the service provider was created to offer a common, high-level view of the service system. Furthermore, based on the prioritization of the features gathered from the Card Sorting excercises conducted on the informants, the placement of the features of the service as well as the information architecture of the administrative portal was designed through visually extremely simplified wireframes (see Figure 24).

To answer the main research question of this thesis work, the findings of the described design process were analysed and formed into a model for digital service development process called the PULSE^2 model. Drawing from the HPI model as well as the Double Diamond, the model consists of six slightly overlapping spheres representing the different stages of the design process (the Premise, the User, the Learning, the Synthesis, the Evolving and the Evaluation), and of arrows and trajectories determining the focus and the direction of these stages (understanding vs. interpreting and deepening knowledge vs. lessening knowledge). Together these form a shape of three hearts inside a diamond – also thus reminding the designers of the importance of empathy towards the user.

6.2 Value of the Study

According to the Constructive Approach (Kosonen et al. 1993) applied in this study, the applicability of the constructed model should be assessed, in order to determine the value of the model. Therefore in this chapter the value of this research is discussed from both the scientific as well as practical perspective.

This study was based on a single Case Study, and therefore the direct, scientific value should be assessed in terms of a Case Study. According to Swanborn (2010), a Case Study does not aim to offer an explanation for a phenomenon, but rather to provide a perspective that could

reveal something about the phenomenon. For this study, the value offered by the empirical research is in deepening the understanding of the context of the HR Professionals as well as the complexity of the concepts of employee well-being and work-life balance.

This research combines the principals of Customer-Dominant Logic with the methodology of Jobs-To-Be-Done or circumstantial thinking, thus offering a concrete example of how to apply these approaches in practice, and therefore also in its part validating their usefulness and applicability. Furthermore, in this study a range of scientific methods were applied and assessed. This study therefore offers value for anyone in the field of Service Design considering using the same methods or thinking about how to apply the methods or the approached in their own research. Also, the the PULSE^2 model created as a result of this study can be applied also in other Case Studies and research projects in the field. Furthermore, the model can also spark conversation within the field, perhaps even offering opportunities to further explore the applicability of the model.

From the practical point of view, the main value of this study is the value it offers to the principal company Timespace in the development of the OurBalance B2B product. The study provided the company with a profound understanding of their main user group and the jobs that they need done, as well as a vast amount of qualitative data gathered from the informants. This study also provided the company with the wireframe designs for the new administrative or main user portal for the OurBalance B2B portal as well as a roadmap for developing new features into the service.

Through applying the results of this study to the OurBalance product and thus being able to offer a tangible tool for supporting and managing employee well-being, this study also offers value to the client organisations of Timespace in means of improved work-life balance and therefore increased productivity. For the HR Professionals in the client organisations, this study brings value in terms of a highly usable and intuitive tool offering them reliable data and information to support their work.

This study also offers value to anyone working in the field of digital service design. With the customer-centric model for digital service development developed, this study offers a framework for UX Designers and development teams in general to apply in their work. Applying the PULSE^2 model in practice will help develop more straightforward and streamlined design processes thus leveraging the productivity of the teams, without tying the hands regarding the use of methods and tools or delimiting the scope.

6.3 Discussion and opportunities for further research

With his study I argue that UX Design cannot claim to design experiences for the user, unless customer-dominant logic is applied both in theory as well as in practice. Without the the customer being in the center, instead of the product or the provider, the design will not sufficiently focus on the holistic experience of the user, and can thus be defined as just product development. The model provided as the result of this study offers a model to maintain the user in the focus of the development process and therefore enhance the user- or customer-centricity of the product.

Nevertheless, creating universal rules to a design process is difficult and hardly even fruitful, since all design processes are unique. One designer can (or at least should) never repeat the same process to the detail with other design processes, let alone other designers on their respective processes, due to the individual touch and interpretations of each designer, as well as the different user groups, circumstances and contexts in each case. However, creating a model of process, suggesting what kind of steps to take and what to focus on is indeed helpful both in designing the research as well as analysing the results and turning the findings into solutions.

This research also offers several opportunities for further research. For the empirical study conducted for this research, a more extensive approach could be applied to further deepen the understanding of the work of the HR Professionals as well as other user groups of a employee well-being service. Due to the COVID-19 pandemic, for example field visits and observations within organisations were not possible, however they would provide the study with more versatile data, resulting into more profound understanding about the complex topic of well-being in workplaces and how to support it. Also, once a viable first version of the OurBalance B2B product is deployed and in use, the findings should be revisited and iterated on, based on actual user feedback and data.

The most typical further research for a research based on a single case study is to extend the research to a multiple case study, thus offering a sturdier basis and a wider perspective for the PULSE^2 model. The model should be applied in various contexts, ranging from new service development to developing a singe feature in an existing service, and the results should be evaluated in order to validate the range of applicability. Researching the results of applying the model in practice on several levels of an organization would not only be interesting and provide valuable data on the model, but would also provide a validation for the model through a strong market-test.

Furthermore, the model could be subjected to a more theoretical research, for example comparing it to other similar models in the field of Service Design and Design Thinking and thus critically evaluate the model based on standardized criteria.

However when evaluating the impact of the PULSE^2 model, it is important to acknowledge that there is no magic formula for creating solutions that perform superbly both in terms of user experience as well as financial performance. UX Design and digital service design cannot be reduced into formulas and thus be excluded of the human factor and the creativity of the designer or the design team. Therefore I conclude this thesis work with a quote by Cat Drew, the Chief Design Officer of the Design Council:

"Following a toolkit does not equal designing a good solution to the right problem. It is as much about the mindsets as the tools e.g. being humble and open to ideas coming from everywhere and changing as a result of feedback, curious about what's really going on and how things are working or not, and working as teams rather than as a lone genius". (Drew 2019)

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Figures

Tables

Appendices

Appendix 1: Survey on Thoughts and Impressions on OurBalance's Group feature

Survey on thoughts and impressions on OurBalance's Groups feature

OurBalance is a well-being application that gives you the full picture of your life balance, with no effort. OurBalance visualizes key behavioral and biological balance metrics that you phone is already measuring, to make it possible for people to start conversations, take action, and then improve our mutual well-being. There is no login needed, so all user data stays private.

The aim of this survey is to get a picture of how to further develop the Groups feature of the application i.e. how to use OurBalance together with other people. This survey is also part of a Master's Thesis research for Laurea University of Applied Sciences MBA candidate (on Service Innovation and Design).

All of the data collected is 100% anonymous and will only be used for the aforementioned purposes. Fo any questions and/or comments regarding this survey, please contact sara@timespace.co .

Thank you in advance for sharing you views!

* Required

Background info

We would like to know you a bit better, in order to gain a better understanding on your preferences!

1. Familiarity with OurBalance application *

Mark only one oval.

- ◯ First time I hear of it
- ◯ I am familiar with OurBalance but I don't use it regularly
- ◯ I use OurBalance regularly

2. Age *

Mark only one oval.

- ◯ Under 20
- ◯ 20-29
- ◯ 30-39
- ◯ 40-49
- ◯ 50-59
- ◯ 60-69
- ◯ 70 or over

3. Current job / life situation *

You can pick as many options as suit your current situation.

Check all that apply.

- [ ] Employer
- [ ] Employee
- [ ] Entrepreneur
- [ ] Freelancer
- [ ] Unemployed
- [ ] Student
- [ ] Retired
- [ ] Other: _____

Usage of the Groups feature

In this section we're looking to understand how you use / would use the Groups feature, and which elements would either improve or depress your user experience. If OurBalance is not familiar to you, think of your experience in some other service which uses a group feature.

4. Who would you like use the group feature with, i.e. to learn about the group's joint wellbein balance? *

Pick as many options as suit you.

Check all that apply.

- [ ] Family
- [ ] Family and relatives
- [ ] Close friends
- [ ] Broad circle of friends
- [ ] Colleagues from same team
- [ ] The whole company / department
- [ ] Nobody
- [ ] Other: _____

5. How would these in-app features affect your experience of the group feature *

Mark only one oval per row.

	Very negative	Slightly negative	Slightly positive	Very positive	No effect
Tailored tips and suggestions for the group	◯	◯	◯	◯	◯
More detailed analysis of the score	◯	◯	◯	◯	◯
Personalisation (eg. group logo / photo)	◯	◯	◯	◯	◯
Challenges (eg. get 10,000 steps every day)	◯	◯	◯	◯	◯
Sharing the group circle (eg. in social media)	◯	◯	◯	◯	◯
Some other feature	◯	◯	◯	◯	◯

6. If you chose "some other feature", please describe it briefly

7. Please rate the importance of these features and elements in a service *

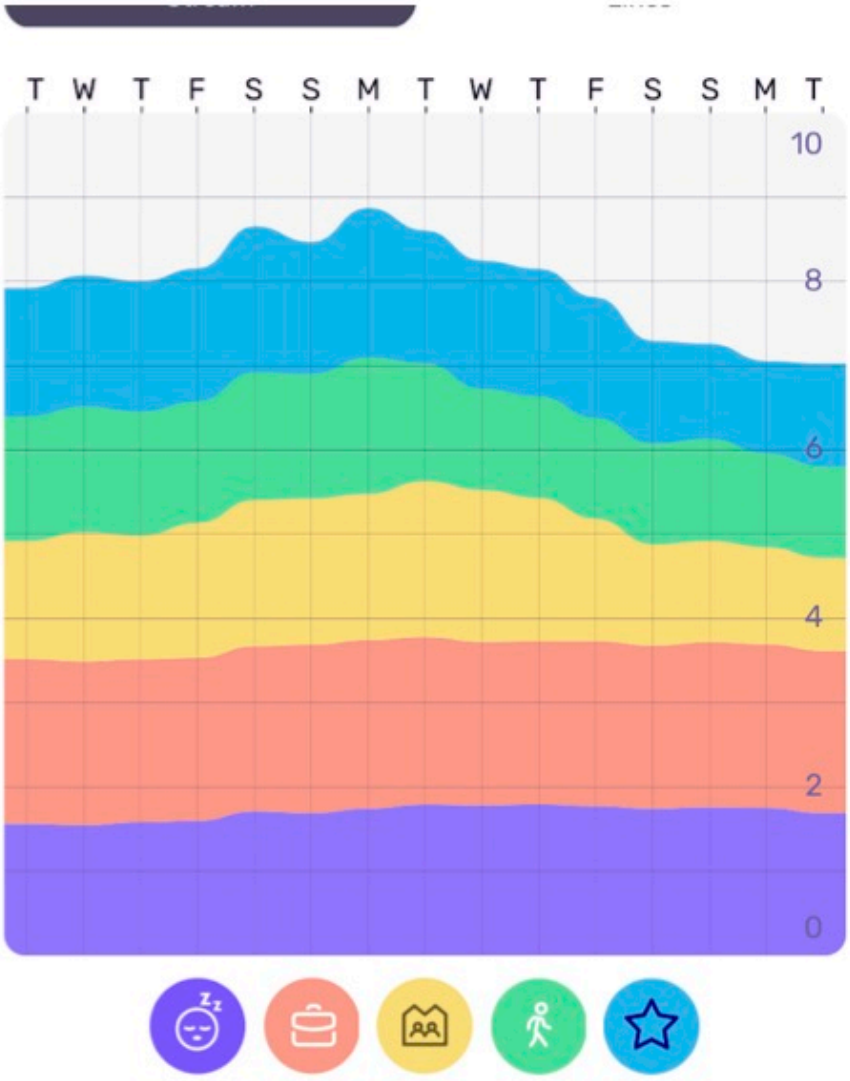
Check all that apply.

	Least important	2nd least important	3rd most important	2nd most important	Most important
Privacy / anonymity	☐	☐	☐	☐	☐
Informativeness	☐	☐	☐	☐	☐
Effortlessness	☐	☐	☐	☐	☐
Visuality	☐	☐	☐	☐	☐
Communion / togetherness	☐	☐	☐	☐	☐

The informativeness of the Groups feature

In this section we ask you to assess the informativeness of the Groups feature through example pictures, to help us understand how we might further improve the feature.

8. The Stream: How happy are you with this information provided about the wellbeing balanc of the group? *

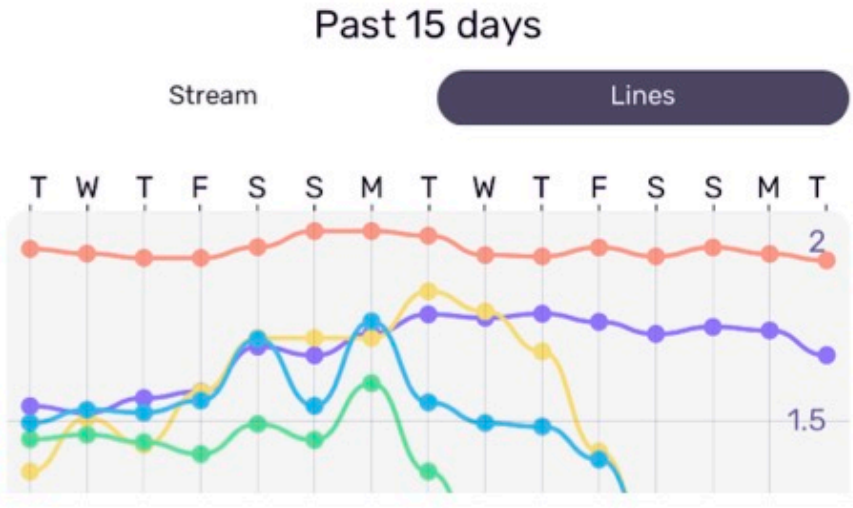


Mark only one oval.

	1	2	3	4	5	
Not happy at all 😐						Very happy 😄

9. Please elaborate why you feel this way *

10. The Lines: How happy are you with this information provided about the wellbeing balance the group? *

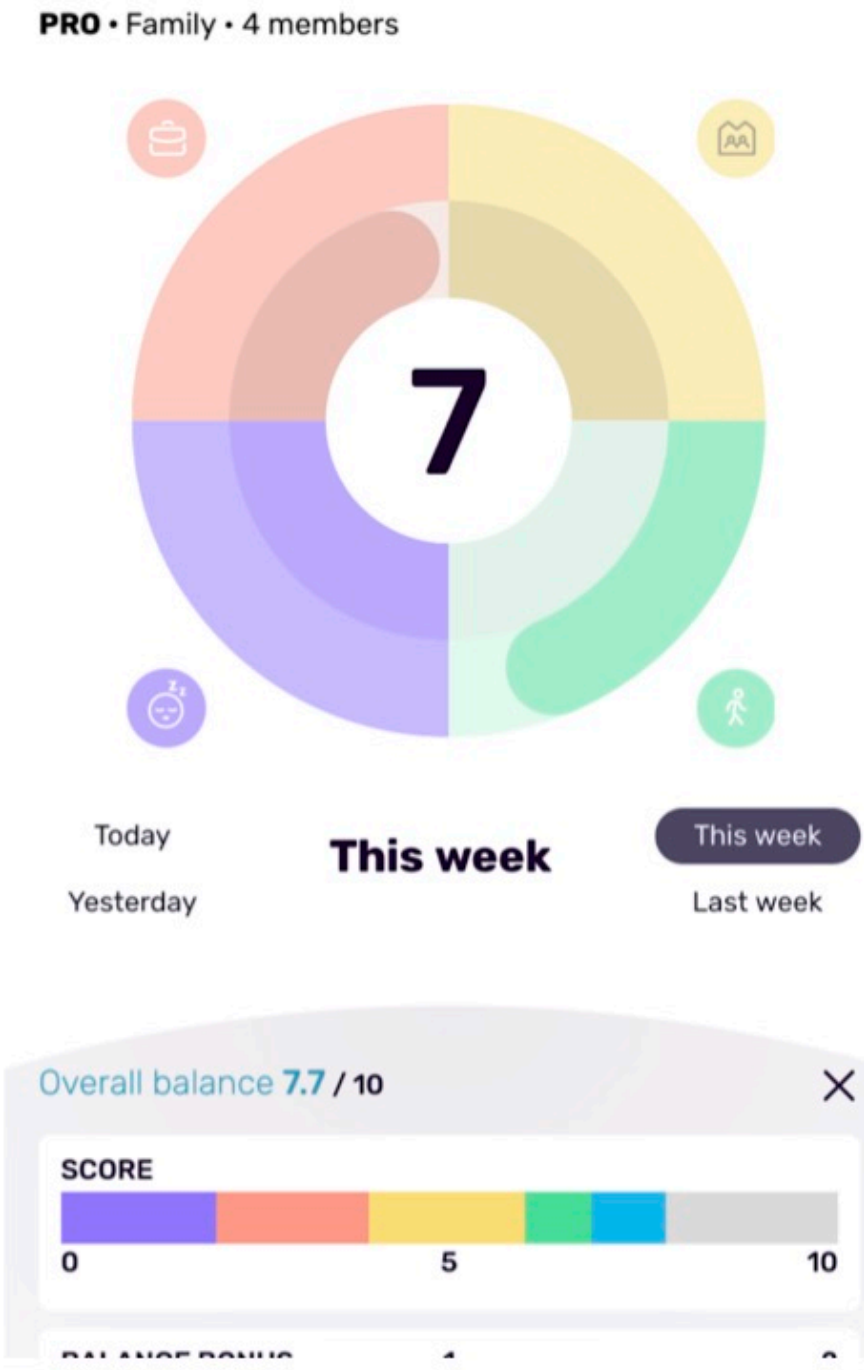


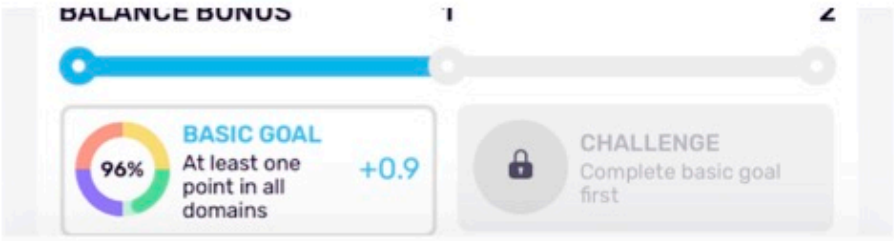
Mark only one oval.

	1	2	3	4	5	6	7	
Not happy at all 😔	◯	◯	◯	◯	◯	◯	◯	Very happy 😊

11. Please elaborate why you feel this way *

12. The Quick Glance: How happy are you with this information provided about the wellbeing balance of the group? *


PRO • Family • 4 members
7
Today
Yesterday
This week
This week
Last week
Overall balance 7.7 / 10
SCORE
0
5
10



Mark only one oval.

	1	2	3	4	5	6	7	
Not happy at all 😔	◯	◯	◯	◯	◯	◯	◯	Very happy 😍

13. Please elaborate why you feel this way *

The stage is yours!

Great, we are almost done! For any questions, thoughts or ideas that might have popped to your mind while filling this survey, this is now the time to share them. Please be as elaborate as you want to - we're all ears!

14. Any thoughts or impressions you would like to share with us?

We highly appreciate any feedback you might have for us!

Appendix 2: Field Guide for the Interviews

Interview

1. Describe your organisation and your role in it?
- How long have you worked in your current position?
- Have you previous experience from the field of HR?

2. Describe your normal work day or week
- What kind of tasks do you have?
- What do you spend most time on?
- Do you have favourite or least favourite tasks?
- What do you enjoy in your work?

3. Describe how the employee well-being is currently monitored and measured in your organisation?
- How many HR or other system do you use daily / weekly /monthly?
- Could you give a concrete example?
- (in case surveys are mentioned) How are the results of pulse or other surveys processed? What happens after a survey is conducted?

4. How do you regard the following and supporting the holistic well-being of an employee by the employer?
- Does your organisation share this view?

5. How do you feel about the current investments of your organisation to workplace well-being and work-life balance? Both in terms of the information gathered as well as the usability of the information.
- Do they make your job easier?
- Do you get all the information you need?
- How do you feel about the form you get the information in?

6. In an ideal situation, what kind of tools would you have in your organisation to support the employee well-being?

- In what kind of form / format would you receive the information?
- How often should the information be updated and delivered to you?

7. How often are issues related to employee well-being addressed in e.g. team or department meetings / weekly meetings?

- How do they employees feel about addressing these issues?
- Describe how the employee well-being issues are addressed?
- What about 1-on-1 meetings and discussions?

8. How has the COVID-19 pandemic affected the measuring and following the employee well-being in your organisation?

- Describe the affects on your job in general?

9. Do you have something to add or share, related to the topic in general or to some specific question?

Card sorting

1. I will send you a link to Google Jamboard, open it. No need to sign in or register.
2. On the sticky notes you see features and functionalities of a admin portal of a B2B well-being service. Take your time to familiarize yourself with them and please ask if a term or a feature seems unclear.
3. If a feature or functionality feels especially important to you, change the colour of the sticky note to pink. If something feels unnecassary or not important, change the colour to blue. Please think aloud.
4. Group the sticky notes in a way that feels logical to you. Please think aloud.
5. NB! There is no right or wrong way to group the sticky notes, and the result will not be evaluated in any way. The aim of this exercise is to understand your logic in grouping the features, not to test your understanding or capabilities
6. When you are happy with the groups, please name them or provide a description.